IRV

VAULT

REGULATIONS

2019-2020

Foreword

This version of the IRV General Regulations for Vault is based on the IRV Vault Regulations 2010 together with the IRV changes from 2011, 2012, 2013, 2014, 2015 and 2016. **It replaces all previous documentation.**

The IRV Vault Regulations 2019-2020 will be valid until 31 December 2020 and are available for download from the IRV website (*www.rhoenrad.com*).

Included in these regulations are some **precise definitions of straight, pike and tuck body positions**, which are relevant for the recognition of vaults by the difficulty judges (see Section 8.2).

Grey shading indicates points of particular importance but should not distract from the overall detail of the document.

We would like to maintain our thanks to all our original contributors:

- Wolfgang Bientzle (USA)
- Markus Schlosser (GER)
- Achus Emeis (GER) and his team
- Jasmin Braunwalder (SUI) for the German translation

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1. DESCRIPTION OF THE VAULT DISCIPLINE

1.1 General regulations

In the Vault discipline, the gymnast performs two vaults. These two vaults may be the same or different. Each vault will be judged independently.

At international competitions organised by the IRV the better of the two individual scores will count as the final score.

It is also possible to use the arithmetic mean of the two individual vault scores as the final score, but this is not IRV policy for the period 2018-2020.

1.2 Description of a vault

The wheel is set in motion by the gymnast with a maximum of 2½ wheel rotations to a landing mat.

After a run-up, the gymnast mounts the wheel into a tuck or straddle position, a forward or reverse standing position, or one of the overswing positions listed in the Catalogue of Vaults (see Appendix).

The gymnast then dismounts from the wheel by performing a jump, thrust, somersault, twist, overswing, or any vault listed in the catalogue.

To finish the vault, the gymnast must land safely on the landing mat, showing a finishing position with legs together, indicating to the judges that the vault has been completed.

A 90cm zone is marked on the landing mat. The gymnast must land beyond this 90cm zone.

The gymnast should only compete a vault that he/she can perform with complete safety and a high degree of aesthetic and technical mastery.

2. THE JUDGING PANEL

2.1 Organisation

2.1.1 Full judging panel for international championships

All international championships should operate with a full judging panel as follows:

- 1 head judge
- 2 difficulty judges
- 4 execution judges

As far as possible, the IRV encourages member states to use a full judging panel at their national competitions.

2.1.2 Reduced judging panel

If there is a shortage of judges, it is possible to use a judging panel with only two execution judges and one difficulty judge. In this case, the tasks of the head judge and difficulty judge can be carried out by one person.

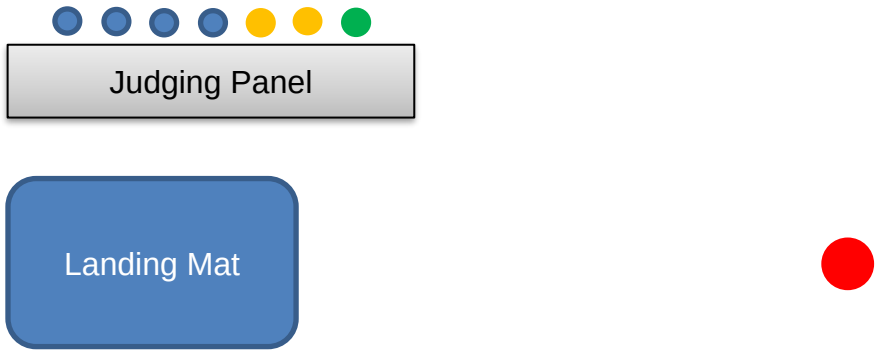
2.1.3 Use of helpers

The competition management may allocate one or two trained helpers to assist the head judge in ensuring a quicker and more efficient implementation of the judging process. Judges who are registered to judge at the competition, but are not needed as judges, can be used to help in the organisation of the competition (e.g. as line judges, video camera operators, etc.).

2.1.4 Positioning of the judging panel

The judging panel is usually positioned in a row.

Execution Judges – Difficulty Judges – Head Judge – Gymnast (starting position)



2.2 General rights and obligations of the judging panel

2.2.1 Pre-requisites for judges at international competitions

- All judges must have a valid national judging licence at the highest level
- All judges must have proof of regular judging experience at national level

2.2.2 Conduct of the judges

All members of the judging panel are obliged to:

- Take part in the judging seminar(s) and judges' meetings associated with a competition
- Arrive punctually at the judges' meetings
- Prepare for their allocated task(s)
- Respect the defined dress code for judges

During the competition, judges must abide by the following:

- Must not leave their places
- Must not engage in conversation with coaches, gymnasts or other judges
- Are only permitted to use electronic instruments (e.g. smart phones) in offline mode for looking up details in the Code of Points / Regulations

In case of an infringement of these rules, the competition judging officer will issue a warning. In the case of repeated infringement against these rules, the competition judging officer has the right to withdraw the judge's licence.

2.3 The rights and obligations of the head judge

2.3.1 General tasks

The head judge is responsible for the correct and fair judging by his/her judging panel. The head judge should therefore judge each vault independently (noting down execution faults and difficulty) in order to have a point of departure for discussion in case of a judges' meeting.

2.3.2 Co-operation with the competition management

The head judge is the link between the judges and the competition management and may summon the competition management to solve possible problems and disturbances. The

head judge is accountable to the competition management for the work of the judging panel and the handling of any unforeseen situations that arise.

2.3.3 Other tasks

The responsibilities of the head judge include:

- Checking that the marking of the 90cm safety zone has been carried out accurately (the edge of the tape furthest from the wheel should mark 90cm from the edge of the landing mat – width of tape used is irrelevant)
- Assisting the difficulty judges in recognising the vault performed and acknowledging its difficulty value
- Providing guidance to the judges regarding specific competition-related questions in order to ensure a correct score
- Checking the scores submitted by the judges, including the permitted difference between the two middle scores.
- Controlling and calculating the correct final score
- Checking the correct entry of scores into the score sheets, or via electronic transmitting devices
- Setting his/her own score for use as a point of departure in case of a judges' meeting
- Calling the judging panel together for a judges' meeting
- Calling the judging panel together for the purpose of changing a score because of too great a difference between the two middle scores, or in order to settle a score between the two middle scores
- Giving a signal (hand signal) to the gymnast at the beginning and end of a vault
- Giving permission to repeat a vault (e.g. in the case of a technical defect, obstacle; or after consulting with the judges and competition management)
- Displaying/announcing/submitting the final score

2.4 The rights and obligations of the difficulty judges

The responsibilities of the difficulty judges include:

- Evaluating all vaults correctly, efficiently and independently
- Being ready when the head judge signals the beginning of a vault
- Writing down the value of the performed vault

- Determining the difficulty score of the vault and displaying/announcing the result
- Informing the execution judges in cases where the recognition or non-recognition of difficulty influences the deductions for execution (e.g. a vault is judged to have been performed in a pike position rather than a straight position)
- Informing the execution judges if a vault is invalid (the difficulty judges may confer with the head judge on this issue).

2.4.1 Co-operation with the head judge

- The difficulty judges support the head judge in his/her activities and make him/her aware of violations of the regulations.
- The difficulty judges have an advisory role in relation to the head judge, but do not make any decisions that are the responsibility of the head judge.
- The difficulty judges do not have the right to initiate a judges' meeting or lead discussions resulting from differences of opinion. However, the head judge may ask the difficulty judges for advice in a discussion.
- If there is a disagreement between the head judge and the difficulty judges regarding the recognition/non-recognition of difficulty, the final decision is the responsibility of the difficulty judges, or Difficulty Judge 1.

2.5 The rights and obligations of the execution judges

- It is the duty of the execution judges to evaluate all vaults correctly, efficiently and independently.
- The execution judges must follow the instructions of the head judge and difficulty judges.
- They must be ready when the head judge signals the beginning of the routine.
- The execution judges document their deductions per judging unit in order to be able to explain their scoring in case of a judges' meeting.
- The execution judges adjust their scores according to the difficulty judges' decisions regarding recognition or non-recognition of vaults.

2.6 Judges' meetings

2.6.1 Before the competition

The judging officer responsible for the competition holds a meeting before the start of the competition to check that the planned head judges, difficulty judges and execution judges are present. If necessary, the judging officer appoints replacement judges or makes

changes to the judging panels before announcing the various judging panels for the competition. The judging officer may also take the opportunity to go through new rules, draw attention to potential problematic issues or answer questions from the judges.

2.6.2 After the competition

The judging officer will hold a meeting for the judges after the competition in order to discuss any problems or questions.

2.6.3 In the case of big differences between the two middles scores

The head judge can choose to call a meeting for the execution judges if the difference between the two middle scores is too big.

2.6.4 On the request of a judge

The head judge ***must*** call a meeting if an execution judge or difficulty judge requests a meeting (e.g. by giving a hand signal) as a result of a specific incident. In this case the head judge will instruct the judges to calculate and note down their scores before starting a discussion. An example of this type of situation would be if a judge's view of the gymnast were blocked by a coach.

2.6.5 On the request of the head judge

The head judge may call a judges' meeting, if he/she thinks it necessary. In this case, he/she will instruct the judges to calculate and note down their scores before entering into a discussion.

An example of this type of situation would be if a judge needs to be reprimanded or if the highest and/or lowest score is too far away from the middle score. No change of score is required in this case.

2.6.6 In the case of a written protest

On receipt of a written protest, a member of the competition management will ask the head judge to call a meeting with the judging panel as soon as possible. The head judge will then inform the judging panel about the protest. After receiving feedback from the head judge, difficulty judges and execution judges, the competition management decides whether to accept or reject the protest.

3. CODE OF CONDUCT FOR GYMNASTS AND COACHES

3.1 Rights and obligations of the gymnasts

3.1.1 Knowledge of the Code of Points

All gymnasts should be well acquainted with the contents of the Code of Points and know the relevant rules for a competition.

3.1.2 Competition clothing

Participation in competitions is only permitted in competition clothing (see current IRV Competition Rules). It is particularly important that gym shoes are in good condition (see 3.3.2 for further information on violations of these rules).

3.1.3 Use of bandages and hand guards

The use of bandages and hand guards is permitted. The gymnast must make sure that these items are in good condition.

3.1.4 Use of magnesium or similar products

The gymnast is permitted to use magnesium or similar products to improve his/her grip on the wheel. However, it is important to ensure that particularly products in powder form are applied outside the competition area.

3.2 Rights and obligations of the coaches

3.2.1 Spotting a gymnast

In order to avoid accidents, one coach may spot the gymnast. The coach must stand next to the wheel during the vault, without blocking the judges' view.

3.2.2 Knowledge of the Code of Points

All coaches must know the Code of Points and abide by the rules. Coaches are expected to contribute to the efficiency of a competition.

3.2.3 Contact with the gymnast or judges

The coach is not permitted to talk to the gymnast during a vault. Furthermore, the coach is not permitted to talk to the judges or technical assistants while a vault is being performed.

3.2.4 Coaches' clothing

As long as a coach is within close quarters of the competition, he/she must wear suitable coach's clothing (tracksuit, inside sports shoes) (see Competition Rules).

3.3 Measures implemented if gymnasts, coaches or judges do not fulfil their obligations

3.3.1 Unruly behaviour

Coaches and gymnasts who behave in an unruly manner or break the rules can receive a warning from the competition management and/or be excluded from the competition.

3.3.2 Breach of clothing rules

If a gymnast, judge or coach appears at a competition in incorrect clothing, the competition management can give the person in question a time limit to change and come back properly dressed.

- If a gymnast does not act on this, he/she can be excluded from competing by the competition committee.
- If a coach does not act on this, he/she can be asked to leave the immediate vicinity of the competition.
- If a judge does not act on this, the competition management can exclude him/her from the competition and charge his/her country or club a fine equivalent to the cost of paying for a missing judge.

4. GENERAL INFORMATION REGARDING THE SCORING SYSTEM

4.1 Total score

The total score for a vault is based on an evaluation of the following factors:

a. Execution

b. Difficulty

Whereby:

a. The execution judges evaluate technical performance and body positioning.

b. The difficulty judges evaluate the difficulty score of a vault by using the *Catalogue of Vaults* (see Appendix).

4.2 Judging methods

4.2.1 Execution judges

Two methods of judging are possible for execution judges:

4.2.1.1 Open scoring

On a signal from the head judge, the execution judges display their scores using manual scorecards or an electronic scoreboard. When using manual scorecards, the scores should be shown to the head judge first, before making them visible for the spectators.

4.2.1.2 Closed scoring

The judges write down their score on a piece of paper, which is given (or taken by a helper) to the head judge. The number of the judge as well as the number of the gymnast should be written on this paper. It is also possible to transmit the scores electronically to the head judge.

4.2.2 Difficulty judges

The difficulty score is calculated by the difficulty judges first but is displayed immediately afterwards.

The difficulty judges have to reach an agreement on the difficulty score. In case of disagreement between the difficulty judges, they are permitted to confer with the head judge.

5. DETERMINING THE FINAL SCORE OF A VAULT

5.1 Beginning and end of the judging process

5.1.1 Beginning of the judging process

Before the judging process of a vault begins, the head judge signals the gymnast to start.

The movements necessary for the gymnast to get into position in the wheel, the setting in motion of the wheel, and the run-up, will not be evaluated by the judging panel.

The judging process starts with the take-off position of the feet on the floor.

5.1.2 End of the judging process

The judging process ends with the gymnast in standing position with legs together after landing from the vault.

5.2 General rules for calculating the final score

The difficulty judges determine their score first and inform the execution judges about any details that are relevant for the execution score. They then display the difficulty score.

The head judge determines the execution score as quickly as possible by writing down the individual scores of the execution judges (or dictating them to a helper). The scores are entered into the competition list or computer system. If there are four execution judges, the execution score is calculated by discarding the highest and lowest scores. The arithmetic mean of the two middle scores will be the final execution score. If there are two judges, the arithmetic mean of the two scores will be the final execution score.

The head judge calculates the final score for the vault by adding together the difficulty score and the arithmetic mean of the two execution scores.

5.3 Permitted difference between the two middle scores for execution

The point difference between the two middles scores for execution should not be greater than:

a) 0.2 if the arithmetic mean is above 5.45

b) 0.3 if the arithmetic mean is between 4.5 and 5.45

c) 0.5 if the arithmetic mean is between 3.0 and 4.45

d) 1.0 if the arithmetic mean is below 3.0

As long as the point difference is within the permitted area of tolerance, the head judge must calculate the execution score using the two middle scores.

If the point difference is greater than described in points a) - d) above, it is up to the head judge whether to accept and use the arithmetic mean between the two scores or whether to call a judges' meeting. In the case of a judges' meeting, the judges explain their respective scores, or if necessary re-calculate to give a new score. If the point difference is still too great after the judges' meeting, it is the head judge's responsibility to decide on the final execution score, somewhere between the two middle scores. This means that the final execution score can be one of the two middle scores or any score in between the two middle scores. (NB: In this case, a note must be made in the competition list that the final execution score was decided by the head judge.)

5.4 Changing individual and final scores

5.4.1 Changing execution scores

- If a judges' meeting is called because of too big a point difference between the two middle execution scores, the execution judges are allowed to change their scores after the meeting.
- If a judges' meeting is called **before** the execution judges have handed in their scores the judges may change their scores after the meeting.
- If a judges' meeting is called **after** the execution judges have handed in their scores and without the difference between the two middles scores being too big, the final execution score will not be changed. (Exception: mathematical mistake in the calculation of an execution score, see next paragraph).
- It is not permitted for coaches/gymnasts to challenge the execution score given by the judges.
- If a judge discovers a mistake in his/her calculation of an execution score before the head judge has calculated and passed on the final score, the judge must inform the head judge immediately and submit his/her corrected execution score.
- After the head judge has calculated and passed on the final score, no change in the execution score is possible.

5.4.2 Changing the difficulty score

- If the difficulty judges discover a mistake in their calculation of the difficulty score, they can change the score after consultation with the head judge before the final score has been submitted by the head judge. After the head judge has calculated and passed on the final score, no change in the difficulty score is possible.

- Challenging the difficulty score:
    - It is recommended that the gymnast submit an overview of the vaults he/she is planning to perform, including their reference number and difficulty as listed in the *Catalogue of Vaults* (pocket card).
    - After the difficulty score is displayed by the judges, but before the final score is announced, the coach is permitted to approach the judges' table and ask the difficulty judges which vault they have recognised for the gymnast's performance. This is for information purposes only – no discussion is permitted.
    - If the coach/gymnast has a major objection to the difficulty score given by the difficulty judges, the only option is to submit an official written protest (see competition rules for formal procedure). If the protest is successful, the difficulty score will be changed. A written protest can only be submitted if a difficulty list (pocket card) was handed in before the competition.
    - The use of video footage is not permitted.

5.5 Correction of the final score / competition result

5.5.1 Correction of the final score

Correction of a gymnast's final score is necessary, if...

- ...there is an identifiable mistake in the head judge's calculation (e.g. incorrect calculation of the arithmetic mean of the two middle execution scores, incorrect addition of the execution score and difficulty score).
- ...there is an identifiable mistake in the transfer of individual scores or final score in an electronic scoring system.
- …a written protest against the difficulty score is successful.

5.5.2 Correction of the competition result

A correction of the competition result is necessary, if...

- ...there is an identifiable mistake in the addition of a gymnast's final scores.
- ...there is an identifiable error in an electronic scoring system.

6. REGULATIONS GOVERNING WHEEL SIZES IN VAULT

6.1 Definition of correct wheel sizes

Gymnasts are obliged to use wheels that are appropriate for their height. A gymnast is allowed to use two different wheel sizes for the two vaults. The wheel size for vault is regulated as follows:

Maximum wheel size
When standing in an upright position on the floor in between the boards, the gymnast must be able to reach both inner handles of the wheel simultaneously. The gymnast is allowed to stand on tiptoe and wear his/her vaulting shoes. It is not necessary for the gymnast to be able to hold the handles properly. It is sufficient for him/her to be able to touch the handles with his/her fingertips. If a gymnast fails to do so, the wheel is defined as too big.

Minimum wheel size
A loose bar is placed across the wheel from one rung handle to the other. When standing on the boards in an upright position, the gymnast must not touch the bar with his/her head. If the gymnast touches the bar, the wheel is defined as too small. The gymnast is allowed to take off his/her shoes.

6.2 Checking of wheel sizes in a competition

In international competitions, a designated judge will be responsible for checking the wheel size of all gymnasts before they enter the competition area.

If there is no official checking of wheel size in a vault competition, it is the responsibility of the head judge to check the wheel size if he/she feels it is necessary.

The head judge can ask to check the wheel size either before the first vault, or immediately after the first vault. It is not possible for the head judge to ask to check the wheel size after the second vault.

If the wheel size is checked before the first vault and the wheel proves to be too big or too small, the gymnast is permitted to change the wheel and perform both vaults over a correctly sized wheel. In this case, no deductions will be made.

If the wheel size is checked after the first vault and the wheel proves to be too big or too small, the gymnast is permitted to change the wheel and perform the second vault over a correctly sized wheel. In this case, the following deductions will apply for the first vault:

6.3 Deductions for using incorrect wheel sizes

Vault over a wheel that is too small = 0.5 fixed deduction (in addition to other execution deductions)

Vault over a wheel that is too big = invalid vault (=score 0.0)

7. INTERRUPTION OF VAULTS

There are two cases where a vault may be interrupted:

7.1 Interruption by the gymnast

The run-up can be interrupted by the gymnast. In this case, he/she must raise an arm to signal to the judges that the run-up is being interrupted (maximum one time). The gymnast is not permitted to touch the wheel in this case.

After this type of interruption, the gymnast is allowed to repeat the vault once. No extra deductions will apply.

If the gymnast touches the wheel after having signaled an interruption, the final score for this vault will be 0.0.

If the gymnast interrupts the vault more than once, the final score of this vault will also be 0.0.

7.2 Interruption because of an obstacle

The run-up can also be interrupted by an obstacle (e.g. a photographer walking through the competition area; a wheel rolling through the competition area).

In this case, the gymnast is allowed to repeat the vault after the obstacle has been removed.

8. REGULATIONS GOVERNING THE DIFFICULTY SCORE

8.1 Vault categories and general regulations

The difficulty judges evaluate each of the two vaults independently. The mounting phase does not have an influence on the difficulty score and is therefore only evaluated by the execution judges.

It is the task of the difficulty judges to identify the vault performed and assign it a difficulty value according to the **Catalogue of Vaults** (see Appendix)**.** The difficulty judges may discuss with the head judge if necessary. If the vault cannot be identified as a vault described in the Catalogue of Vaults, the gymnast will receive a score of 0.0.

There are four different vault categories:

Category A	Vaults performed in a tuck or straddle position from arm support on the wheel
Category B	Vaults performed from a forward standing position on the wheel
Category C	Vaults performed from a reverse standing position on the wheel
Category D	Vaults performed using an overswing technique

The **Catalogue of Vaults** lists all the vaults in each category, states their difficulty and describes the technique required to perform them correctly. An overview of common faults and associated deductions is also provided.

In the case of twisting vaults, the difficulty judges will add a bonus to each vault, depending on the twists performed.

An overview of all vaults and their difficulty values, as well as the bonus points for additional twists, can be found in the **difficulty table** in the Catalogue of Vaults (see Appendix).

8.2 Definition of body positions and recognition of difficulty

Each somersault can be performed in a tuck, pike or straight position. The body positions are defined by the angles of the hip and knees as follows:

A perfect **straight body position** is one in which a line from the shoulders through the hips to the ankles is straight or slightly bent forwards or backwards. If the hip assumes a flexion of more than 45° during the vault, it will be considered piked.

A perfect **pike body position** is one in which the knees are straight and the hips are bent at least 90° from the extended position. If the knees assume a flexion of more than 45° during the vault, it will be considered tucked.

A perfect **tuck body position** is one in which the hips are strongly bent and the bent knees are brought to the chest – a minimum 90° bend in each.

Deviations from these body positions can lead to an up- or downgrading of the difficulty score. They will also result in minor deductions applied by the execution judges.

8.3 Recognition of twists

In the case of vaults with an additional twist in the flight phase, the gymnast must fully complete the twist in order for the bonus to be given. A margin of error of up to 30° is permitted (judged by the landing position of the feet) and will incur a minor deduction.

This means that if a gymnast announces a somersault with 1½ twists (=540°), but does not achieve at least 510° before landing, the difficulty judges will only award the bonus for a full twist (=360°). Deductions for execution will also apply.

8.4 Invalid Vaults

A vault will be invalid (fixed final score: 0.0) in the following cases:

- The wheel rolls back with the gymnast still on it.
- Assistance from the coach before the gymnast has left the wheel.
- The vault performed varies to such an extent from the one indicated that it cannot be recognised as any of the vaults listed in the *Catalogue of Vaults*.
- The vault is not landed with both feet first.
- The gymnast uses more than 2½ wheel rotations for the run-up.
- The gymnast uses a wheel that is too big (see chapter 6).
- The gymnast interrupts the run-up of a vault more than once or touches the wheel after having interrupted the run-up.

An invalid vault will be discussed by the head judge and the difficulty judges, who will then inform the execution judges.

9. REGULATIONS GOVERNING THE EXECUTION SCORE

9.1 General Regulations

The two vaults will be judged independently by the execution judges.

Each of the four execution judges will give a score for execution between 0.0 and 6.0. Each judge will start with 6 points for execution and make deductions for aesthetic and technical errors.

If the sum of deductions exceeds 6.0, the gymnast will receive an execution score of 0.0.

The highest and lowest execution scores will be discarded and the arithmetic mean of the two middle scores will be calculated (see Chapter 5).

There are three categories of deductions:

Minor deductions	0.1-0.2
Variable deductions	0.1-0.5 or 0.1-0.8
Fixed deductions	0.2, 0.5 or 0.8

9.2 Definition of judging units for execution

Each vault is divided into four units:

Unit 1 – Setting the wheel in motion, run-up
Unit 2 – Take-off, mounting phase
Unit 3 – Thrust with hands or feet from the wheel, flight phase
Unit 4 – Landing

The evaluation of a vault does not start until Unit 2. Unit 1 will not be evaluated by the judging panel.

All deductions made in units 2, 3 and 4 are accumulated, but each type of deduction may only be made once per unit. There is no maximum for the sum of deductions per unit. Minor deductions are made in addition to fixed and variable deductions.

The four judging units are described as follows:

9.2.1 Unit 1 – Setting wheel in motion, run-up

The gymnast awaits a signal from the head judge before setting the wheel in motion.

There is no prescribed manner in which to set the wheel in motion, but two of the most usual methods are described below:

a. The gymnast stands on the floor between the inner handles, reaches to hold the upper inner handle and pulls it downwards. The gymnast crouches down to allow the wheel to roll freely before letting go as the handle he/she is holding passes the floor. The gymnast then stands up and prepares for the run-up.

b. The gymnast stands on the boards of the wheel and holds the front inner handle. He/she lifts feet onto the front rung and allows the wheel to roll forwards. As the rung reaches the floor, the gymnast jumps onto the floor in the same crouching position as in the previously described method. The gymnast releases hold on the handle, allows the wheel to roll and stands up to prepare for the run-up.

The gymnast can use maximum 2½ wheel rotations to perform the vault.

The run-up can be interrupted by the gymnast (once only) by raising an arm to signal the interruption to the judges (see Chapter 7).

Unit 1 ends immediately before take-off from the floor after the run-up.

9.2.2 Unit 2 – Take-off, mounting phase

The judges' evaluation of execution starts from the take-off position on the floor.

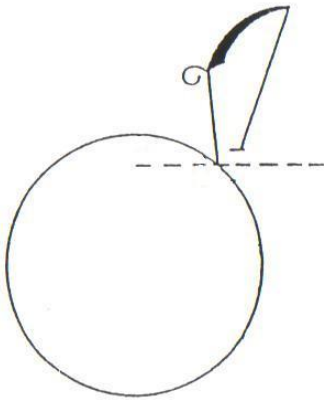
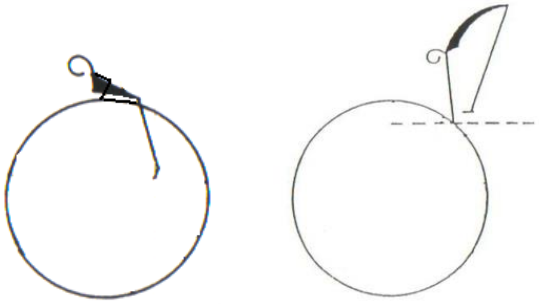
Take-off must be from two feet. The gymnast holds the rims of the wheel, evenly positioned with one hand on each rim.

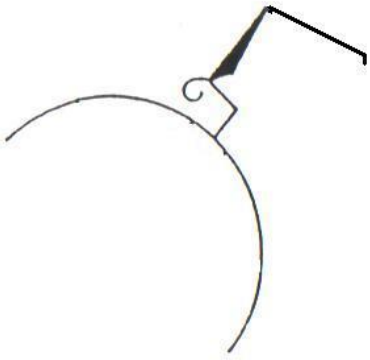
The mounting phase (layout, pike, handstand, reverse or none) for each vault is defined in the *Catalogue of Vaults*.

The following variations for mounting the wheel are possible:

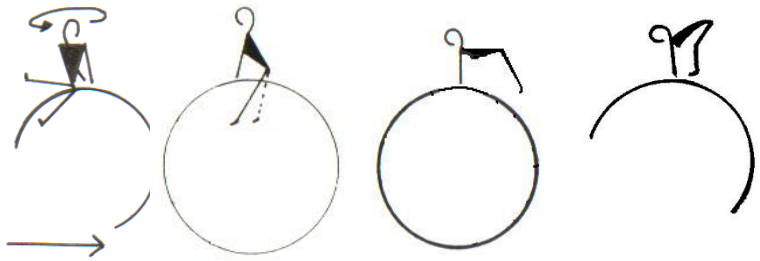
	A **layout mount** requires the following technique: Take-off close to the wheel. Hands grip the wheel at approximately waist height (no prescribed grip zone). Arms can be slightly bent (minimum elbow angle 135^{o}), elbows must not be placed on the wheel. Legs (straight) should rise almost to the horizontal (160^{o}-180^{o} angle to floor), hips extended, acute angle (<90^{o}) between arms and upper body, body slightly arched.

A **pike mount** is used to achieve a standing position forwards on the wheel.
There are two alternative ways of performing a pike mount:

	A **pike mount from the floor** requires the following technique: Take-off close to the wheel. Hands grip the wheel rims at approximately waist height (no prescribed grip zone). Arms can be slightly bent (minimum elbow angle 135º). Closed hip angle with hips rising to above shoulder level. Feet above level of hands on wheel, angle between arms and upper body greater than 90º. Legs straight throughout. (Exception for Gainer back somersaults: feet may be placed on the wheel at the same level as the hands or above without deduction).
	A **pike mount from front lying** requires the following technique: Take-off from two feet close to the wheel into immediate front lying on one of the rungs, hands holding the rims next to the rung. Legs swing forwards towards the centre of the wheel and then backwards and upwards into a pike position, arms can be slightly bent (elbow angle not less than 135º). Pike onto wheel should be achieved as for pike mount from floor (see above). Closed hip angle with hips rising to above shoulder level. Feet above level of hands on wheel, angle between arms and upper body greater than 90º. Legs straight throughout. (Exception for Gainer back somersaults: feet may be placed on the wheel at the same level as the hands without deduction).

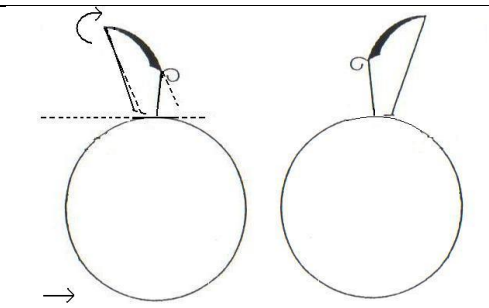
	A **handstand mount** requires the following technique: Take-off close to the wheel. Hands grip the wheel at approximately waist height to hold the rims (no prescribed grip zone). Elbow angle minimum 90º, hip angle 90º-180º, feet above level of hands on wheel, legs straight.

A **reverse mount** is used to achieve a position from which a backwards vault from standing position on the wheel can be performed.
There are four alternative ways of performing a reverse mount:



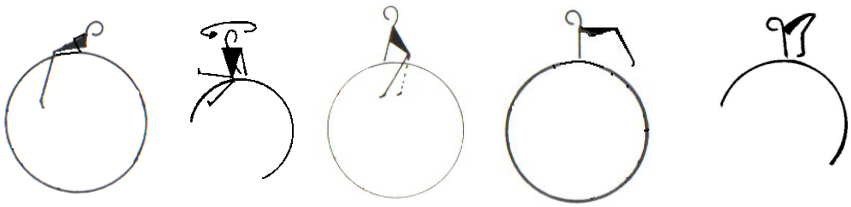
Reverse mount with straddle backswing
The following technique is required: Take-off close to the wheel. Hands grip the wheel rims at approximately waist height (slight bending of arms permitted - elbow angle not less than 135º - no prescribed grip zone). Immediately after take-off, the gymnast performs a half turn into a backward straddle position on the wheel. The hands are then released from the original holding position and the upper body is untwisted so that the gymnast can re-grasp the rims in front of the backward straddle sitting position. As soon as the gymnast has re-grasped the rims of the wheel, the legs are swung backwards and upwards in a single movement (no 'extra swing' permitted). Legs remain straight, feet extended, hip angle gradually closing until hips have reached at least shoulder level, after which the gymnast is permitted to bend his/her legs (knee angle not less than 90º) in order to place feet on wheel immediately behind hands ready for a pike standing position backwards on top of the wheel.

Reverse mount with pike backswing
The following technique is required: Take-off close to the wheel. Hands grip the wheel rims at approximately waist height (slight bending of arms permitted - elbow angle not less than 135º - no prescribed grip zone, but this mount is only possible if the hands are close to the outer handles). Immediately after take-off, the gymnast performs a half turn into a backward straddle position on the wheel. The hands are then released from the original holding position and the upper body is untwisted so that the gymnast can re-grasp the rims behind the backward straddle sitting position. As soon as the gymnast has re-grasped the rims of the wheel, the legs are brought together in front of the gymnast, passing through a half lever or pike support position before swinging/lifting the legs backwards and upwards between the rims of the wheel (closed hip angle). Legs remain straight, feet extended, until the hips have reached at least shoulder level, after which the gymnast is permitted to bend his/her knees (knee angle not less than 90º) in order to place the feet on wheel immediately behind hands ready for a pike standing position backwards on top of the wheel.



Pike mount with ½ turn

The following technique is required: Take-off close to the wheel. Hands grip the wheel rims at approximately waist height (no prescribed grip zone). Arms can be slightly bent (minimum elbow angle 135º). Closed hip angle with hips rising to above shoulder level. Feet above level of hands on wheel, angle between arms and upper body greater than 90º. Legs straight. The turn is initiated from the hips and one foot is placed on the rim in front of the opposite hand. The second foot is then placed behind the other hand, which is released to re-grip in front of the first leg (half-turn completed), while the first hand is moved across to the other rim. The gymnast should then be ready for a pike standing position backwards on top of the wheel. Legs should be straight throughout. Minor deductions will be made for bent legs and/or re-positioning of feet on top of the wheel.



Reverse mount from front lying with straddle backswing

(NB: pike backswing not possible because the rung blocks the swing)

A reverse mount from front lying with ½ turn requires the following technique: Take-off close to the wheel into immediate front lying on one of the rungs, hands holding the rims next to the rung. Legs swing forwards towards the centre of the wheel and then backwards to perform an immediate half turn into a back straddle sitting position on the wheel. The hands are then released from the original holding position and the upper body is untwisted so that the gymnast can re-grasp the rims in front of the backward straddle sitting position. As soon as the gymnast has re-grasped the rims of the wheel, the legs are swung/lifted backwards and upwards in a single movement (no 'extra swing' permitted). Legs remain straight, feet extended, hip angle gradually closing until hips have reached at least shoulder level, after which the gymnast is permitted to bend his/her legs (knee angle not less than 90º) in order to place feet on the wheel immediately behind the hands, ready for a pike standing position backwards on top of the wheel.

At the end of a reverse mount (one of four alternatives described above) the gymnast must end up in a pike standing position with straight legs. The gymnast can then either remain in a pike standing position or stand upright on the wheel before thrusting from the wheel. If the gymnast remains in a pike standing position, the arms will stay low and be brought backwards past the lower body as the gymnast prepares for the flight phase. If the gymnast chooses to stand upright on the wheel, the arms may be elevated above the head or kept at the side of the body. Legs must be seen to be straight in both cases. As

the gymnast initiates the flight phase of the vault, it will be necessary to bend the legs again briefly in order to achieve a powerful take-off from the wheel.

Vaults with no mounting phase

There are some vaults that are performed without one of the above mounting phases. These include the straddle and tuck vaults (A5 and A6 in the *Catalogue of Vaults*), both of which depend upon a very fast run-up and a mounting phase that is integrated into the position on top of the wheel. In addition, vaults D4, D5 and D6 are performed such that the gymnast adopts a front lying position on one of the rungs immediately after take-off from the floor.

End of Unit 2

Unit 2 finishes immediately before the gymnast thrusts with hands or feet from the wheel.

9.2.3 Unit 3 – Thrust with hands or feet from the wheel, flight phase

Unit 3 starts with the thrust from the wheel, initiated by the gymnast's hands or feet.

After leaving the wheel, the gymnast must gain height. This is achieved by way of a thrust with hands or feet from the wheel. From a standing position on the wheel, this is achieved by the gymnast jumping upwards and away from the wheel. In all other vaults, it is achieved by way of a thrust from the hands, sometimes combined with a leg swing movement. The thrust should leave the wheel almost stationary.

All vaults must have an identifiable flight phase.

The prescribed height of the flight phase is defined in the *Catalogue of Vaults*.

All vaults should achieve a minimum length of 90 cm in the flight phase (landing mats should be marked with tape). Both feet must be clear of this line on landing. If any part of the gymnast's body touches or crosses the line at the point of landing, a fixed deduction of 0.2 will be made. This requirement has been introduced in order to ensure maximum safety in the vault discipline. The distance should represent a minimum safety clearance that can be applied to all wheel sizes. (See "Fixed 0.2 deductions" on page 24 for a detailed definition.)

The body should be extended (hip angle at least 160^{o}) before landing (exceptions: B9, C7, D5 and D6, where the hip angle may be less than 160^{o}, but the hips must not drop below knee level on landing).

Unit 3 finishes immediately before landing.

9.2.4 Unit 4 – Landing

The gymnast should land in a stable position on two feet (legs bent and up to shoulder width apart), arms in front – no steps permitted.

The gymnast should land beyond the 90cm safety zone marked on the landing mat.

After every landing (even an unsuccessful one) the gymnast should finish in a standing position, legs together, indicating to the judges that the vault has been completed.

Unit 4 finishes with the gymnast reaching the final position described above.

9.3 List of deductions in execution

9.3.1 General deductions independent of judging unit

Minor deductions (0.1 or 0.2):

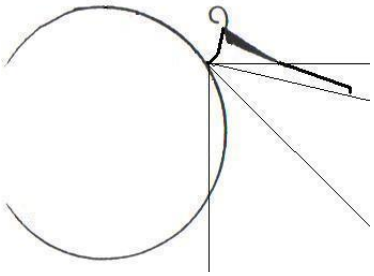
Head	- Incorrect head position (head should be an extension of backbone) - Incorrect (irregular) head movement
Hands	- Uneven hand positioning on wheel - Small adjustment of hand positioning on wheel
Arms	- Bent arms when they should be straight - Lack of tension in arms (“floppy” arms)
Feet	- Small adjustment of feet on wheel - Feet not extended (“floppy” feet)
Legs	- Bent legs when they should be straight - Legs apart when they should be together - Crossed legs - Lack of tension in legs (“floppy” legs)
Hips	- Incorrect hip angle (e.g. too open/closed) - Hips not square - Unnecessary/incorrect hip movements - Hip angle not extended (at least 160°) immediately before landing
Shoulders	- Obvious movement of shoulders in order to achieve shift aimed at increasing/decreasing speed of wheel

9.3.2 Specific deductions for the mounting phase (judging unit 2)

Variable deduction for insufficient height in mounting phase (0.1-0.5)

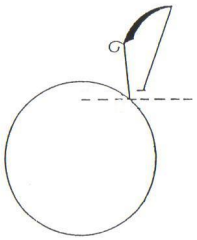
The following guidelines can be used to make deductions for insufficient height in the mounting phase of a vault. Minor deductions are made in addition. The examples for incorrect execution are not exhaustive.

Layout mount



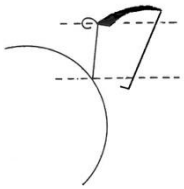
leg angle to floor more or equal to 160°	=no deduction
leg angle to floor between 135° and 160°	=0.1-0.2 deduction
leg angle to floor between 90° and 135°	=0.3-0.4 deduction
leg angle to floor 90°	=0.5 deduction

Pike mount and pike mount with ½ turn



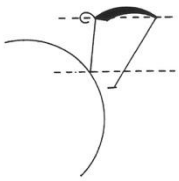
no deduction

correct execution



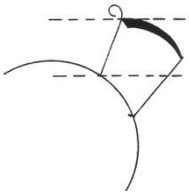
0.1 deduction

hips above shoulder level but feet below or equal hands



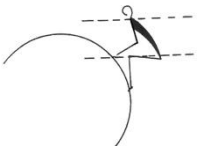
0.2 deduction

hips approximately equal to shoulder level



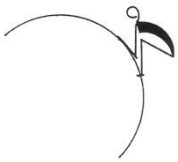
0.3 deduction

hips slightly below shoulder level



0.4 deduction

hips below shoulder level



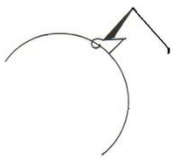
0.5 deduction

no attempt to lift hips

Handstand mounts

no deduction

correct execution

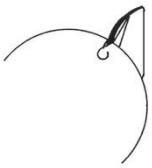


0.1-0.2 deduction

feet around level of hands, hip angle approximately 90°

0.3-0.4 deduction

feet below level of hands, hip angle <90°, body away from elbows



0.5 deduction

feet below level of hands, hip angle <90°, body resting on elbows

Variable deduction for spending too long on top of the wheel (0.1-0.5)

The gymnast should be in contact with the wheel for as short a time as possible. The following guidelines are used to evaluate the length of time a gymnast spends on top pf the wheel. Time on the wheel is measured from placement of hands on wheel for all vaults in categories A and D. For vaults performed with a pike mount, including pike mount from front lying, (i.e. all category B vaults as well as category C vaults performed from a pike mount with ½ turn) the time is measured from placement of the feet on the wheel. In the case of category C vaults performed from a reverse mount with straddle or pike backswing the time is measured from placement of thighs on the wheel:

3-4 seconds 0.1-0.2 deduction
5-6 seconds 0.3-0.4 deduction
>6 seconds 0.5 deduction

Fixed deductions for the mounting phase

	0.2	**0.5**	**0.8**
elbow angle less than 135° in the mounting phase of all vaults other than those performed with a handstand mount	X		
extra leg swing in a reverse mount onto the wheel	X		
knee angle less than 90° as gymnast places feet on wheel in reverse mount	X		
wheel touches the landing mats before the gymnast has left the wheel (without being severely impaired or slowed down)	X		
take-off from the floor from one foot		X	
incorrect/non-definable mounting phase		X	
major correction of holding, sitting, lying or standing position in order to maintain balance on top of the wheel		X	
legs bent before hips reach shoulder level in reverse mount with straddle or pike backswing into reverse stand on wheel		X	
legs not straightened before thrust from wheel in vaults performed from a reverse mount		X	
elbow angle less than 90° in vaults performed with a handstand mount		X	
overswing vaults initiated by bending knees		X	
body resting on elbows in overswing vaults performed from sitting or lying position		X	
flight phase in straddle vault (A1) initiated by bending knees		X	
elbows touching wheel in mounting phase			X
shoulders below (or weight resting on) the rims of the wheel in overswing vaults			X
feet below the rims of the wheel in vault A6 (tuck over)			X
wheel rolls into the landing mat such that the rolling movement is severely impaired and the wheel slows down considerably (in this case, the fixed 0.2 deduction for the wheel touching the mat will **not** be applied)			X

9.3.3 Specific deductions for the flight phase (judging unit 3)

Minor deductions relating to flight phase (0.1 or 0.2)

- lack of body extension immediately after thrust from wheel
- tuck/pike/straddle position not executed at highest point of flight phase in vaults performed from a standing position on top of the wheel
- hip angle more than 90º in tuck/pike straddle positions
- knee angle more than 90º in tuck position
- slightly bent knees in a pike somersault (up to 45º flexion)

- legs not together in tuck/pike/straight positions
- lack of body extension before landing (hip angle at least 160º)

Minor deductions relating to vaults with additional twists in the flight phase

- up to 30º less twist than the announced vault (see 8.3 Recognition of twists)
- wheel brought out of line during thrust from wheel in twisting overswing vaults
- legs crossed during twist

Variable deduction for lack of height in flight phase (0.1-0.8)

A 0.8 deduction will be made if there is NO identifiable thrust from the wheel. The Catalogue of Vaults describes the specific height requirements for each vault. For Category B and C vaults, it is possible to make the general statement that at the highest point of the flight phase the hips of the gymnast should reach at least the level of the gymnast's shoulders when standing on top of the wheel. The judges will need to evaluate the gymnast's performance on a scale between the described height requirement (best case, no deduction) and no identifiable thrust (worst case, 0.8 deduction). Each judge will need to make an individual evaluation of the extent to which the gymnast fulfils the height requirement for the flight phase of the vault.

Fixed deductions for the flight phase

	0.2	**0.5**	**0.8**
somersault rotation not at top of flight phase in single somersaults	X		
first somersault rotation not at top of flight phase in double somersaults	X		
double somersaults (B9, C7): less than half the second somersault rotation completed above the level of the top of the wheel	X		
no identifiable handstand position during thrust from wheel in overswing vaults	X		
overswing vaults (D5, D6): less than half the somersault rotation completed above the level of the top of the wheel	X		
twists initiated before thrust from wheel in twisting overswing vaults		X	
gymnast is still in contact with the wheel after the first ½ twist has been completed in overswing vaults with at least a full twist		X	
hip angle in first half of straight front somersault less than 160° – NB: if the hip angle is less than 135° the somersault will be downgraded from straight to pike		X	
hip angle in second half of a straight back somersault less than 160° (in this case no additional deduction for lack of extension before landing) – NB: if the hip angle is less than 135° the somersault will be downgraded from straight to pike		X	
pike back somersault initiated with bent knees (i.e. gymnast uses knee bend to create initial rotation)		X	

pike gainer back somersault initiated with bent knees (i.e. gymnast uses knee bend to create initial rotation)		X	
straight gainer back somersault initiated with bent knees (i.e. gymnast uses knee bend to create initial rotation)		X	
front somersault with ½ twist where the gymnast performs the half twist in the first half of the somersault (= barani)			X
coach touches either gymnast or wheel after the gymnast has left the wheel but before he/she has landed			X
gymnast in contact with wheel during flight phase			X

9.3.4 Specific deductions for the landing (judging unit 4)

Variable deduction for steps (or jumps) on landing (0.1-0.5)

1 step	=0.1 deduction
2 steps (1 jump)	=0.2 deduction
more than 2 steps/major loss of balance	=0.3-0.5 deduction

One step is defined as the movement of one leg away from the original landing position, i.e. one step forwards/sideways/backwards after landing, but with recovery back to the original landing position. A gymnast is considered to have taken two steps (or one jump) if he/she moves both legs away from the original landing position, i.e. one jump (feet together) after landing or one step forwards/sideways/backwards, with the second leg following to finish away from the original landing position or two steps forwards/sideways/backwards, with recovery to standing position as after one step.

Fixed deductions for the landing

	0.2	**0.5**	**0.8**
Flight phase too short. (The gymnast must land feet first beyond the 90cm minimum marking on the landing mats. The deduction will be made if the gymnast touches or crosses the line on his/her initial landing. As long as the gymnast makes his/her initial landing without touching or crossing the 90cm line, any subsequent steps or falls backwards across the line will not incur this deduction but will be subject to deductions for steps or fall on landing.)	X		
Gymnast brushes his/her hands on the floor on landing	X		
Gymnast does not finish his/her vault in a standing position with feet together (even after a fall)	X		
Fall after stable landing on feet first		X	
Hips below knee level on landing			X
Fall after unstable landing on feet first			X

Appendix

CATALOGUE OF VAULTS

2018-2020

Catalogue of Vaults

INTRODUCTION

The ***Catalogue of Vaults*** lists all the vaults in each category, states their difficulty and describes the technique required to perform them correctly. An overview of common faults and associated deductions is also given.

Bonus points may be added to the difficulty value of any of the listed vaults if they are performed with additional twists in the flight phase.

For vaults with somersaults in the flight phase, the following bonus points are applicable:

½ twist	0.5
full twist	1.2
1½ twist	2.0
Each additional ½ twist	1.0

For other vaults, the following bonus points are applicable:

½ twist	0.2
full twist	0.6
1½ twist	1.0
Each additional ½ twist	0.5

In Gainer back somersaults: full twist 2.2

Comments and examples regarding the recognition and evaluation of vaults

The vault regulations have been designed such that it should not be worthwhile for a gymnast to make a bad attempt at a difficult vault. Many of the fixed 0.5 and 0.8 deductions serve the purpose of bringing down the score of a badly performed vault to a level that would have made it more sensible for the gymnast to perform a less difficult vault well. The role of the difficulty judge is vital in ensuring that this is what actually happens in competitions.

Some examples of potentially problematic vaults can be found here:

[NB: See Catalogue of Vaults for full technical specifications and range of deductions. These examples relate primarily to faults in execution that affect the difficulty of a vault.]

Vault	Difficulty Value	Typical faults in execution	Deductions	Comments
B3, B4 Tuck front with half twist Pike front with half twist	2.0 + 0.5 (bonus) = 2.5 2.3 + 0.5 (bonus) = 2.8	▪ Half twist takes place in first half of somersault rotation (= tuck/pike barani)	▪ 0.8 fixed deduction	One sign of a twist that is initiated too early is if the gymnast starts to turn his/her shoulders when taking off for the somersault and continues to twist from this point
		▪ Hips too open (more than 90º) in tuck or pike position	▪ 0.1-0.2 minor deduction	
		▪ Slightly bent knees in a pike somersault	▪ 0.1-0.2 minor deduction	
		▪ Knee flexion of more than 45º (i.e. a knee angle of less than 135º) in a pike somersault	▪ In this case the somersault will be downgraded and judged as a tuck	A difficulty judge will judge a pike somersault as a tuck if he/she sees the knee angle as less than 135º
		▪ Lack of height in the flight phase ▪ Somersault rotation not at the highest point	▪ 0.1-0.8 deduction ▪ 0.2 fixed deduction	
B5 Straight front somersault	2.8	▪ Hip angle less than 160º	▪ 0.5 fixed deduction	
		▪ Flexion in the hips of more than 45º (i.e. a hip angle of less than 135º)	▪ In this case the somersault will be downgraded and judged as a pike	A difficulty judge will judge the vault as a pike somersault if he/she sees the hip angle as less than 135º
B5 Straight front somersault **with half twist** **[Special case**: **barani]**	2.8 + 0.5 (bonus) = 3.3	▪ Half twist takes place in first half of somersault rotation	▪ 0.8 fixed deduction	One sign of a twist that is initiated too early is if the gymnast starts to turn his/her shoulders when taking off for the somersault and continues to twist from this point
		▪ Hip angle less than 160º	▪ 0.5 fixed deduction	
		▪ Flexion in the hips of more than 45º (i.e. a hip angle of less than 135º)	▪ In this case the somersault will be downgraded and judged as a pike	
		▪ Lack of height in flight phase (hips must rise to at least gymnast's shoulder level when standing on top of the wheel)	▪ 0.1-0.8 variable deduction	A difficulty judge will judge the vault as a pike somersault if he/she sees the hip angle as less than 135º
		▪ Somersault rotation not at highest point in flight phase	▪ 0.2 fixed deduction	

B5 Straight front somersault **with full twist**	2.8 + 1.2 (bonus) = 4.0	▪ Hip angle less than 160º ▪ Flexion in the hips of more than 45º (i.e. a hip angle of less than 135º) ▪ The gymnast lands after twisting 210º ▪ The gymnast lands after twisting 330º	▪ 0.5 fixed deduction ▪ In this case the somersault will be downgraded and judged as a pike ▪ In this case only a half twist will be recognised, and the bonus will be reduced to 0.5 ▪ In this case, the full twist will be recognised and a bonus of 1.2 will be given, but there will be a minor deduction of 0.1-0.2 for under-rotation.	A difficulty judge will judge the vault as a pike somersault if he/she sees the hip angle as less than 135º and will adjust the twist bonus according to the actual twist performed.
B7 Pike Gainer Back Somersault	3.8	▪ The gymnast initiates the somersault rotation by bending the knees before straightening into a pike position. [*NB: Judges must be able to see the difference between this and a pike somersault that is led by the feet but has slightly bent legs and thus incurs only a minor deduction.]*	▪ 0.5 fixed deduction	This brings the difficulty score down to the level of a tuck gainer back somersault. NB: A difficulty judge will judge the somersault as a tuck if he/she sees the knee angle as less than 135º throughout the somersault.
B8 Straight Gainer Back Somersault	4.3	▪ Somersault rotation initiated by bending knees (see above example for B7) ▪ Hip angle less than 160º (making it more like a pike somersault) ▪ Flexion in the hips of more than 45º (i.e. a hip angle of less than 135º)	▪ 0.5 fixed deduction ▪ 0.5 fixed deduction ▪ In this case the somersault will be downgraded and judged as a pike	This brings difficulty down to level between tuck and pike gainer back somersault. A difficulty judge will judge the somersault as a tuck if he/she sees the knee angle as less than 135º throughout the somersault, or as a pike if he/she sees the hip angle as less than 135º throughout the somersault.

B9 Double Tuck Front Somersault	3.8	▪ Hips below knee level on landing ▪ Landing in sitting position on crash mat	▪ 0.8 fixed deduction ▪ invalid vault (=0.0) if the feet do not touch the landing mat first	▪ Landing in deep crouch then standing up will have minimum deduction 0.8 (hips below knee level) ▪ Landing in deep crouch then falling into sitting position will have minimum deduction 0.8 (hips below knee level) + 0.5/0.8 (fall after stable/unstable landing on feet first)
C3 Pike Back Somersault	2.8	▪ Somersault rotation initiated by bending knees (see B7 above)	▪ 0.5 fixed deduction	This brings difficulty down to level of a tuck back. NB: A difficulty judge will judge the somersault as a tuck if he/she sees the knee angle as less than 135º throughout the somersault.
C7 Double Tuck Back Somersault	4.0	▪ Hips below knee level on landing ▪ Landing in kneeling position on crash mat	▪ 0.8 fixed deduction ▪ invalid vault (=0.0) if the feet do not touch the landing mat first	▪ Landing in deep crouch then standing up will have minimum deduction 0.8 (hips below knee level) ▪ Landing in deep crouch then falling will have minimum deduction 0.8 (hips below knee level) + 0.5/0.8 (fall after stable/unstable landing on feet first)

D5 Front Lying, Overswing, Front Somersault	4.5	▪ Hips below knee level on landing ▪ Landing in sitting position on crash mat	▪ 0.8 fixed deduction ▪ invalid vault (=0.0) if the feet do not touch the landing mat first	▪ Landing in deep crouch then standing up will have minimum deduction 0.8 (hips below knee level) ▪ Landing in deep crouch then falling into sitting position will have minimum deduction 0.8 (hips below knee level) + 0.5/0.8 (fall after stable/unstable landing on feet first)
D6 Front Lying, Overswing, Half Twist, Back Somersault	5.0	▪ Hips below knee level on landing ▪ Landing in kneeling position on crash mat	▪ 0.8 fixed deduction ▪ invalid vault (=0.0) if the feet do not touch the landing mat first	▪ Landing in deep crouch then standing up will have minimum deduction 0.8 (hips below knee level) ▪ Landing in deep crouch then falling will have minimum deduction 0.8 (hips below knee level) + 0.5/0.8 (fall after stable/unstable landing on feet first)
All Overswing vaults with at least a full twist in the flight phase		▪ The gymnast is still in contact with the wheel (usually with only one arm) <u>after</u> the first half twist has been completed.	▪ 0.5 fixed deduction in addition to other execution deductions	▪ e.g. this deduction will be made in addition to the fixed 0.5 deduction for "twist started before thrust from wheel"

Difficulty Table

		Difficulty	German Ref.	*Page*
Category A:	Vaults performed in tuck or straddle position from arm support on the wheel			
A1	Straddle Sitting	0.0	*Grätschsitz*	43
A2	Back Straddle Sitting	0.3	*Grätschsitz rückwärts*	45
A3	Tuck Through	0.5	*Durchhocken*	47
A4	Handstand, Straddle Down	3.0	*Handstütz abgrätschen*	49
A5	Straddle Over	1.3	*Grätsche*	51
A6	Tuck Over	2.0	*Hocke*	52
Category B:	Vaults performed from a FORWARD standing position on the wheel			
B1	Straight Jump forwards	0.5	*Strecksprung vorwärts*	53
B2	Pike Straddle Jump	1.0	*Grätschwinkelsprung*	55
B3	Tuck Front Somersault	2.0	*Salto vorwärts gehockt*	57
B4	Pike Front Somersault	2.3	*Salto vorwärts gebückt*	59
B5	Straight Front Somersault	2.8	*Salto vorwärts gestreckt*	61
B6	Tuck Gainer Back Somersault	3.3	*Auerbach Salto gehockt*	63
B7	Pike Gainer Back Somersault	3.8	*Auerbach Salto gebückt*	65
B8	Straight Gainer Back Somersault	4.3	*Auerbach Salto gestreckt*	67
B9	Double Tuck Front Somersault	3.8	*Doppelsalto vorwärts gehockt*	69
Category C:	Vaults performed from a REVERSE standing position on the wheel			
C1	Straight Jump backwards	0.5	*Strecksprung rückwärts*	75
C2	Tuck Back Somersault	2.0	*Salto rückwärts gehockt*	77
C3	Pike Back Somersault	2.5	*Salto rückwärts gebückt*	79
C4	Straight Back Somersault	2.8	*Salto rückwärts gestreckt*	81
C5	Reverse Stand, Half Twist into Tuck Front Somersault	3.0	*Stand rw, ½ Drehung, Salto vw gehockt*	83
C6	Reverse Stand, Half Twist into Pike Front Somersault	3.3	*Stand rw, ½ Drehung, Salto vw gebückt*	85
C7	Double Tuck Back Somersault	4.0	*Doppelsalto rückwärts gehockt*	87
Category D:	Vaults performed using an overswing technique			
D1	Overswing	2.0	*Überschlag*	89
D2	Straddle Overswing	1.8	*Grätschüberschlag*	91
D3	Straddle Sitting, Overswing	1.3	*Grätschsitz, Überschlag*	93
D4	Front Lying, Overswing	1.0	*Aufliegen, Überschlag*	95
D5	Front Lying, Overswing, Front Somersault	4.5	*Aufliegen, Überschlag, Salto*	97
D6	Front Lying, Overswing, Half Twist, Back Somersault	5.0	*Aufliegen, Überschlag, ½ Drehung, Salto*	99

Bonus points for extra twists:

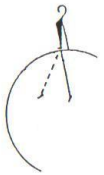
In somersaults:		In other vaults:	
½ twist	0.5	½ twist	0.2
full twist	1.2	full twist	0.6
1½ twist	2.0	1½ twist	1.0
each additional ½ twist	+1.0	each additional ½ twist	+0.5

In Gainer back somersaults: full twist 2.2

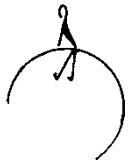
On the following pages, all vaults will be listed with additional comments regarding the recognition of difficulty and common faults in execution.

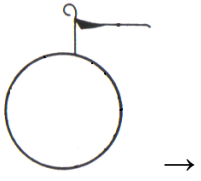
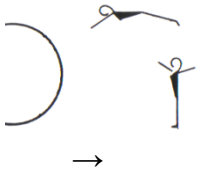
The list only includes judging units 2 and 3 for all vaults. Judging units 1 and 4 are the same for all vaults and all regulations governing these units can be found in the **IRV General Regulations for Vault 2018-2020**.

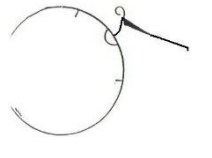
Category A: Vaults performed in a tuck or straddle position from arm support on the wheel

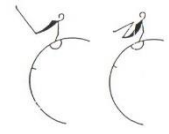
A1 **Straddle Sitting**		**Difficulty value: 0.0**	***German ref.: Grätschsitz***
Vault Phases	Technique	Common Faults (not exhaustive)	Deductions/Comments
Unit 2: Take-off	Take-off must be from 2 feet	• take-off from 1 foot	• 0.5 fixed deduction
Mounting phase  ←	Layout mount: Slight bending of arms permitted (elbow angle not less than 135º). Legs straight and together after take-off. Should reach almost horizontal (160º-180º angle to floor), hips extended, acute angle between arms and upper body, body slightly arched.	• uneven hand positioning on wheel • elbow angle less than 135º • elbows on wheel • insufficient height in mounting phase • lack of hip extension • legs not together after take-off • legs not straight • feet not extended	• 0.1-0.2 minor deduction • 0.2 fixed deduction • 0.8 fixed deduction • 0.1-0.5 variable deduction • 0.1-0.2 minor deduction • 0.1-0.2 minor deduction • 0.1-0.2 minor deduction • 0.1-0.2 minor deduction
Position on wheel  ←	Straddle sitting, hips extended and inner thighs in contact with wheel (no "sitting" on back of thighs). Legs straight, feet extended. Gymnast reaches behind (both hands together) to hold rims of wheel immediately behind sitting position.	• lack of hip extension • legs not straight • feet not extended • hands not moved at same time • small adjustment of body position on wheel • major correction of body position on wheel • "too long" on top of wheel	• 0.1-0.2 minor deduction • 0.1-0.2 minor deduction • 0.1-0.2 minor deduction • 0.1-0.2 minor deduction • 0.1-0.2 minor deduction • 0.5 fixed deduction • 0.1-0.5 variable deduction: [< 3 seconds = no deduction] [3-4 seconds = 0.1-0.2 deduction]

		NB: <u>Each minor deduction</u> may only be made <u>once per unit</u>. For example, if the gymnast has bent legs in mounting phase and on top of wheel, the judges may deduct maximum 0.2 for bent legs in Unit 2.	[5-6 seconds = 0.3-0.4 deduction] [> 6 seconds = 0.5 deduction]
<u>Unit 3:</u>			
Thrust from wheel  ←	Legs (straight) swing forwards and join when clear of wheel. Swing movement is stopped abruptly, hips extended and gymnast thrusts away from wheel with hands.	• legs not together once clear of wheel • feet not extended • no hip extension at end of swing • legs bent in order to initiate thrust from wheel • wheel touches mat before gymnast leaves wheel • wheel rolls into the landing mat such that the rolling movement is severely impaired before the gymnast thrusts from the wheel	• 0.1-0.2 minor deduction • 0.1-0.2 minor deduction • 0.1-0.2 minor deduction • 0.5 fixed deduction • 0.2 fixed deduction • 0.8 fixed deduction
Flight phase  ←	Hips rise above contact point of hands on wheel. Extended body in flight phase.	• lack of body extension after thrust from wheel • lack of height in flight phase • lack of body extension before landing • flight phase too short (inside 90 cm zone)	• 0.1-0.2 minor deduction • 0.1-0.8 variable deduction [0.8 deduction if no identifiable thrust; no deduction as long as hips rise above contact point for hands on wheel] • 0.1-0.2 minor deduction • 0.2 fixed deduction

A2 **Back Straddle Sitting**		**Difficulty value: 0.3**	***German ref.: Grätschsitz rückwärts***
Vault Phases	Technique	Common Faults (not exhaustive)	Deductions/Comments
Unit 2: Take-off	Take-off from 2 feet	• take-off from 1 foot	• 0.5 fixed deduction
Mounting phase  →	Reverse mount: Slight bending of arms permitted (elbow angle not less than 135º). Immediate half-turn after take-off into back straddle on wheel, legs straight, feet extended. No height requirement in this mounting phase. Reverse mount from front lying also possible.	• uneven hand positioning on wheel • elbow angle less than 135º • elbows on wheel • legs not straight • feet not extended	• 0.1-0.2 minor deduction • 0.2 fixed deduction • 0.8 fixed deduction • 0.1-0.2 minor deduction • 0.1-0.2 minor deduction
Position on wheel  →	Release hands (simultaneously) from original holding position and untwist upper body to hold rims in front of backward straddle sitting position. Inner thighs are in contact with wheel, legs straight, feet extended.	• hands not released simultaneously • legs not straight • feet not extended • 'extra swing' taken before thrust • small adjustment of body position on wheel • major correction of body position on wheel • "too long" on top of wheel *NB: <u>Each deduction</u> may only be made <u>once per unit</u>. For example, if the gymnast has bent legs both in both mounting phase and on top of wheel, the judges may deduct maximum 0.2 for bent legs in Unit 2.*	• 0.1-0.2 minor deduction • 0.1-0.2 minor deduction • 0.1-0.2 minor deduction • 0.2 fixed deduction • 0.1-0.2 minor deduction • 0.5 fixed deduction • 0.1-0.5 variable deduction: [< 3 seconds = no deduction] [3-4 seconds = 0.1-0.2 deduction] [5-6 seconds = 0.3-0.4 deduction] [> 6 seconds = 0.5 deduction]

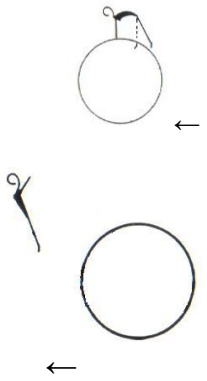
Unit 3: Thrust from wheel 	For backwards thrust from wheel, legs (straight) swing backwards and join when clear of wheel (no 'extra swing' permitted), body slightly arched. Leg movement stops and gymnast thrusts away from wheel with hands. Hips extended.	• legs not straight in swing movement • legs do not join once clear of wheel • feet not extended • lack of hip extension at end of swing • wheel touches mat before gymnast leaves wheel • wheel rolls into the landing mat such that the rolling movement is severely impaired before the gymnast thrusts from the wheel	• 0.1-0.2 minor deduction • 0.1-0.2 minor deduction • 0.1-0.2 minor deduction • 0.1-0.2 minor deduction • 0.2 fixed deduction • 0.8 fixed deduction
Flight phase 	Hips rise above contact point of hands on wheel, extended body approaching horizontal (160º – 180º).	• lack of body extension after thrust from wheel • lack of height in flight phase • lack of body extension before landing • flight phase too short (inside 90 cm zone)	• 0.1-0.2 minor deduction • 0.1-0.8 variable deduction [0.8 deduction if no identifiable thrust; no deduction as long as extended body approaching horizontal (160º – 180º)] • 0.1-0.2 minor deduction • 0.2 fixed deduction

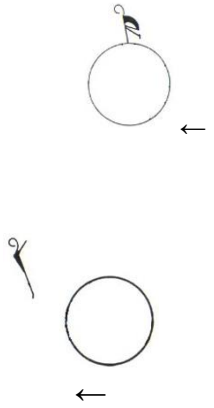
A3 **Tuck Through**		**Difficulty value: 0.5**	***German ref.: Durchhocken***
Vault Phases	Technique	Common Faults (not exhaustive)	Deductions/Comments
Unit 2: Take-off	Take-off from 2 feet	• take-off from 1 foot	• 0.5 fixed deduction
Mounting phase 	Layout mount: No prescribed grip zone, but this vault will only be possible if hands hold near rim handles. Slight bending of arms permitted (elbow angle not less than 135°). Legs straight and together after take-off. Should reach almost horizontal (160°-180° angle to floor), hips extended, acute angle between arms and upper body, body slightly arched.	• uneven hand positioning on wheel • elbow angle less than 135° • elbows on wheel • insufficient height in mounting phase • lack of hip extension • legs not together after take-off • legs not straight • feet not extended	• 0.1-0.2 minor deduction • 0.2 fixed deduction • 0.8 fixed deduction • 0.1-0.5 variable deduction • 0.1-0.2 minor deduction • 0.1-0.2 minor deduction • 0.1-0.2 minor deduction • 0.1-0.2 minor deduction
Position on wheel 	Tuck support position, whereby angle between upper body and thighs should momentarily be less than 90°. Legs together, feet extended (legs pass through wheel below rim level).	• insufficient tuck position (angle between upper body and thighs greater than 90° throughout vault) • legs not together • lack of tension in legs • feet not extended • small adjustment of body position on wheel	• 0.1-0.2 minor deduction • 0.1-0.2 minor deduction • 0.1-0.2 minor deduction • 0.1-0.2 minor deduction • 0.1-0.2 minor deduction
		• major correction of body position on wheel • “too long” on top of wheel	• 0.5 fixed deduction • 0.1-0.5 variable deduction: [< 3 seconds = no deduction] [3-4 seconds = 0.1-0.2 deduction] [5-6 seconds = 0.3-0.4 deduction] [> 6 seconds = 0.5 deduction]

Unit 3: Thrust from wheel  ←	From tuck support position legs are swung forwards, together and straight until body is beyond horizontal. Leg movement stops abruptly and gymnast thrusts away from wheel with hands, hips extended.	• legs not straight in swing movement • legs not together in swing movement • feet not extended • lack of hip extension • wheel touches mat before gymnast leaves wheel • wheel rolls into the landing mat such that the rolling movement is severely impaired before the gymnast thrusts from the wheel	• 0.1-0.2 minor deduction • 0.1-0.2 minor deduction • 0.1-0.2 minor deduction • 0.1-0.2 minor deduction • 0.2 fixed deduction • 0.8 fixed deduction
Flight phase  ←	Body must rise above horizontal. Extended body in flight phase.	• lack of body extension after thrust from wheel • lack of height in flight phase • lack of body extension before landing • flight phase too short (inside 90 cm zone)	• 0.1-0.2 minor deduction • 0.1-0.8 variable deduction [0.8 deduction if no identifiable thrust; no deduction as long as body rises above horizontal] • 0.1-0.2 minor deduction • 0.2 fixed deduction

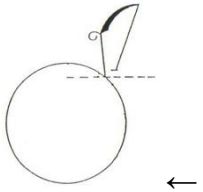
A4 **Handstand, Straddle Down**		**Difficulty value: 3.0**	***German ref.: Handstütz, Abgrätschen***
Vault Phases	Technique	Common Faults (not exhaustive)	Deductions/Comments
Unit 2: Take-off	Take-off from 2 feet	• take-off from 1 foot	• 0.5 fixed deduction
Mounting phase  ←	Handstand mount: Elbow angle minimum 90°, hip angle 90°-180°, feet above level of hands on wheel. Legs straight and together, feet extended.	• uneven hand positioning on wheel • elbow angle less than 90° • hip angle less than 90° • legs not straight • legs not together • feet not extended • insufficient height in mounting phase	• 0.1-0.2 minor deduction • 0.5 fixed deduction • 0.1-0.2 minor deduction • 0.1-0.2 minor deduction • 0.1-0.2 minor deduction • 0.1-0.2 minor deduction • 0.1-0.5 variable deduction
Position on wheel  ←	Handstand position must be achieved first. Straddle down by closing the hip angle and straddling the legs.	• handstand position not reached (i.e. hip angle remains less than 160°) before straddle down • legs not straight • legs not together in handstand • feet not extended • small adjustment of body position on wheel • major correction of body position on wheel • "too long" on top of wheel *NB: <u>Each deduction</u> may only be made <u>once per unit</u>. For example, if the gymnast has bent legs in both mounting phase and on top of wheel, the judges may deduct maximum 0.2 for bent legs in Unit 2.*	• 0.1-0.2 minor deduction • 0.1-0.2 minor deduction • 0.1-0.2 minor deduction • 0.1-0.2 minor deduction • 0.1-0.2 minor deduction • 0.5 fixed deduction • 0.1-0.5 variable deduction: [< 3 seconds = no deduction] [3-4 seconds = 0.1-0.2 deduction] [5-6 seconds = 0.3-0.4 deduction] [> 6 seconds = 0.5 deduction]
 ←			

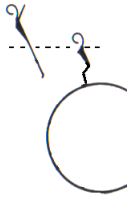
Unit 3: Thrust from wheel	After straddling down from handstand, an extended body is achieved by way of a powerful hand thrust from the wheel and a lifting of the upper body.	• legs not straight in straddle down • feet not extended • wheel touches mat before gymnast leaves wheel • wheel rolls into the landing mat such that the rolling movement is severely impaired before the gymnast thrusts from the wheel	• 0.1-0.2 minor deduction • 0.1-0.2 minor deduction • 0.2 fixed deduction • 0.8 fixed deduction
Flight phase  ←	The thrust from the wheel must be sufficient to ensure that the hips of the gymnast in the flight phase are above the level of the hand thrust from the wheel. Body extended, legs together.	• lack of body extension (hips extended, legs straight, upper body lifted) after thrust from wheel • lack of height in flight phase • legs not together before landing • lack of body extension before landing • flight phase too short (inside 90 cm zone)	• 0.1-0.2 minor deduction • 0.1-0.8 variable deduction [0.8 deduction if no identifiable thrust; no deduction as long as hips are above level of hand thrust from wheel] • 0.1-0.2 minor deduction • 0.1-0.2 minor deduction • 0.2 fixed deduction

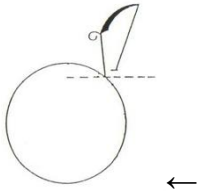
A5 **Straddle Over**		**Difficulty value: 1.3**	***German ref.: Grätsche***
Vault Phases	Technique	Common Faults (not exhaustive)	Deductions/Comments
Unit 2: Take-off Mounting phase/ Position on top of the wheel *NB: Note that the mounting phase and position on wheel are integrated into one movement for this vault (and A6).*	• Take-off from 2 feet Hands reach high up on wheel. After a strong take-off (no layout required) and powerful arm pull (bent arms permitted), the gymnast passes through a straddle support position on top of the wheel.	• take-off from 1 foot • uneven hand positioning on wheel • legs not straight after take-off • feet not extended • legs in contact with wheel • "too long" on top of wheel	• 0.5 fixed deduction • 0.1-0.2 minor deduction • 0.1-0.2 minor deduction • 0.1-0.2 minor deduction • 0.1-0.2 minor deduction • 0.1-0.5 variable deduction: [< 3 seconds = no deduction] [3-4 seconds = 0.1-0.2 deduction] [5-6 seconds = 0.3-0.4 deduction] [> 6 seconds = 0.5 deduction]
Unit 3: Thrust from wheel / Flight phase 	The hand thrust from the wheel takes place while the gymnast is still gaining height. By way of a powerful arm push, extension of the hips and lifting of the upper body (arms elevated) the gymnast achieves an extended body position during the flight phase. The gymnast should continue to gain height after thrusting from the wheel (hip level of gymnast should be visibly above top of wheel in flight phase).	• lack of hip extension after thrust from wheel • arms not elevated • legs not together • legs not straight • feet not extended • wheel touches mat before gymnast leaves wheel • wheel rolls into the landing mat such that the rolling movement is severely impaired before the gymnast thrusts from the wheel • lack of height in flight phase • lack of body extension before landing • flight phase too short (inside 90 cm zone)	• 0.1-0.2 minor deduction • 0.1-0.2 minor deduction • 0.1-0.2 minor deduction • 0.1-0.2 minor deduction • 0.1-0.2 minor deduction • 0.2 fixed deduction • 0.8 fixed deduction • 0.1-0.8 variable deduction [0.8 deduction if no identifiable thrust; no deduction as long as hip level of gymnast visibly above top of wheel] • 0.1-0.2 minor deduction • 0.2 fixed deduction

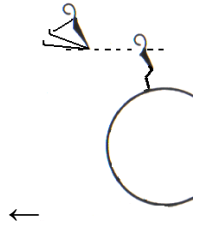
A6 **Tuck Over**		**Difficulty value: 2.0**	***German ref.: Hocke***
Vault Phases	Technique	Common Faults (not exhaustive)	Deductions/Comments
Unit 2: Take-off Mounting phase/ Position on top of the wheel *NB: Note that the mounting phase and position on wheel are integrated into one movement for this vault (and A5).*	• Take-off from 2 feet Hands reach high up on wheel. After a strong take-off (no layout required) and powerful arm pull (bent arms permitted), the gymnast passes through a tuck support position on top of the wheel. The feet must not fall below the rim of the wheel.	• take-off from 1 foot • uneven hand positioning on wheel • lack of tension in legs • legs not together in tuck position • feet not extended • legs in contact with wheel • feet fall below rim of wheel • "too long" on top of wheel	• 0.5 fixed deduction • 0.1-0.2 minor deduction • 0.1-0.2 minor deduction • 0.1-0.2 minor deduction • 0.1-0.2 minor deduction • 0.1-0.2 minor deduction • 0.8 fixed deduction • 0.1-0.5 variable deduction: [< 3 seconds = no deduction] [3-4 seconds = 0.1-0.2 deduction] [5-6 seconds = 0.3-0.4 deduction] [> 6 seconds = 0.5 deduction]
Unit 3: Thrust from wheel / Flight phase 	The hand thrust from the wheel takes place while the gymnast is still gaining height. By way of a powerful arm push, extension of the hips and lifting the upper body (arms elevated) the gymnast achieves an extended body position during the flight phase. The gymnast should continue to gain height after thrusting from the wheel (hip level of gymnast should be visibly above top of wheel in flight phase).	• lack of hip extension after thrust from wheel • arms not elevated • legs not together • legs not straight • feet not extended • wheel touches mat before gymnast leaves wheel • wheel rolls into the landing mat such that the rolling movement is severely impaired before the gymnast thrusts from the wheel • lack of height in flight phase • lack of body extension before landing • flight phase too short (inside 90 cm zone)	• 0.1-0.2 minor deduction • 0.1-0.2 minor deduction • 0.1-0.2 minor deduction • 0.1-0.2 minor deduction • 0.1-0.2 minor deduction • 0.2 fixed deduction • 0.8 fixed deduction • 0.1-0.8 variable deduction [0.8 deduction if no identifiable thrust; no deduction as long as hip level of gymnast visibly above top of wheel] • 0.1-0.2 minor deduction • 0.2 fixed deduction

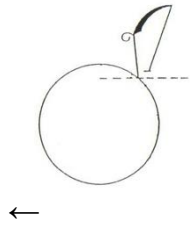
Category B: Vaults performed from a FORWARD standing position on the wheel

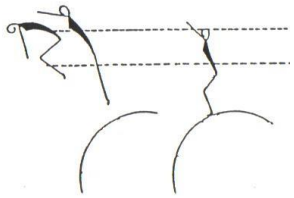
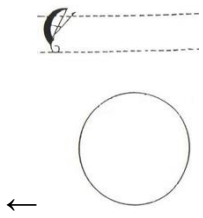
B1 **Straight Jump forwards**		**Difficulty value: 0.5**	***German ref.: Strecksprung vw***
Vault Phases	Technique	Common Faults (not exhaustive)	Deductions/Comments
Unit 2: Take-off	Take-off must be from 2 feet	• take-off from 1 foot	• 0.5 fixed deduction
Mounting phase 	Pike mount: Hands grip wheel rims at approximately waist height. Slight bending of arms permitted (elbow angle not less than 135°). Legs straight after take-off. Closed hip angle with hips rising to above shoulder level. Feet above level of hands on wheel, angle between arms and upper body greater than 90°. Pike mount from front lying also possible.	• uneven hand positioning on wheel • elbow angle less than 135° • elbows on wheel • insufficient height in mounting phase • legs not straight • feet not extended before placement on wheel • legs in contact with wheel before feet	• 0.1-0.2 minor deduction • 0.2 fixed deduction • 0.8 fixed deduction • 0.1-0.5 variable deduction • 0.1-0.2 minor deduction • 0.1-0.2 minor deduction • 0.1-0.2 minor deduction
Position on wheel	Pike straddle stand, straight legs, closed hip angle, feet immediately behind hands on wheel (pointing forwards). After placement of feet on wheel, the gymnast releases grip and lifts upper body into upright standing position. Arms (straight) may be elevated above head or kept	• legs not straight • feet not immediately behind hands • feet not pointing forwards • small adjustment of body position on wheel • major correction of body position on wheel (including “dragging” legs up wheel) • “too long” on top of wheel	• 0.1-0.2 minor deduction • 0.1-0.2 minor deduction • 0.1-0.2 minor deduction • 0.1-0.2 minor deduction • 0.5 fixed deduction • 0.1-0.5 variable deduction: [< 3 seconds = no deduction] [3-4 seconds = 0.1-0.2 deduction]

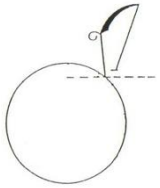
	behind lower body ready to swing upwards.	*NB: <u>Each deduction</u> may only be made <u>once per unit</u>. For example, if the gymnast has bent legs in both mounting phase and on top of wheel, the judges may deduct maximum 0.2 for bent legs in Unit 2.*	[5-6 seconds = 0.3-0.4 deduction] [> 6 seconds = 0.5 deduction]
<u>Unit 3:</u>			
Thrust from wheel	The thrust from the wheel is initiated through a slight bending of the legs followed by a powerful thrust (jump) from the wheel. The gymnast may (but does not have to) use an upward arm swing to achieve required height in flight phase.	• wheel touches mat before gymnast leaves wheel • wheel rolls into the landing mat such that the rolling movement is severely impaired before the gymnast thrusts from the wheel	• 0.2 fixed deduction • 0.8 fixed deduction
Flight phase 	Body extended after thrust from wheel. Straight legs and extended feet. Level of hips at top of straight jump should be at least equivalent to gymnast's shoulder level in standing position on top of wheel. Extended body throughout flight phase.	• lack of body extension after thrust from wheel • lack of height in flight phase • legs not straight • legs not together • feet not extended • lack of body extension before landing • flight phase too short (inside 90 cm zone)	• 0.1-0.2 minor deduction • 0.1-0.8 variable deduction [0.8 deduction if no identifiable thrust; no deduction as long as hips rise to level at least equivalent to gymnast's shoulder level in standing position on top of wheel] • 0.1-0.2 minor deduction • 0.1-0.2 minor deduction • 0.1-0.2 minor deduction • 0.1-0.2 minor deduction • 0.2 fixed deduction • 0.2 fixed deduction

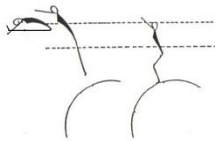
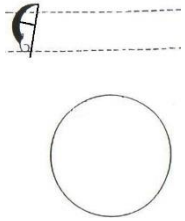
B2 **Pike Straddle Jump**		**Difficulty value: 1.0**	***German ref.: Grätschwinkelsprung***
Vault Phases	Technique	Common Faults (not exhaustive)	Deductions/Comments
Unit 2: Take-off	Take-off from 2 feet	• take-off from 1 foot	• 0.5 fixed deduction
Mounting phase  ←	Pike mount: Hands grip wheel rims at approximately waist height. Slight bending of arms permitted (elbow angle not less than 135º). Legs straight after take-off. Closed hip angle with hips rising to above shoulder level. Feet above level of hands on wheel, angle between arms and upper body greater than 90º. Pike mount from front lying also possible	• uneven hand positioning on wheel • elbow angle less than 135º • elbows on wheel • insufficient height in mounting phase • legs not straight • feet not extended before placement on wheel • legs in contact with wheel before feet	• 0.1-0.2 minor deduction • 0.2 fixed deduction • 0.8 fixed deduction • 0.1-0.5 variable deduction • 0.1-0.2 minor deduction • 0.1-0.2 minor deduction • 0.1-0.2 minor deduction
Position on wheel	Pike straddle stand, straight legs, closed hip angle, feet immediately behind hands on wheel (pointing forwards). After placement of feet on wheel, the gymnast releases grip on wheel and lifts upper body into upright standing position. Arms (straight) may be elevated above head or kept behind lower body ready to swing upwards.	• legs not straight • feet not immediately behind hands • feet not pointing forwards • small adjustment of body position on wheel • major correction of body position on wheel (including “dragging” legs up wheel) • “too long” on top of wheel *NB: <u>Each deduction</u> may only be made <u>once per unit</u>. For example, if the gymnast has bent legs in both mounting phase and on top of wheel, the judges*	• 0.1-0.2 minor deduction • 0.1-0.2 minor deduction • 0.1-0.2 minor deduction • 0.1-0.2 minor deduction • 0.5 fixed deduction • 0.1-0.5 variable deduction: [< 3 seconds = no deduction] [3-4 seconds = 0.1-0.2 deduction] [5-6 seconds = 0.3-0.4 deduction] [> 6 seconds = 0.5 deduction]

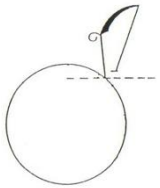
		may deduct maximum 0.2 for bent legs in Unit 2.	
Unit 3: Thrust from wheel	The thrust from the wheel is initiated through a slight bending of the legs followed by a powerful thrust (jump) from the wheel. The gymnast may (but does not have to) use an upward arm swing to achieve required height in flight phase.	• wheel touches mat before gymnast leaves wheel • wheel rolls into the landing mat such that the rolling movement is severely impaired before the gymnast thrusts from the wheel	• 0.2 fixed deduction • 0.8 fixed deduction
Flight phase 	Body extended after jump from wheel, straight legs and extended feet. Lift legs into pike straddle position at highest point of flight phase, hip angle 90º or less, at least 90º angle between straddled legs. Hip level at highest point in flight phase should be at least equivalent to gymnast's shoulder level in standing position on top of wheel. Extended body before landing.	• lack of body extension after thrust from wheel • pike straddle position not at highest point in flight phase • lack of height in flight phase • legs not straight • feet not extended • hip angle more than 90º • angle between straddled legs less than 90º • lack of body extension before landing • flight phase too short (inside 90 cm zone)	• 0.1-0.2 minor deduction • 0.1-0.2 minor deduction • 0.1-0.8 variable deduction [0.8 deduction if no identifiable thrust; no deduction as long as hips rise to level at least equivalent to gymnast's shoulder level in standing position on top of wheel] • 0.1-0.2 minor deduction • 0.1-0.2 minor deduction • 0.1-0.2 minor deduction • 0.1-0.2 minor deduction • 0.1-0.2 minor deduction • 0.2 fixed deduction

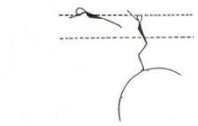
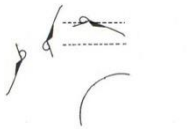
B3 **Tuck Front Somersault**		**Difficulty value: 2.0**	***German ref.: Salto vorwärts gehockt***
Vault Phases	Technique	Common Faults (not exhaustive)	Deductions/Comments
Unit 2: Take-off	Take-off from 2 feet	• take-off from 1 foot	• 0.5 fixed deduction
Mounting phase  ←	Pike mount: Hands grip wheel rims at approximately waist height. Slight bending of arms permitted (elbow angle not less than 135º). Legs straight after take-off. Closed hip angle with hips rising to above shoulder level. Feet above level of hands on wheel, angle between arms and upper body greater than 90º. Pike mount from front lying also possible.	• uneven hand positioning on wheel • elbow angle less than 135º • elbows on wheel • insufficient height in mounting phase • legs not straight • feet not extended before placement on wheel • legs in contact with wheel before feet • feet not placed immediately behind hands on wheel	• 0.1-0.2 minor deduction • 0.2 fixed deduction • 0.8 fixed deduction • 0.1-0.5 variable deduction • 0.1-0.2 minor deduction • 0.1-0.2 minor deduction • 0.1-0.2 minor deduction • 0.1-0.2 minor deduction • 0.1-0.2 minor deduction
Position on wheel 	Pike straddle stand, straight legs, closed hip angle, feet immediately behind hands on wheel (pointing forwards). After placement of feet on wheel, the gymnast releases grip and lifts upper body into upright standing position. Straight legs, feet on rims (pointing forwards), body tension, arms (straight) above head.	• legs not straight • feet not pointing forwards • lack of body tension • arms not straight above head • small adjustment of body position on wheel • major correction of body position on wheel (including “dragging” legs up wheel) • “too long” on top of wheel *NB: <u>Each deduction</u> may only be made <u>once per unit</u>. For example, if the gymnast has bent legs in both mounting phase and on top of wheel, the judges may deduct maximum 0.2 for bent legs in Unit 2.*	• 0.1-0.2 minor deduction • 0.1-0.2 minor deduction • 0.1-0.2 minor deduction • 0.1-0.2 minor deduction • 0.1-0.2 minor deduction • 0.5 fixed deduction • 0.1-0.5 variable deduction: [< 3 seconds = no deduction] [3-4 seconds = 0.1-0.2 deduction] [5-6 seconds = 0.3-0.4 deduction] [> 6 seconds = 0.5 deduction]

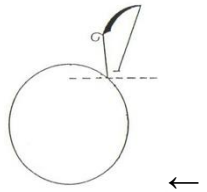
Unit 3: Thrust from wheel 	The gymnast initiates the front somersault from standing position on the wheel through a slight bending of the legs followed by a powerful thrust (jump) from the wheel.	• wheel touches mat before gymnast leaves wheel • wheel rolls into the landing mat such that the rolling movement is severely impaired before the gymnast thrusts from the wheel	• 0.2 fixed deduction • 0.8 fixed deduction
Flight phase 	Body extended immediately after take-off from wheel. There should be a noticeable gain in height before the gymnast adopts a tuck position (legs together, feet extended, knee angle 90° or less, hip angle 90° or less) for the tuck front somersault. Rotation should take place at the highest point of the flight phase, with the hips rising to at least the equivalent of the gymnast's shoulder level when standing on top of the wheel. Extended body before landing.	• lack of body extension after thrust from wheel • lack of height in flight phase • somersault rotation not at highest point in flight phase • legs not together • knee angle more than 90° • hip angle more than 90° • lack of body extension before landing • flight phase too short (inside 90 cm zone)	• 0.1-0.2 minor deduction • 0.1-0.8 variable deduction [0.8 deduction if no identifiable thrust; no deduction as long as hips rise to level at least equivalent to gymnast's shoulder level in standing position on top of wheel] • 0.2 fixed deduction • 0.1-0.2 minor deduction • 0.1-0.2 minor deduction • 0.1-0.2 minor deduction • 0.1-0.2 minor deduction • 0.2 fixed deduction

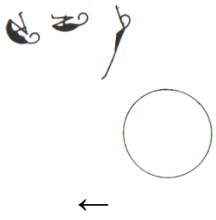
B4 **Pike Front Somersault**		**Difficulty value: 2.3**	***German ref.: Salto vorwärts gebückt***
Vault Phases	Technique	Common Faults (not exhaustive)	Deductions/Comments
Unit 1: Setting wheel in motion Run-up	• Gymnast awaits signal from head judge before setting wheel in motion • Max. 2 ½ wheel rotations to perform vault • Run-up may be interrupted by gymnast (max once per attempted vault)	Evaluation of execution starts in Unit 2	• The head judge has the right to ask the gymnast to repeat the vault if the gymnast sets the wheel in motion without waiting for a signal from the head judge. • Invalid vault (score 0.0) if the gymnast uses more than 2 ½ wheel rotations to perform the vault. • Invalid vault (score 0.0) if the gymnast interrupts the run-up of a vault twice.
Unit 2: Take-off Mounting phase  ←	Take-off from 2 feet Pike mount: Hands grip wheel rims at approximately waist height. Slight bending of arms permitted (elbow angle not less than 135º). Legs straight after take-off. Closed hip angle with hips rising to above shoulder level. Feet above level of hands on wheel, angle between arms and upper body greater than 90º. Pike mount from front lying also possible.	• take-off from 1 foot • uneven hand positioning on wheel • elbow angle less than 135º • elbows on wheel • insufficient height in mounting phase • legs not straight • feet not extended before placement on wheel • legs in contact with wheel before feet • feet not placed immediately behind hands on wheel	• 0.5 fixed deduction • 0.1-0.2 minor deduction • 0.2 fixed deduction • 0.8 fixed deduction • 0.1-0.5 variable deduction • 0.1-0.2 minor deduction • 0.1-0.2 minor deduction • 0.1-0.2 minor deduction • 0.1-0.2 minor deduction
Position on wheel	Pike straddle stand, straight legs, closed hip angle, feet immediately behind hands on wheel (pointing forwards). After placement of feet on wheel, the gymnast releases grip and lifts upper body into	• legs not straight • feet not pointing forwards • lack of body tension • arms not straight above head • small adjustment of body position on wheel	• 0.1-0.2 minor deduction • 0.1-0.2 minor deduction • 0.1-0.2 minor deduction • 0.1-0.2 minor deduction • 0.1-0.2 minor deduction

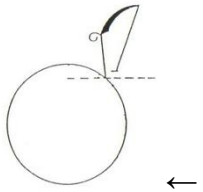
	upright standing position. Straight legs, feet on rims (pointing forwards), body tension, arms (straight) above head.	• major correction of body position on wheel (including "dragging" legs up wheel) • "too long" on top of wheel *NB: <u>Each deduction</u> may only be made <u>once per unit</u>. For example, if the gymnast has bent legs in both mounting phase and on top of wheel, the judges may deduct maximum 0.2 for bent legs in Unit 2.*	• 0.5 fixed deduction • 0.1-0.5 variable deduction: [< 3 seconds = no deduction] [3-4 seconds = 0.1-0.2 deduction] [5-6 seconds = 0.3-0.4 deduction] [> 6 seconds = 0.5 deduction]
<u>Unit 3:</u> Thrust from wheel  ←	The gymnast initiates the front somersault from standing position on the wheel through a slight bending of the legs followed by a powerful thrust (jump) from the wheel.	• wheel touches mat before gymnast leaves wheel • wheel rolls into the landing mat such that the rolling movement is severely impaired before the gymnast thrusts from the wheel	• 0.2 fixed deduction • 0.8 fixed deduction
Flight phase 	Body extended immediately after take-off from wheel. There should be a noticeable gain in height before the gymnast adopts a pike position (hip angle 45^{o} or less, legs together and straight, extended feet) for the pike front somersault. Rotation should take place at the highest point of the flight phase, with the hips rising to at least the equivalent of the gymnast's shoulder level when standing on top of the wheel. Extended body before landing.	• lack of body extension after thrust from wheel • lack of height in flight phase • somersault rotation not at highest point in flight phase • hip angle more than 90^{o} • legs not together • legs not straight • knee flexion of more than 45^{o} (i.e. knee angle less than 135^{o}) throughout the somersault • feet not extended • lack of body extension before landing • flight phase too short (inside 90 cm zone)	• 0.1-0.2 minor deduction • 0.1-0.8 variable deduction [0.8 deduction if no identifiable thrust; no deduction as long as hips rise to level at least equivalent to gymnast's shoulder level in standing position on top of wheel] • 0.2 fixed deduction • 0.1-0.2 minor deduction • 0.1-0.2 minor deduction • 0.1-0.2 minor deduction • In this case the somersault will be downgraded and judged as a tuck • 0.1-0.2 minor deduction • 0.1-0.2 minor deduction • 0.2 fixed deduction

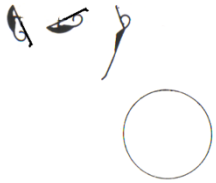
B5 **Straight Front Somersault**		**Difficulty value: 2.8**	***German ref.: Salto vorwärts gestreckt***
Vault Phases	Technique	Common Faults (not exhaustive)	Deductions/Comments
Unit 2: Take-off	Take-off from 2 feet	• take-off from 1 foot	• 0.5 fixed deduction
Mounting phase  ←	Pike mount: Hands grip wheel rims at approximately waist height. Slight bending of arms permitted (elbow angle not less than 135º). Legs straight after take-off. Closed hip angle with hips rising to above shoulder level. Feet above level of hands on wheel, angle between arms and upper body greater than 90º. Pike mount from front lying also possible.	• uneven hand positioning on wheel • elbow angle less than 135º • elbows on wheel • insufficient height in mounting phase • legs not straight • feet not extended before placement on wheel • legs in contact with wheel before feet • feet not placed immediately behind hands on wheel	• 0.1-0.2 minor deduction • 0.2 fixed deduction • 0.8 fixed deduction • 0.1-0.5 variable deduction • 0.1-0.2 minor deduction • 0.1-0.2 minor deduction • 0.1-0.2 minor deduction • 0.1-0.2 minor deduction • 0.1-0.2 minor deduction
Position on wheel 	Pike straddle stand, straight legs, closed hip angle, feet immediately behind hands on wheel (pointing forwards). After placement of feet on wheel, the gymnast releases grip and lifts upper body into upright standing position. Straight legs, feet on rims (pointing forwards), body tension, arms (straight) above head.	• legs not straight • feet not pointing forwards • lack of body tension • arms not straight above head • small adjustment of body position on wheel • major correction of body position on wheel (including “dragging” legs up wheel) • “too long” on top of wheel *NB: <u>Each deduction</u> may only be made <u>once per unit</u>. For example, if the gymnast has bent legs in both mounting phase and on top of wheel, the judges may deduct maximum 0.2 for bent legs in Unit 2.*	• 0.1-0.2 minor deduction • 0.1-0.2 minor deduction • 0.1-0.2 minor deduction • 0.1-0.2 minor deduction • 0.1-0.2 minor deduction • 0.5 fixed deduction • 0.1-0.5 variable deduction: [< 3 seconds = no deduction] [3-4 seconds = 0.1-0.2 deduction] [5-6 seconds = 0.3-0.4 deduction] [> 6 seconds = 0.5 deduction]

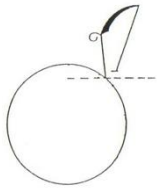
Unit 3: Thrust from wheel  ←	The gymnast initiates the front somersault from standing position on the wheel through a slight bending of the legs followed by a powerful thrust (jump) from the wheel.	• wheel touches mat before gymnast leaves wheel • wheel rolls into the landing mat such that the rolling movement is severely impaired before the gymnast thrusts from the wheel	• 0.2 fixed deduction • 0.8 fixed deduction
Flight phase  ←	Body extended immediately after take-off from wheel. Rotation is initiated through a dynamic heel lift, while the hip angle must be minimum 160° throughout the somersault, legs together and straight, extended feet. Rotation should take place at the highest point of the flight phase, with the hips rising to at least the equivalent of the gymnast's shoulder level when standing on top of the wheel.	• lack of body extension after thrust from wheel • lack of height in flight phase • somersault rotation not at highest point in flight phase • hip angle less than 160° in first half of somersault • flexion in the hips of more than 45° (i.e. a hip angle of less than 135°) • legs not together • legs not straight • feet not extended • flight phase too short (inside 90 cm zone)	• 0.1-0.2 minor deduction • 0.1-0.8 variable deduction [0.8 deduction if no identifiable thrust; no deduction as long as hips rise to level at least equivalent to gymnast's shoulder level in standing position on top of wheel] • 0.2 fixed deduction • 0.5 fixed deduction • In this case the somersault will be downgraded and judged as a pike • 0.1-0.2 minor deduction • 0.1-0.2 minor deduction • 0.1-0.2 minor deduction • 0.2 fixed deduction

B6 **Tuck Gainer Back Somersault**		**Difficulty value: 3.3**	***German ref.: Auerbach Salto gehockt***
Vault Phases	Technique	Common Faults (not exhaustive)	Deductions/Comments
Unit 2: Take-off	Take-off from 2 feet	• take-off from 1 foot	• 0.5 fixed deduction
Mounting phase 	Pike mount: Hands grip wheel rims at approximately waist height. Slight bending of arms permitted (elbow angle not less than 135º). Legs straight after take-off. Closed hip angle with hips rising to above shoulder level. Feet at least at level of hands on wheel, angle between arms and upper body greater than 90º. Pike mount from front lying also possible.	• uneven hand positioning on wheel • elbow angle less than 135º • elbows on wheel • insufficient height in mounting phase • legs not straight • feet not extended before placement on wheel • legs in contact with wheel before feet • feet not placed immediately behind hands on wheel	• 0.1-0.2 minor deduction • 0.2 fixed deduction • 0.8 fixed deduction • 0.1-0.5 variable deduction • 0.1-0.2 minor deduction • 0.1-0.2 minor deduction • 0.1-0.2 minor deduction • 0.1-0.2 minor deduction
Position on wheel	Pike straddle stand, straight legs, closed hip angle, feet immediately behind hands on wheel (pointing forwards). After placement of feet on wheel, the gymnast releases grip and lifts upper body into upright standing position (legs bend in preparation for powerful thrust from wheel). Arms are usually kept behind lower body ready to swing upwards into somersault.	• legs not straight on initial contact with wheel • feet not immediately behind hands • feet not pointing forwards • small adjustment of body position on wheel • major correction of body position on wheel (including “dragging” legs up wheel) • “too long” on top of wheel *NB: <u>Each deduction</u> may only be made <u>once per unit</u>.*	• 0.1-0.2 minor deduction • 0.1-0.2 minor deduction • 0.1-0.2 minor deduction • 0.1-0.2 minor deduction • 0.5 fixed deduction • 0.1-0.5 variable deduction: [< 3 seconds = no deduction] [3-4 seconds = 0.1-0.2 deduction] [5-6 seconds = 0.3-0.4 deduction] [> 6 seconds = 0.5 deduction]

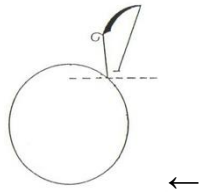
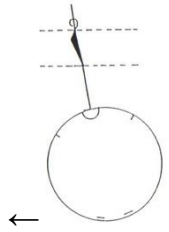
Unit 3: Thrust from wheel  ←	The gymnast initiates the back somersault from forward standing position on the wheel by way of a powerful arm swing upwards combined with a powerful thrust (jump) from the wheel.	• wheel touches mat before gymnast leaves wheel • wheel rolls into the landing mat such that the rolling movement is severely impaired before the gymnast thrusts from the wheel	• 0.2 fixed deduction • 0.8 fixed deduction
Flight phase  ←	Body extended immediately after take-off from wheel. There should be a noticeable gain in height before the gymnast adopts a tuck position (legs together, feet extended, knee angle 90° or less, hip angle 90° or less) for the tuck back somersault. Rotation should take place at the highest point of the flight phase, with the hips rising to at least the equivalent of the gymnast's shoulder level when standing on top of the wheel. Extended body before landing.	• lack of body extension after thrust from wheel • lack of height in flight phase • somersault rotation not at highest point • head too far back (not an extension of backbone) • legs not together • knee angle more than 90° • hip angle more than 90° • lack of body extension before landing • flight phase too short (inside 90 cm zone)	• 0.1-0.2 minor deduction • 0.1-0.8 variable deduction [0.8 deduction if no identifiable thrust; no deduction as long as hips rise to level at least equivalent to gymnast's shoulder level in standing position on top of wheel] • 0.2 fixed deduction • 0.1-0.2 minor deduction • 0.1-0.2 minor deduction • 0.1-0.2 minor deduction • 0.1-0.2 minor deduction • 0.1-0.2 minor deduction • 0.2 fixed deduction

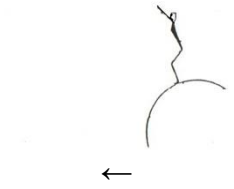
B7 **Pike Gainer Back Somersault**		**Difficulty value: 3.8**	***German ref.: Auerbach Salto gebückt***
Vault Phases	Technique	Common Faults (not exhaustive)	Deductions/Comments
Unit 2: Take-off	Take-off from 2 feet	• take-off from 1 foot	• 0.5 fixed deduction
Mounting phase 	Pike mount: Hands grip wheel rims at approximately waist height. Slight bending of arms permitted (elbow angle not less than 135º). Legs straight after take-off. Closed hip angle with hips rising to above shoulder level. Feet at least at level of hands on wheel, angle between arms and upper body greater than 90º. Pike mount from front lying also possible.	• uneven hand positioning on wheel • elbow angle less than 135º • elbows on wheel • insufficient height in mounting phase • legs not straight • feet not extended before placement on wheel • legs in contact with wheel before feet • feet not placed immediately behind hands	• 0.1-0.2 minor deduction • 0.2 fixed deduction • 0.8 fixed deduction • 0.1-0.5 variable deduction • 0.1-0.2 minor deduction • 0.1-0.2 minor deduction • 0.1-0.2 minor deduction • 0.1-0.2 minor deduction
Position on wheel	Pike straddle stand, straight legs, closed hip angle, feet immediately behind hands on wheel (pointing forwards). After placement of feet on wheel, the gymnast releases grip and lifts upper body into upright standing position (legs bend in preparation for powerful thrust from wheel). Arms are usually kept behind lower body ready to swing upwards into somersault.	• legs not straight on initial contact with wheel • feet not immediately behind hands • feet not pointing forwards • small adjustment of body position on wheel • major correction of body position on wheel (including “dragging” legs up wheel) • “too long” on top of wheel *NB: <u>Each deduction</u> may only be made <u>once per unit.</u>*	• 0.1-0.2 minor deduction • 0.1-0.2 minor deduction • 0.1-0.2 minor deduction • 0.1-0.2 minor deduction • 0.5 fixed deduction • 0.1-0.5 variable deduction: [< 3 seconds = no deduction] [3-4 seconds = 0.1-0.2 deduction] [5-6 seconds = 0.3-0.4 deduction] [> 6 seconds = 0.5 deduction]

Unit 3: Thrust from wheel  ← Flight phase  ←	The gymnast initiates the back somersault from forward standing position on the wheel by way of a powerful arm swing upwards combined with a powerful thrust (jump) from the wheel. Body extended immediately after take-off from wheel. There should be a noticeable gain in height before the gymnast adopts a pike position (hip angle 45^{o} or less, legs together and straight, extended feet) for the pike back somersault. Rotation should take place at the highest point of the flight phase, with the hips rising to at least the equivalent of the gymnast's shoulder level when standing on top of the wheel. Extended body before landing.	• lack of body extension after thrust from wheel • lack of height in flight phase • knee bend used to initiate rotation • somersault rotation not at highest point • head too far back (not an extension of backbone) • hip angle more than 90^{o} • legs not together • legs not straight • knee flexion of more than 45^{o} (i.e. knee angle less than 135^{o}) throughout the somersault • feet not extended • lack of body extension before landing • flight phase too short (inside 90 cm zone) • wheel touches mat before gymnast leaves wheel • wheel rolls into the landing mat such that the rolling movement is severely impaired before the gymnast thrusts from the wheel	• 0.1-0.2 minor deduction • 0.1-0.8 variable deduction [0.8 deduction if no identifiable thrust; no deduction as long as hips rise to level at least equivalent to gymnast's shoulder level in upright standing position on top of wheel] • 0.5 fixed deduction • 0.2 fixed deduction • 0.1-0.2 minor deduction • 0.1-0.2 minor deduction • 0.1-0.2 minor deduction • 0.1-0.2 minor deduction • In this case the somersault will be downgraded and judged as a tuck • 0.1-0.2 minor deduction • 0.1-0.2 minor deduction • 0.2 fixed deduction • 0.2 fixed deduction • 0.8 fixed deduction

B8 **Straight Gainer Back Somersault**		**Difficulty value: 4.3**	***German ref.: Auerbach Salto gestreckt***
Vault Phases	Technique	Common Faults (not exhaustive)	Deductions/Comments
Unit 2: Take-off	Take-off from 2 feet	• take-off from 1 foot	• 0.5 fixed deduction
Mounting phase  ←	Pike mount: Hands grip wheel rims at approximately waist height. Slight bending of arms permitted (elbow angle not less than 135º). Legs straight after take-off. Closed hip angle with hips rising to above shoulder level. Feet at least at level of hands on wheel, angle between arms and upper body greater than 90º. Pike mount from front lying also possible.	• uneven hand positioning on wheel • elbow angle less than 135º • elbows on wheel • insufficient height in mounting phase • legs not straight • feet not extended before placement on wheel • legs in contact with wheel before feet • feet not placed immediately behind hands	• 0.1-0.2 minor deduction • 0.2 fixed deduction • 0.8 fixed deduction • 0.1-0.5 variable deduction • 0.1-0.2 minor deduction • 0.1-0.2 minor deduction • 0.1-0.2 minor deduction • 0.1-0.2 minor deduction
Position on wheel	Pike straddle stand, straight legs, closed hip angle, feet immediately behind hands on wheel (pointing forwards). After placement of feet on wheel, the gymnast releases grip and lifts upper body into upright standing position (legs bend in preparation for powerful thrust from wheel). Arms are usually kept behind lower body ready to swing upwards into somersault.	• legs not straight on initial contact with wheel • feet not immediately behind hands • feet not pointing forwards • small adjustment of body position on wheel • major correction of body position on wheel (including “dragging” legs up wheel) • “too long” on top of wheel *NB: <u>Each deduction</u> may only be made <u>once per unit.</u>*	• 0.1-0.2 minor deduction • 0.1-0.2 minor deduction • 0.1-0.2 minor deduction • 0.1-0.2 minor deduction • 0.5 fixed deduction • 0.1-0.5 variable deduction: [< 3 seconds = no deduction] [3-4 seconds = 0.1-0.2 deduction] [5-6 seconds = 0.3-0.4 deduction] [> 6 seconds = 0.5 deduction]

<u>Unit 3:</u> Thrust from wheel  ←	The gymnast initiates the back somersault from forward standing position on the wheel by way of a powerful arm swing upwards combined with a powerful thrust (jump) from the wheel.	• wheel touches mat before gymnast leaves wheel • wheel rolls into the landing mat such that the rolling movement is severely impaired before the gymnast thrusts from the wheel	• 0.2 fixed deduction • 0.8 fixed deduction
Flight phase  ←	Body extended immediately after take-off from wheel. There should be a noticeable gain in height as gymnast maintains straight position (hip angle at least 160º, legs together and straight, extended feet) for the straight back somersault. Rotation should take place at the highest point of the flight phase, with the hips rising to at least the equivalent of the gymnast's shoulder level when standing on top of the wheel. Extended body before landing.	• lack of body extension after thrust from wheel • lack of height in flight phase • knee bend used to initiate rotation • somersault rotation not at highest point • head too far back (not an extension of backbone) • hip angle during second half of somersault less than 160º • flexion in the hips of more than 45º (i.e. a hip angle of less than 135º) • legs not together • legs not straight • feet not extended • lack of body extension before landing • flight phase too short (inside 90 cm zone)	• 0.1-0.2 minor deduction • 0.1-0.8 variable deduction [0.8 deduction if no identifiable thrust; no deduction as long as hips rise to level at least equivalent to gymnast's shoulder level in upright standing position on top of wheel] • 0.5 fixed deduction • 0.2 fixed deduction • 0.1-0.2 minor deduction • 0.5 fixed deduction • In this case the somersault will be downgraded and judged as a pike • 0.1-0.2 minor deduction • 0.1-0.2 minor deduction • 0.1-0.2 minor deduction • 0.1-0.2 minor deduction [<u>no</u> deduction if 0.5 for hip angle less than 160º in second half of somersault already deducted] • 0.2 fixed deduction

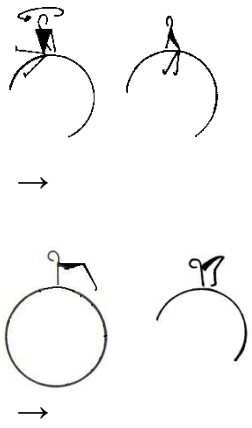
B9 **Double Tuck Front Somersault**		**Difficulty value: 3.8**	***German ref.: Doppelsalto vorwärts gehockt***
Vault Phases	Technique	Common Faults (not exhaustive)	Deductions/Comments
Unit 2: Take-off	Take-off from 2 feet	• take-off from 1 foot	• 0.5 fixed deduction
Mounting phase 	Pike mount: Hands grip wheel rims at approximately waist height. Slight bending of arms permitted (elbow angle not less than 135°). Legs straight after take-off. Closed hip angle with hips rising to above shoulder level. Feet above level of hands on wheel, angle between arms and upper body greater than 90°. Pike mount from front lying also possible.	• uneven hand positioning on wheel • elbow angle less than 135° • elbows on wheel • insufficient height in mounting phase • legs not straight • feet not extended before placement on wheel • legs in contact with wheel before feet • feet not placed immediately behind hands on wheel	• 0.1-0.2 minor deduction • 0.2 fixed deduction • 0.8 fixed deduction • 0.1-0.5 variable deduction • 0.1-0.2 minor deduction • 0.1-0.2 minor deduction • 0.1-0.2 minor deduction • 0.1-0.2 minor deduction • 0.1-0.2 minor deduction
Position on wheel 	Gymnast releases grip on wheel and lifts upper body into upright standing position immediately after placement of feet on wheel. Straight legs, feet on rims (pointing forwards), body tension, arms (straight) above head.	• legs not straight • feet not pointing forwards • lack of body tension • arms not straight above head • small adjustment of body position on wheel • major correction of body position on wheel (including “dragging” legs up wheel) • “too long” on top of wheel *NB: <u>Each deduction</u> may only be made <u>once per unit</u>.*	• 0.1-0.2 minor deduction • 0.1-0.2 minor deduction • 0.1-0.2 minor deduction • 0.1-0.2 minor deduction • 0.1-0.2 minor deduction • 0.5 fixed deduction • 0.1-0.5 variable deduction: [< 3 seconds = no deduction] [3-4 seconds = 0.1-0.2 deduction] [5-6 seconds = 0.3-0.4 deduction] [> 6 seconds = 0.5 deduction]

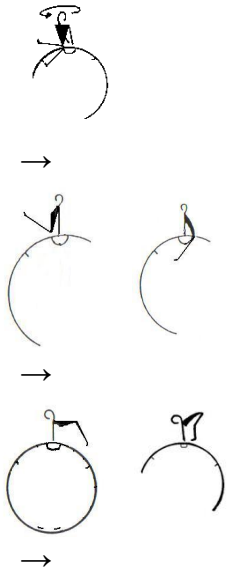
Unit 3: Thrust from wheel  ←	The gymnast initiates the double front somersault from standing position on the wheel through a slight bending of the legs followed by a powerful thrust (jump) from the wheel.	• wheel touches mat before gymnast leaves wheel • wheel rolls into the landing mat such that the rolling movement is severely impaired before the gymnast thrusts from the wheel	• 0.2 fixed deduction • 0.8 fixed deduction
Flight phase  ←	Body extended immediately after take-off from wheel. There should be a noticeable gain in height before the gymnast adopts a tuck position for the first of two rotations. The first rotation should take place at the highest point of the flight phase, with hips rising to at least the equivalent of the gymnast's shoulder level when standing on top of the wheel. Second rotation in immediate succession to the first. "Cowboy" style rotation (legs apart) permitted, hip and knee angles as small as possible. An extended body before landing is not required, but the hips must not be below at the level of the knees on landing.	• lack of body extension after thrust from wheel • lack of height in flight phase • first somersault rotation not at highest point in flight phase • less than half the second somersault rotation completed above the level of the wheel • hip angle more than 90° • flight phase too short (inside 90 cm zone)	• 0.1-0.2 minor deduction • 0.1-0.8 variable deduction [0.8 deduction if no identifiable thrust; no deduction as long as hips rise to level at least equivalent to gymnast's shoulder level in standing position on top of wheel] • 0.2 fixed deduction • 0.2 fixed deduction • 0.1-0.2 minor deduction • 0.2 fixed deduction

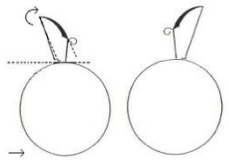
Category C: Vaults performed from a REVERSE standing position on the wheel

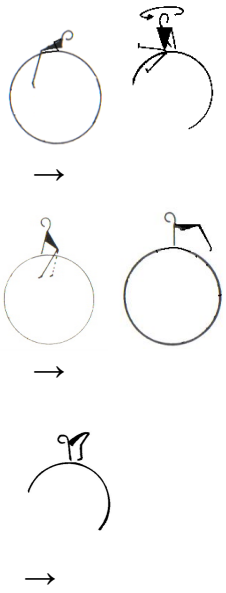
Reverse Mounts

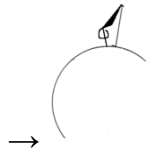
For Category C there are 4 alternative mounts that can be used to achieve a reverse standing position on the wheel. A detailed description of these 4 mounts can be found below, so that they do not have to be repeated in detail for each vault. In the individual vault descriptions C1-C7 there will be a reference to the alternatives described here.

Reverse Mounts	Technique	Common Faults (not exhaustive)	Deductions/Comments
1. REVERSE MOUNT WITH STRADDLE BACKSWING 	Take-off close to wheel. Hands grip wheel rims at approx. waist height (slight bending of arms permitted - elbow angle not less than 135º - no prescribed grip zone). Immediately after take-off the gymnast performs a half turn into a backwards straddle position on the wheel. The hands are then released from the original holding position and the upper body is untwisted so that the gymnast can re-grasp the rims in front of the backward straddle sitting position. As soon as the gymnast has re-grasped the rims of the wheel, the legs are swung backwards and upwards in a single movement (no 'extra swing' permitted). Legs remain straight, feet extended, hip angle gradually closing until hips are at least shoulder level, after which the gymnast may bend his/her legs (knee angle minimum 90º) in order to place feet on wheel immediately behind hands, ready for a pike standing position backwards on top of the wheel.	• uneven hand positioning on wheel • elbow angle less than 135º • elbows on wheel • legs not straight • feet not extended • 'extra swing' on top of wheel • legs bent before hips reach shoulder level in backwards swing movement • knee angle less than 90º when feet placed on wheel	• 0.1-0.2 minor deduction • 0.2 fixed deduction • 0.8 fixed deduction • 0.1-0.2 minor deduction • 0.1-0.2 minor deduction • 0.2 fixed deduction • 0.5 fixed deduction • 0.2 fixed deduction

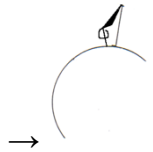
2. REVERSE MOUNT WITH PIKE BACKSWING: 	Take-off close to wheel. Hands grip wheel rims at approx. waist height (slight bending of arms permitted - elbow angle not less than 135º - no prescribed grip zone, but this mount is only possible if the hands are close to the rim handles). Immediately after take-off the gymnast performs a half turn into a backwards straddle position on the wheel. The hands are then released from the original holding position and the upper body is untwisted so that the gymnast can re-grasp the rims behind the backward straddle sitting position. As soon as the gymnast has re-grasped the rims of the wheel, the legs are brought together in front of the gymnast passing through a half lever or pike support position (the higher and tighter the pike the support position, the easier the subsequent swing will be) before swinging backwards and upwards between the rims of the wheel (closed hip angle). Legs remain straight, feet extended, until the hips are at least shoulder level, after which the gymnast may bend his/her knees (knee angle minimum 90º) in order to place feet on wheel immediately behind hands, ready for a pike standing position backwards on top of the wheel.	• uneven hand positioning on wheel • elbow angle less than 135º • elbows on wheel • legs not straight • feet not extended • 'extra swing' on top of wheel • legs bent before hips reach shoulder level in backwards swing movement • knee angle less than 90º when feet placed on wheel	• 0.1-0.2 minor deduction • 0.2 fixed deduction • 0.8 fixed deduction • 0.1-0.2 minor deduction • 0.1-0.2 minor deduction • 0.2 fixed deduction • 0.5 fixed deduction • 0.2 fixed deduction

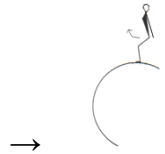
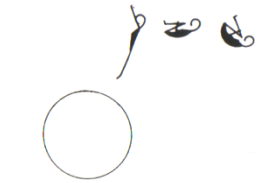
3. PIKE MOUNT WITH ½ TURN: 	Take-off close to the wheel. Hands grip wheel rims at approximately waist height (no prescribed grip zone). Arms may be slightly bent (minimum elbow angle 135º). Closed hip angle with hips rising to above shoulder level. Feet above level of hands on wheel, angle between arms and upper body greater than 90º. Legs straight. The turn is initiated from the hips and one foot is placed on the rim in front of the opposite hand. The second foot is then placed behind the other hand, which is released to re-grip in front of the first leg (half turn completed), while the first hand is moved across to the other rim. The gymnast should then be ready for a pike standing position backwards on top of the wheel. Legs straight throughout. Minor deductions for bent legs and/or re-positioning of feet on top of the wheel.	• uneven hand positioning on wheel • elbow angle less than 135º • elbows on wheel • insufficient height in mounting phase • legs not straight • legs in contact with wheel before feet	• 0.1-0.2 minor deduction • 0.2 fixed deduction • 0.8 fixed deduction • 0.1-0.5 variable deduction • 0.1-0.2 minor deduction • 0.1-0.2 minor deduction

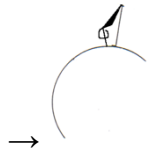
4. REVERSE MOUNT FROM FRONT LYING (WITH ½ TURN INTO STRADDLE BACKSWING): 	Take-off from two feet close to the wheel into immediate front lying on one of the rungs, hands holding the rims next to the rung. Legs swing forwards towards the centre of the wheel and then backwards to perform an immediate half turn into a back straddle sitting position on the wheel. The hands are then released from the original holding position and the upper body is untwisted so that the gymnast can re-grasp the rims in front of the backward straddle sitting position. As soon as the gymnast has re-grasped the rims of the wheel, the legs are swung backwards and upwards in a single movement (no 'extra swing' permitted). Legs remain straight, feet extended, hip angle gradually closing until hips have reached at least shoulder level, after which the gymnast is permitted to bend his/her legs (knee angle minimum 90º) in order to place feet on wheel immediately behind hands ready for a pike standing position backwards on top of the wheel.	• uneven hand positioning on wheel • insufficient hip extension immediately after take-off from floor • legs not together • legs not straight • feet not extended • elbow angle less than 135° • elbows on wheel • hands not released simultaneously before half turn • "extra leg swing" on top of the wheel • legs bent before hips reach shoulder level in backwards swing movement • knee angle less than 90° when feet placed on wheel • feet not placed immediately behind the hands	• 0.1-0.2 minor deduction • 0.1-0.2 minor deduction • 0.1-0.2 minor deduction • 0.1-0.2 minor deduction • 0.1-0.2 minor deduction • 0.2 fixed deduction • 0.8 fixed deduction • 0.1-0.2 minor deduction • 0.2 fixed deduction • 0.5 fixed deduction • 0.2 fixed deduction • 0.1-0.2 minor deduction

C1 **Straight Jump backwards**		**Difficulty value: 0.5**	***German ref.: Strecksprung rückwärts***
Vault Phases	Technique	Common Faults (not exhaustive)	Deductions/Comments
Unit 2: Take-off Four alternative mounts: ***1.Reverse mount with straddle backswing*** ***2.Reverse mount with pike backswing*** **3.*Pike mount with ½ turn*** **4.*Reverse mount from front lying (with ½ turn into straddle backswing)*** Position on wheel Either:  Or: 	Take-off from 2 feet Reverse pike stand on the wheel, feet immediately behind hands, toes pointing towards hands. The gymnast may then either remain in a pike standing position or stand upright on the wheel before thrusting from the wheel. If the gymnast remains in a pike stand, the arms will stay low and be brought backwards past the lower body as the gymnast prepares for the flight phase. If the gymnast chooses to stand upright on the wheel, the arms may be elevated above the head or kept at the side of the body.	• take-off from 1 foot ***See beginning of section on C category vaults for full description of reverse mounts, common faults and deductions.*** • legs not straight in reverse pike stand • small adjustment of body position on wheel • major correction of body position on wheel • "too long" on top of wheel	• 0.5 fixed deduction • 0.5 fixed deduction • 0.1-0.2 minor deduction • 0.5 fixed deduction • 0.1-0.5 variable deduction: [< 3 seconds = no deduction] [3-4 seconds = 0.1-0.2 deduction] [5-6 seconds = 0.3-0.4 deduction] [> 6 seconds = 0.5 deduction]

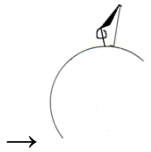
Unit 3: Thrust from wheel  → Flight phase  →	From standing position backwards on wheel, the gymnast initiates the straight jump by way of a powerful arm swing upwards combined with a powerful thrust (jump) from the legs (knee bend required before take-off from wheel). Body extended after thrust from wheel. Straight legs and extended feet. Level of hips at top of straight jump should be at least equivalent to gymnast's shoulder level in standing position on top of wheel. Extended body throughout flight phase.	• wheel touches mat before gymnast leaves wheel • wheel rolls into the landing mat such that the rolling movement is severely impaired before the gymnast thrusts from the wheel • lack of body extension after thrust from wheel • lack of height in flight phase • legs not straight • legs not together • feet not extended • lack of body extension before landing • flight phase too short (inside 90 cm zone)	• 0.2 fixed deduction • 0.8 fixed deduction • 0.1-0.2 minor deduction • 0.1-0.8 variable deduction [0.8 deduction if no identifiable thrust; no deduction as long as hips rise to level at least equivalent to gymnast's shoulder level in standing position on top of wheel] • 0.1-0.2 minor deduction • 0.1-0.2 minor deduction • 0.1-0.2 minor deduction • 0.1-0.2 minor deduction • 0.2 fixed deduction

C2 **Tuck Back Somersault**		**Difficulty value: 2.0**	***German ref.: Salto rückwärts gehockt***
Vault Phases	Technique	Common Faults (not exhaustive)	Deductions/Comments
Unit 2: Take-off Four alternative mounts: ***1.Reverse mount with straddle backswing*** ***2.Reverse mount with pike backswing*** 3.***Pike mount with ½ turn*** ***4.Reverse mount from front lying (with ½ turn into straddle backswing)*** Position on wheel Either:  Or: 	Take-off from 2 feet Reverse pike stand on the wheel, feet immediately behind hands, toes pointing towards hands. The gymnast may then either remain in a pike standing position or stand upright on the wheel before thrusting from the wheel. If the gymnast remains in a pike stand, the arms will stay low and be brought backwards past the lower body as the gymnast prepares for the flight phase. If the gymnast chooses to stand upright on the wheel, the arms may be elevated above the head or kept at the side of the body.	• take-off from 1 foot ***See beginning of section on C category vaults for full description of reverse mounts, common faults and deductions.*** • legs not straight in reverse pike stand • small adjustment of body position on wheel • major correction of body position on wheel • "too long" on top of wheel	• 0.5 fixed deduction • 0.5 fixed deduction • 0.1-0.2 minor deduction • 0.5 fixed deduction • 0.1-0.5 variable deduction: [< 3 seconds = no deduction] [3-4 seconds = 0.1-0.2 deduction] [5-6 seconds = 0.3-0.4 deduction] [> 6 seconds = 0.5 deduction]

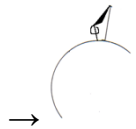
Unit 3: Thrust from wheel  → Flight phase  →	From standing position backwards on wheel, the gymnast initiates the somersault through a powerful upward arm swing combined with a powerful thrust (jump) from legs. Body extended immediately after take-off from wheel, arms (straight) above head. There should be a noticeable gain in height before the gymnast adopts a tuck position (legs together, feet extended, knee angle 90° or less, hip angle 90° or less) for the tuck back somersault. Rotation should take place at the highest point of the flight phase, with the hips rising to at least the gymnast's shoulder level when standing upright on top of the wheel. Extended body before landing.	• wheel touches mat before gymnast leaves wheel • wheel rolls into the landing mat such that the rolling movement is severely impaired before the gymnast thrusts from the wheel • lack of body extension after thrust • lack of height in flight phase • somersault rotation not at highest point in flight phase • head too far back (not an extension of backbone) • legs not together • knee angle more than 90° during somersault • hip angle more than 90° during somersault • lack of body extension before landing • flight phase too short (inside 90 cm zone)	• 0.2 fixed deduction • 0.8 fixed deduction • 0.1-0.2 minor deduction • 0.1-0.8 variable deduction [0.8 deduction if no identifiable thrust; no deduction as long as hips rise to level at least equivalent to gymnast's shoulder level in upright standing position on top of wheel] • 0.2 fixed deduction • 0.1-0.2 minor deduction • 0.1-0.2 minor deduction • 0.1-0.2 minor deduction • 0.1-0.2 minor deduction • 0.1-0.2 minor deduction • 0.2 fixed deduction

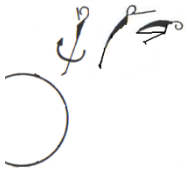
C3 **Pike Back Somersault**		**Difficulty value: 2.5**	***German ref.: Salto rückwärts gebückt***
Vault Phases	Technique	Common Faults (not exhaustive)	Deductions/Comments
Unit 2: Take-off Four alternative mounts: ***1.Reverse mount with straddle backswing*** ***2.Reverse mount with pike backswing*** 3.***Pike mount with ½ turn*** ***4.Reverse mount from front lying (with ½ turn into straddle backswing)*** Position on wheel Either:  Or: 	Take-off from 2 feet Reverse pike stand on the wheel, feet immediately behind hands, toes pointing towards hands. The gymnast may then either remain in a pike standing position or stand upright on the wheel before thrusting from the wheel. If the gymnast remains in a pike stand, the arms will stay low and be brought backwards past the lower body as the gymnast prepares for the flight phase. If the gymnast chooses to stand upright on the wheel, the arms may be elevated above the head or kept at the side of the body.	• take-off from 1 foot ***See beginning of section on C category vaults for full description of reverse mounts, common faults and deductions.*** • legs not straight in reverse pike stand • small adjustment of body position on wheel • major correction of body position on wheel • "too long" on top of wheel	• 0.5 fixed deduction • 0.5 fixed deduction • 0.1-0.2 minor deduction • 0.5 fixed deduction • 0.1-0.5 variable deduction: [< 3 seconds = no deduction] [3-4 seconds = 0.1-0.2 deduction] [5-6 seconds = 0.3-0.4 deduction] [> 6 seconds = 0.5 deduction]

Unit 3: Thrust from wheel  → Flight phase  →	From standing position backwards on wheel, the gymnast initiates the somersault through a powerful upward arm swing combined with a powerful thrust (jump) from the legs. Body extended immediately after take-off from wheel, arms (straight) above head. There should be a noticeable gain in height before the gymnast adopts a pike position (hip angle 45° or less, legs together and straight, extended feet) for the pike back somersault. Rotation should take place at the highest point of the flight phase, with the hips rising to at least the gymnast's shoulder level when standing upright on top of the wheel. Extended body before landing.	• wheel touches mat before gymnast leaves wheel • wheel rolls into the landing mat such that the rolling movement is severely impaired before the gymnast thrusts from the wheel • lack of body extension after thrust • lack of height in flight phase • knee bend used to initiate rotation • somersault rotation not at highest point in flight phase • head too far back (not an extension of backbone) • hip angle more than 90° during somersault • legs not together • legs not straight • knee flexion of more than 45° (i.e. a knee angle of less than 135°) • feet not extended • lack of body extension before landing • flight phase too short (inside 90 cm zone)	• 0.2 fixed deduction • 0.8 fixed deduction • 0.1-0.2 minor deduction • 0.1-0.8 variable deduction [0.8 deduction if no identifiable thrust; no deduction as long as hips rise to level at least equivalent to gymnast's shoulder level in upright standing position on top of wheel] • 0.5 fixed deduction • 0.2 fixed deduction • 0.1-0.2 minor deduction • 0.1-0.2 minor deduction • 0.1-0.2 minor deduction • 0.1-0.2 minor deduction • In this case the somersault will be downgraded and judged as a tuck • 0.1-0.2 minor deduction • 0.1-0.2 minor deduction • 0.2 fixed deduction

C4 **Straight Back Somersault**		**Difficulty value: 2.8**	***German ref.: Salto rückwärts gestreckt***
Vault Phases	Technique	Common Faults (not exhaustive)	Deductions/Comments
Unit 2: Take-off Four alternative mounts: ***1.Reverse mount with straddle backswing*** ***2.Reverse mount with pike backswing*** 3.***Pike mount with ½ turn*** **4. *Reverse mount from front lying (with ½ turn into straddle backswing)*** Position on wheel Either:  Or: 	Take-off from 2 feet Reverse pike stand on the wheel, feet immediately behind hands, toes pointing towards hands. The gymnast may then either remain in a pike standing position or stand upright on the wheel before thrusting from the wheel. If the gymnast remains in a pike stand, the arms will stay low and be brought backwards past the lower body as the gymnast prepares for the flight phase. If the gymnast chooses to stand upright on the wheel, the arms may be elevated above the head or kept at the side of the body.	• take-off from 1 foot ***See beginning of section on C category vaults for full description of reverse mounts, common faults and deductions.*** • legs not straight in reverse pike stand • small adjustment of body position on wheel • major correction of body position on wheel • "too long" on top of wheel	• 0.5 fixed deduction • 0.5 fixed deduction • 0.1-0.2 minor deduction • 0.5 fixed deduction • 0.1-0.5 variable deduction: [< 3 seconds = no deduction] [3-4 seconds = 0.1-0.2 deduction] [5-6 seconds = 0.3-0.4 deduction] [> 6 seconds = 0.5 deduction]

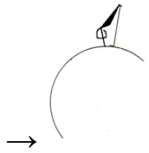
<u>Unit 3:</u> Thrust from wheel  →	From standing position backwards on wheel, the gymnast initiates the somersault by way of a powerful arm swing upwards combined with a powerful thrust (jump) from the legs.	• wheel touches mat before gymnast leaves wheel • wheel rolls into the landing mat such that the rolling movement is severely impaired before the gymnast thrusts from the wheel	• 0.2 fixed deduction • 0.8 fixed deduction
Flight phase  →	Body extended immediately after take-off from wheel, arms (straight) above head. There should be a noticeable gain in height before the somersault rotation takes place at the highest point of the flight phase (legs together and straight, feet extended, hip angle at least 160º). Hips rise to at least the gymnast's shoulder level when standing upright on top of the wheel. From highest point after thrust from wheel, arms are pulled down in front of body as somersault rotates (arm angle completely closed), returning to elevated position before landing.	• lack of body extension after thrust • lack of height in flight phase	• 0.1-0.2 minor deduction • 0.1-0.8 variable deduction [0.8 deduction if no identifiable thrust; no deduction as long as hips rise to level at least equivalent to gymnast's shoulder level in upright standing position on top of wheel]
		• somersault rotation not at highest point in flight phase	• 0.2 fixed deduction
		• hip angle less than 160º during somersault	• 0.5 fixed deduction
		• flexion in the hips of more than 45º (i.e. a hip angle of less than 135º)	• In this case the somersault will be downgraded and judged as a pike
		• head too far back (not an extension of backbone)	• 0.1-0.2 minor deduction
		• legs not together	• 0.1-0.2 minor deduction
		• legs not straight	• 0.1-0.2 minor deduction
		• feet not extended	• 0.1-0.2 minor deduction
		• lack of body extension before landing	• 0.1-0.2 minor deduction [<u>no</u> deduction if 0.5 for hip angle less than 160º in second half of somersault already deducted]
		• flight phase too short (inside 90 cm zone)	• 0.2 fixed deduction

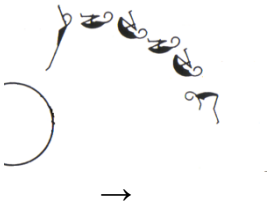
C5 Reverse Stand, Half Twist into Tuck Front Somersault		**Difficulty value: 3.0**	***German ref.: Stand rw, halbe Drehung, Salto vw gehockt***
Vault Phases	Technique	Common Faults (not exhaustive)	Deductions/Comments
Unit 2: Take-off Four alternative mounts: ***1.Reverse mount with straddle backswing*** ***2.Reverse mount with pike backswing*** 3.***Pike mount with ½ turn*** ***4.Reverse mount from front lying (with ½ turn into straddle backswing)*** Position on wheel Either:  → Or:  →	Take-off from 2 feet Reverse pike stand on the wheel, feet immediately behind hands, toes pointing towards hands. The gymnast may then either remain in a pike standing position or stand upright on the wheel before thrusting from the wheel. If the gymnast remains in a pike stand, the arms will stay low and be brought backwards past the lower body as the gymnast prepares for the flight phase. If the gymnast chooses to stand upright on the wheel, the arms may be elevated above the head or kept at the side of the body.	• take-off from 1 foot ***See beginning of section on C category vaults for full description of reverse mounts, common faults and deductions.*** • legs not straight in reverse pike stand • small adjustment of body position on wheel • major correction of body position on wheel • "too long" on top of wheel	• 0.5 fixed deduction • 0.5 fixed deduction • 0.1-0.2 minor deduction • 0.5 fixed deduction • 0.1-0.5 variable deduction: [< 3 seconds = no deduction] [3-4 seconds = 0.1-0.2 deduction] [5-6 seconds = 0.3-0.4 deduction] [> 6 seconds = 0.5 deduction]

Unit 3: Thrust from wheel 	From standing position backwards on wheel, the gymnast initiates the somersault by way of a powerful arm swing upwards combined with a powerful thrust (jump) from the legs.	• wheel touches mat before gymnast leaves wheel • wheel rolls into the landing mat such that the rolling movement is severely impaired before the gymnast thrusts from the wheel	• 0.2 fixed deduction • 0.8 fixed deduction
Flight phase  →	Body extended immediately after take-off from wheel. There should be a noticeable gain in height before the gymnast initiates a half twist (initiated by head and shoulders) into tuck position (legs together, feet extended, knee angle 90º or less, hip angle 90º or less) for the tuck front somersault. Rotation should take place at the highest point of the flight phase, with the hips rising to at least the gymnast's shoulder level when standing upright on top of the wheel. Extended body before landing.	• lack of body extension after thrust from wheel • half twist initiated before thrust from wheel • lack of height in flight phase • somersault rotation not at highest point in flight phase • head too far back (not an extension of backbone) • legs not together • knee angle more than 90º during somersault • hip angle more than 90º during somersault • lack of body extension before landing • flight phase too short (inside 90 cm zone)	• 0.1-0.2 minor deduction • 0.1-0.2 minor deduction • 0.1-0.8 variable deduction [0.8 deduction if no identifiable thrust; no deduction as long as hips rise to level at least equivalent to gymnast's shoulder level in upright standing position on top of wheel] • 0.2 fixed deduction • 0.1-0.2 minor deduction • 0.1-0.2 minor deduction • 0.1-0.2 minor deduction • 0.1-0.2 minor deduction • 0.1-0.2 minor deduction • 0.2 fixed deduction

C6 Reverse Stand, Half Twist into Pike Front Somersault		**Difficulty value: 3.3**	***German ref.: Stand rw, halbe Drehung, Salto vw gebückt***
Vault Phases	Technique	Common Faults (not exhaustive)	Deductions/Comments
Unit 2: Take-off Four alternative mounts: ***1.Reverse mount with straddle backswing*** ***2.Reverse mount with pike backswing*** 3.***Pike mount with ½ turn*** ***4.Reverse mount from front lying (with ½ turn into straddle backswing)*** Position on wheel Either:  → Or:  →	Take-off from 2 feet Reverse pike stand on the wheel, feet immediately behind hands, toes pointing towards hands. The gymnast may then either remain in a pike standing position or stand upright on the wheel before thrusting from the wheel. If the gymnast remains in a pike stand, the arms will stay low and be brought backwards past the lower body as the gymnast prepares for the flight phase. If the gymnast chooses to stand upright on the wheel, the arms may be elevated above the head or kept at the side of the body.	• take-off from 1 foot ***See beginning of section on C category vaults for full description of reverse mounts, common faults and deductions.*** • legs not straight in reverse pike stand • small adjustment of body position on wheel • major correction of body position on wheel • "too long" on top of wheel	• 0.5 fixed deduction • 0.5 fixed deduction • 0.1-0.2 minor deduction • 0.5 fixed deduction • 0.1-0.5 variable deduction: [< 3 seconds = no deduction] [3-4 seconds = 0.1-0.2 deduction] [5-6 seconds = 0.3-0.4 deduction] [> 6 seconds = 0.5 deduction]

Unit 3: Thrust from wheel  Flight phase 	From standing position backwards on wheel, the gymnast initiates the somersault by way of a powerful arm swing upwards combined with a powerful thrust (jump) from the legs. Body extended immediately after take-off from wheel. There should be a noticeable gain in height before the gymnast initiates the half twist (initiated by head and shoulders) into pike position (hip angle 45° or less, legs together and straight, extended feet) for the pike front somersault. Rotation should take place at the highest point of the flight phase, with the hips rising to at least the gymnast's shoulder level when standing upright on top of the wheel. Extended body before landing.	• wheel touches mat before gymnast leaves wheel • wheel rolls into the landing mat such that the rolling movement is severely impaired before the gymnast thrusts from the wheel • lack of body extension after thrust from wheel • half twist initiated before thrust from wheel • lack of height in flight phase • somersault rotation not at highest point in flight phase • head too far back (not an extension of backbone) • legs not together • legs not straight • hip angle more than 90° during somersault • knee flexion of more than 45° (i.e. a knee angle of less than 135°) • lack of body extension before landing • flight phase too short (inside 90 cm zone)	• 0.2 fixed deduction • 0.8 fixed deduction • 0.1-0.2 minor deduction • 0.1-0.2 minor deduction • 0.1-0.8 variable deduction [0.8 deduction if no identifiable thrust; no deduction as long as hips rise to level at least equivalent to gymnast's shoulder level in upright standing position on top of wheel] • 0.2 fixed deduction • 0.1-0.2 minor deduction • 0.1-0.2 minor deduction • 0.1-0.2 minor deduction • 0.1-0.2 minor deduction • In this case the somersault will be downgraded and judged as a tuck • 0.1-0.2 minor deduction • 0.2 fixed deduction

C7 **Double Tuck Back Somersault**		**Difficulty value: 4.0**	***German ref.: Doppelsalto rückwärts gehockt***
Vault Phases	Technique	Common Faults (not exhaustive)	Deductions/Comments
Unit 2: Take-off Four alternative mounts: ***1.Reverse mount with straddle backswing*** ***2.Reverse mount with pike backswing*** 3.***Pike mount with ½ turn*** ***4.Reverse mount from front lying (with ½ turn into straddle backswing)*** Position on wheel Either:  Or: 	Take-off from 2 feet Reverse pike stand on the wheel, feet immediately behind hands, toes pointing towards hands. The gymnast may then either remain in a pike standing position or stand upright on the wheel before thrusting from the wheel. If the gymnast remains in a pike stand, the arms will stay low and be brought backwards past the lower body as the gymnast prepares for the flight phase. If the gymnast chooses to stand upright on the wheel, the arms may be elevated above the head or kept at the side of the body.	• take-off from 1 foot ***See beginning of section on C category vaults for full description of reverse mounts, common faults and deductions.*** • legs not straight in reverse pike stand • small adjustment of body position on wheel • major correction of body position on wheel • "too long" on top of wheel	• 0.5 fixed deduction • 0.5 fixed deduction • 0.1-0.2 minor deduction • 0.5 fixed deduction • 0.1-0.5 variable deduction: [< 3 seconds = no deduction] [3-4 seconds = 0.1-0.2 deduction] [5-6 seconds = 0.3-0.4 deduction] [> 6 seconds = 0.5 deduction]

Unit 3: Thrust from wheel 	From standing position backwards on wheel, the gymnast initiates the somersault using a powerful arm swing upwards combined with a strong thrust (jump) from the legs. Body extended immediately after take-off from wheel.	• wheel touches mat before gymnast leaves wheel • wheel rolls into the landing mat such that the rolling movement is severely impaired before the gymnast thrusts from the wheel	• 0.2 fixed deduction • 0.8 fixed deduction
Flight phase 	There should be a noticeable gain in height before the gymnast adopts a tuck position for the double tuck back somersault. The first rotation should take place at the highest point of the flight phase, with the hips rising to at least the equivalent of the gymnast's shoulder level when standing upright on top of the wheel. Second rotation in immediate succession to the first. "Cowboy" style rotation (legs apart) permitted, hip and knee angles as small as possible. An extended body before landing is not required, but the hips must not be below the level of the knees on landing.	• lack of body extension after thrust from wheel • lack of height in flight phase • first somersault rotation not at highest point in flight phase • head too far back (not an extension of backbone) • less than half the second somersault rotation completed above the level of the wheel • hip angle more than 90° • flight phase too short (inside 90 cm zone)	• 0.1-0.2 minor deduction • 0.1-0.8 variable deduction [0.8 deduction if no identifiable thrust; no deduction as long as hips rise to level at least equivalent to gymnast's shoulder level in upright standing position on top of wheel] • 0.2 fixed deduction • 0.1-0.2 minor deduction • 0.2 fixed deduction • 0.1-0.2 minor deduction • 0.2 fixed deduction

Category D: Vaults performed using an overswing technique

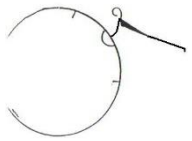
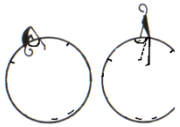
D1 **Overswing**		**Difficulty value: 2.0**	***German ref.: Überschlag***
Vault Phases	Technique	Common Faults (not exhaustive)	Deductions/Comments
Unit 2: Take-off	Take-off from 2 feet	• take-off from 1 foot	• 0.5 fixed deduction
Mounting phase  ←	Handstand mount: Elbow angle minimum 90°, hip angle 90°-180°, feet above level of hands on wheel. Legs straight and together, feet extended.	• uneven hand positioning on wheel • elbow angle less than 90° • elbows on wheel • shoulders below (or weight resting on) rim of wheel • legs not straight • legs not together • feet not extended • insufficient height in mounting phase	• 0.1-0.2 minor deduction • 0.5 fixed deduction • 0.8 fixed deduction • 0.8 fixed deduction • 0.1-0.2 minor deduction • 0.1-0.2 minor deduction • 0.1-0.2 minor deduction • 0.1-0.5 variable deduction
Position on wheel  ←	Hips must rise as quickly as possible. The upward movement continues until wrists, shoulders and hips are vertically aligned above the wheel, hip angle increasingly open. With a minimum elbow angle of 90°, the gymnast's shoulders should be clearly above the top of the wheel.	• shoulders below (or weight resting on) rim of wheel • elbow angle less than 90° • no vertical alignment of wrists, shoulders, and hips above wheel • no visible opening of hip angle • small adjustment of body position on wheel • major correction of body position on wheel • "too long" on top of wheel	• 0.8 fixed deduction • 0.5 fixed deduction • 0.1-0.2 minor deduction • 0.1-0.2 minor deduction • 0.1-0.2 minor deduction • 0.5 fixed deduction • 0.1-0.5 variable deduction:

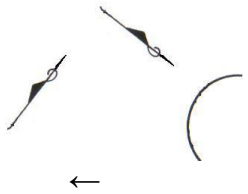
		NB: <u>Each deduction</u> may only be made <u>once per unit</u>. For example, if gymnast's shoulders are below rim of wheel throughout Unit 2, only one 0.8 deduction may be made for this error.	[< 3 seconds = no deduction] [3-4 seconds = 0.1-0.2 deduction] [5-6 seconds = 0.3-0.4 deduction] [> 6 seconds = 0.5 deduction]

<u>Unit 3:</u>			
Thrust from wheel  ←	Thrust from the wheel takes place just after the gymnast's holding position has passed the top of the wheel. As the hip angle reaches full extension the arms are straightened, and the gymnast pushes away from the wheel, passing through a handstand position.	• hip angle not fully extended • legs not straight • legs not together • feet not extended • arms not straightened • flight phase initiated by bending knees • shoulders below (or weight resting on) rim of wheel • no identifiable handstand position • wheel touches mat before gymnast leaves wheel • wheel rolls into the landing mat such that the rolling movement is severely impaired before the gymnast thrusts from the wheel	• 0.1-0.2 minor deduction • 0.1-0.2 minor deduction • 0.1-0.2 minor deduction • 0.1-0.2 minor deduction • 0.1-0.2 minor deduction • 0.5 fixed deduction • 0.8 fixed deduction • 0.2 fixed deduction • 0.2 fixed deduction • 0.8 fixed deduction
Flight phase  ←	Extended body in flight phase. Hip level must rise visibly after thrust from wheel. The body may be in a straight or slightly arched position.	• lack of body extension after thrust • lack of height in flight phase • lack of body extension before landing • flight phase too short (inside 90 cm zone)	• 0.1-0.2 minor deduction • 0.1-0.8 variable deduction [0.8 deduction if no identifiable thrust; no deduction as long as hips rise visibly after thrust from wheel] • 0.1-0.2 minor deduction • 0.2 fixed deduction

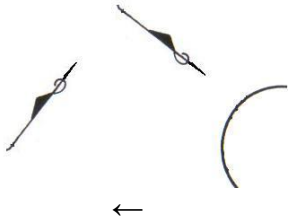
D2 Straddle Overswing		**Difficulty value: 1.8**	***German ref.: Grätschüberschlag***
Vault Phases	Technique	Common Faults (not exhaustive)	Deductions/Comments
Unit 2: Take-off	Take-off from 2 feet	• take-off from 1 foot	• 0.5 fixed deduction
Mounting phase  ←	Handstand mount: Elbow angle minimum 90°, hip angle 90°-180°, feet above level of hands on wheel. Straight legs in straddle position, feet extended.	• uneven hand positioning on wheel • elbow angle less than 90° • legs not straight • feet not extended • insufficient height in mounting phase	• 0.1-0.2 minor deduction • 0.5 fixed deduction • 0.1-0.2 minor deduction • 0.1-0.2 minor deduction • 0.1-0.5 variable deduction
Position on wheel  ←	Hips must rise as quickly as possible. The upward movement continues until wrists, shoulders and hips are vertically aligned above the wheel. The hip angle is increasingly open and the legs are brought back together. With a minimum elbow angle of 90°, the gymnast's shoulders should be clearly above the top of the wheel.	• legs in contact with wheel • legs not straight • feet not extended • elbow angle less than 90° • shoulders below (or weight resting on) rim of wheel • no visible opening of hip angle • no vertical alignment of wrists, shoulders, and hips above wheel • small adjustment of body position on wheel • major correction of body position on wheel • "too long" on top of wheel *NB: <u>Each deduction</u> may only be made <u>once per unit</u>. For example, if elbow angle less than 90° throughout Unit 2, only one 0.5 deduction can be made for this error.*	• 0.1-0.2 minor deduction • 0.1-0.2 minor deduction • 0.1-0.2 minor deduction • 0.5 fixed deduction • 0.8 fixed deduction • 0.1-0.2 minor deduction • 0.1-0.2 minor deduction • 0.1-0.2 minor deduction • 0.5 fixed deduction • 0.1-0.5 variable deduction: [< 3 seconds = no deduction] [3-4 seconds = 0.1-0.2 deduction] [5-6 seconds = 0.3-0.4 deduction] [> 6 seconds = 0.5 deduction]

Unit 3: Thrust from wheel  ←	Thrust from the wheel takes place just after the gymnast's holding position has passed the top of the wheel. As the hip angle reaches full extension the arms are straightened, and the gymnast pushes away from the wheel, passing through a handstand position.	• hip angle not fully extended • legs not straight • legs not together • feet not extended • arms not straightened • flight phase initiated by bending knees • no identifiable handstand position • wheel touches mat before gymnast leaves wheel • wheel rolls into the landing mat such that the rolling movement is severely impaired before the gymnast thrusts from the wheel	• 0.1-0.2 minor deduction • 0.1-0.2 minor deduction • 0.1-0.2 minor deduction • 0.1-0.2 minor deduction • 0.1-0.2 minor deduction • 0.5 fixed deduction • 0.2 fixed deduction • 0.2 fixed deduction • 0.8 fixed deduction
Flight phase  ←	Extended body in flight phase. Hip level must rise visibly after thrust from wheel. The body may be in a straight or slightly arched position.	• lack of body extension after thrust • shoulders below (or weight resting on) rim of wheel • lack of height in flight phase • lack of body extension before landing • flight phase too short (inside 90 cm zone)	• 0.1-0.2 minor deduction • 0.8 fixed deduction • 0.1-0.8 variable deduction [0.8 deduction if no identifiable thrust; no deduction as long as hips rise visibly after thrust from wheel] • 0.1-0.2 minor deduction • 0.2 fixed deduction

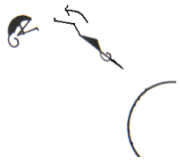
D3 **Straddle Sitting, Overswing**		**Difficulty value: 1.3**	***German ref.: Grätschsitz, Überschlag***
Vault Phases	Technique	Common Faults (not exhaustive)	Deductions/Comments
Unit 2: Take-off Mounting phase 	Take-off must be from 2 feet Layout mount: No prescribed grip zone but need to hold near the rim handles in order to perform rest of vault. Slight bending of arms permitted (elbow angle not less than 135º). Legs straight and together after take-off. Should reach almost horizontal (160º-180º angle to floor), hips extended, acute angle between arms and upper body, body slightly arched.	• take-off from 1 foot • uneven hand positioning on wheel • elbow angle less than 135º • elbows on wheel • insufficient height in mounting phase • lack of hip extension • legs not together after take-off • legs not straight • feet not extended	• 0.5 fixed deduction • 0.1-0.2 minor deduction • 0.2 fixed deduction • 0.8 fixed deduction • 0.1-0.5 variable deduction • 0.1-0.2 minor deduction • 0.1-0.2 minor deduction • 0.1-0.2 minor deduction • 0.1-0.2 minor deduction
Position on wheel  ←	Straddle sitting, hips extended and inner thighs in contact with wheel immediately behind hands (no “sitting” on back of thighs). Legs straight, feet extended. Tilt body forwards, lower shoulders to level of wheel rim, elbow angle less than 45º. Upper body must not rest on elbows, shoulders may touch wheel but must not sink below level of rims. Lift hips and start to open hip	• lack of hip extension • legs not straight • feet not extended • upper body resting on elbows • shoulders below (or weight resting on) rim of wheel • no visible opening of hip angle • no vertical alignment of wrists, shoulders, and hips above wheel • small adjustment of body position on wheel • major correction of body position on wheel • “too long” on top of wheel	• 0.1-0.2 minor deduction • 0.1-0.2 minor deduction • 0.1-0.2 minor deduction • 0.5 fixed deduction • 0.8 fixed deduction • 0.1-0.2 minor deduction • 0.1-0.2 minor deduction • 0.1-0.2 minor deduction • 0.5 fixed deduction

	angle. Hips gradually lifted until wrists, shoulders and hips are vertically aligned above the wheel. Hip angle continues to open.	*NB: <u>Each deduction</u> may only be made <u>once per unit</u>.*	• 0.1-0.5 variable deduction: [< 3 seconds = no deduction] [3-4 seconds = 0.1-0.2 deduction] [5-6 seconds = 0.3-0.4 deduction] [> 6 seconds = 0.5 deduction]
<u>Unit 3:</u> Thrust from wheel  ←	Thrust from the wheel takes place just after the gymnast's holding position has passed the top of the wheel. As the hip angle reaches full extension the arms are straightened, and the gymnast pushes away from the wheel, passing through a handstand position.	• hip angle not fully extended • legs not straight • legs not together • feet not extended • arms not straightened • flight phase initiated by bending knees • shoulders below (or weight resting on) rim of wheel • no identifiable handstand position • wheel touches mat before gymnast leaves wheel • wheel rolls into the landing mat such that the rolling movement is severely impaired before the gymnast thrusts from the wheel	• 0.1-0.2 minor deduction • 0.1-0.2 minor deduction • 0.1-0.2 minor deduction • 0.1-0.2 minor deduction • 0.1-0.2 minor deduction • 0.5 fixed deduction • 0.8 fixed deduction • 0.2 fixed deduction • 0.2 fixed deduction • 0.8 fixed deduction
Flight phase  ←	Extended body in flight phase. Hip level must rise visibly after thrust from wheel. The body may be in a straight or slightly arched position.	• lack of body extension after thrust from wheel • lack of height in flight phase • lack of body extension before landing • flight phase too short (inside 90 cm zone)	• 0.1-0.2 minor deduction • 0.1-0.8 variable deduction [0.8 deduction if no identifiable thrust; no deduction as long as hips rise visibly after thrust from wheel] • 0.1-0.2 minor deduction • 0.2 fixed deduction

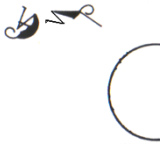
D4 **Front Lying, Overswing**		**Difficulty value: 1.0**	***German ref.: Aufliegen, Überschlag***
Vault Phases	Technique	Common Faults (not exhaustive)	Deductions/Comments
Unit 2: Take-off Mounting phase/ Position on top of the wheel *NB: Note that the mounting phase and position on wheel are integrated into one movement for this vault.*  ←	Take-off must be from 2 feet After take-off from the floor the gymnast is in front lying position on one of the rungs, hands holding the rims of the wheel between the rung on which the gymnast is lying and the one above. Legs swing inwards (forwards) towards the centre of the wheel. As the gymnast's holding position passes the top of the wheel the gymnast swings his/her legs powerfully back and up. Shoulders remain at the level of the wheel rims (must not fall below), while the hips rise above shoulder level. Elbow angle less than 45°, upper body must not rest on elbows. Legs straight and together throughout, feet extended. The gymnast should pass through a position where wrists, shoulders and hips are vertically aligned above the wheel.	• take-off from 1 foot • uneven hand positioning on wheel • lack of hip extension immediately after take-off • legs not together • legs not straight • feet not extended • shoulders below (or weight resting on) rim of wheel • upper body resting on elbows • no visible opening of hip angle • no vertical alignment of wrists, shoulders, and hips above wheel • small adjustment of body position • major correction of body position on wheel • "too long" on top of wheel	• 0.5 fixed deduction • 0.1-0.2 minor deduction • 0.1-0.2 minor deduction • 0.1-0.2 minor deduction • 0.1-0.2 minor deduction • 0.1-0.2 minor deduction • 0.8 fixed deduction • 0.5 fixed deduction • 0.1-0.2 minor deduction • 0.1-0.2 minor deduction • 0.1-0.2 minor deduction • 0.5 fixed deduction • 0.1-0.5 variable deduction: [< 3 seconds = no deduction] [3-4 seconds = 0.1-0.2 deduction] [5-6 seconds = 0.3-0.4 deduction] [> 6 seconds = 0.5 deduction]

Unit 3:			
Thrust from wheel 	Thrust from the wheel takes place just after the gymnast's holding position has passed the top of the wheel. As the hip angle reaches full extension the arms are straightened, and the gymnast pushes away from the wheel, passing through a handstand position.	• hip angle not fully extended • legs not straight • legs not together • feet not extended • arms not straightened • shoulders below (or weight resting on) rim of wheel • no identifiable handstand position • wheel touches mat before gymnast leaves wheel • wheel rolls into the landing mat such that the rolling movement is severely impaired before the gymnast thrusts from the wheel	• 0.1-0.2 minor deduction • 0.1-0.2 minor deduction • 0.1-0.2 minor deduction • 0.1-0.2 minor deduction • 0.1-0.2 minor deduction • 0.8 fixed deduction • 0.2 fixed deduction • 0.2 fixed deduction • 0.8 fixed deduction
Flight phase 	Extended body in flight phase. Hip level must rise visibly after thrust from wheel. The body may be in a straight or slightly arched position.	• lack of body extension after thrust from wheel • lack of height in flight phase • lack of body extension before landing • flight phase too short (inside 90 cm zone)	• 0.1-0.2 minor deduction • 0.1-0.8 variable deduction [0.8 deduction if no identifiable thrust; no deduction as long as hips rise visibly after thrust from wheel] • 0.1-0.2 minor deduction • 0.2 fixed deduction

D5 **Front Lying, Overswing, Front Somersault**		**Difficulty value: 4.5**	***German ref.: Aufliegen, Überschlag, Salto***
Vault Phases	Technique	Common Faults (not exhaustive)	Deductions/Comments
Unit 2: Take-off Mounting phase/ Position on top of the wheel *NB: Note that the mounting phase and position on wheel are integrated into one movement for this vault.*  ←	Take-off must be from 2 feet After take-off from the floor the gymnast is in front lying position on one of the rungs, hands holding the rims of the wheel between the rung on which the gymnast is lying and the one above. Legs swing inwards (forwards) towards the centre of the wheel. As the gymnast's holding position passes the top of the wheel the gymnast swings his/her legs powerfully back and up. Shoulders remain at the level of the wheel rims (must not fall below), while the hips rise above shoulder level. Elbow angle less than 45º, upper body must not rest on elbows. Legs straight and together throughout, feet extended. Wrists, shoulders and hips should pass through vertical alignment.	• take-off from 1 foot • uneven hand positioning on wheel • lack of hip extension immediately after take-off • legs not together • legs not straight • feet not extended • shoulders below (or weight resting on) rim of wheel • upper body resting on elbows • no visible opening of hip angle • no vertical alignment of wrists, shoulders, and hips above wheel • small adjustment of body position • major correction of body position on wheel • "too long" on top of wheel	• 0.5 fixed deduction • 0.1-0.2 minor deduction • 0.1-0.2 minor deduction • 0.1-0.2 minor deduction • 0.1-0.2 minor deduction • 0.1-0.2 minor deduction • 0.8 fixed deduction • 0.5 fixed deduction • 0.1-0.2 minor deduction • 0.1-0.2 minor deduction • 0.1-0.2 minor deduction • 0.5 fixed deduction • 0.1-0.5 variable deduction: [< 3 seconds = no deduction] [3-4 seconds = 0.1-0.2 deduction] [5-6 seconds = 0.3-0.4 deduction] [> 6 seconds = 0.5 deduction]

Unit 3:			
Thrust from wheel  ←	The thrust from the wheel is achieved by straightening the arms and pushing away from the wheel at the same as the hip angle is fully opened, passing through a handstand position.	• hip angle not fully opened • legs not straight • legs not together • feet not extended • arms not straightened • shoulders below (or weight resting on) rim of wheel • no identifiable handstand position • wheel touches mat before gymnast leaves wheel • wheel rolls into the landing mat such that the rolling movement is severely impaired before the gymnast thrusts from the wheel	• 0.1-0.2 minor deduction • 0.1-0.2 minor deduction • 0.1-0.2 minor deduction • 0.1-0.2 minor deduction • 0.1-0.2 minor deduction • 0.8 fixed deduction • 0.2 fixed deduction • 0.2 fixed deduction • 0.8 fixed deduction
Flight phase  ←	Extended body at beginning of flight phase. Hip level must rise visibly after thrust from wheel and the front somersault should be initiated at the highest point of the flight phase. "Cowboy" style rotation (legs apart) is permitted. An extended body before landing is not required, but the hips must not be below the level of the knees on landing.	• lack of body extension after thrust • lack of height in flight phase • somersault rotation not at highest point in flight phase • less than half the somersault rotation completed above the level of the top of the wheel • hip angle more than 90° • flight phase too short (inside 90 cm zone)	• 0.1-0.2 minor deduction • 0.1-0.8 variable deduction [0.8 deduction if no identifiable thrust; no deduction as long as there is a visible rise in hip level after thrust from wheel] • 0.2 fixed deduction • 0.2 fixed deduction • 0.1-0.2 minor deduction • 0.2 fixed deduction

D6 **Front Lying, Overswing Half Twist, Back Somersault**		**Difficulty value: 5.0**	***German ref.: Aufliegen, Überschlag, Halbe Drehung, Salto rückwärts***
Vault Phases	Technique	Common Faults (not exhaustive)	Deductions/Comments
Unit 2: Take-off Mounting phase/ Position on top of the wheel *NB: Note that the mounting phase and position on wheel are integrated into one movement for this vault.*  ←	Take-off must be from 2 feet After take-off from the floor, the gymnast is in front lying position on one of the rungs, hands holding the rims of the wheel between the rung on which the gymnast is lying and the one above. Legs swing inwards (forwards) towards the centre of the wheel. As the gymnast's holding position passes the top of the wheel the gymnast swings his/her legs powerfully back and up. Shoulders remain at the level of the wheel rims (must not fall below), while the hips rise above shoulder level. Elbow angle less than 45°, upper body must not rest on elbows. Legs straight and together throughout, feet extended. Wrists, shoulders and hips should pass through vertical alignment.	• take-off from 1 foot • uneven hand positioning on wheel • lack of hip extension immediately after take-off • legs not together • legs not straight • feet not extended • shoulders below (or weight resting on) rim of wheel • upper body resting on elbows • no visible opening of hip angle • no vertical alignment of wrists, shoulders, and hips above wheel • small adjustment of body position • major correction of body position on wheel • "too long" on top of wheel	• 0.5 fixed deduction • 0.1-0.2 minor deduction • 0.1-0.2 minor deduction • 0.1-0.2 minor deduction • 0.1-0.2 minor deduction • 0.1-0.2 minor deduction • 0.8 fixed deduction • 0.5 fixed deduction • 0.1-0.2 minor deduction • 0.1-0.2 minor deduction • 0.1-0.2 minor deduction • 0.5 fixed deduction • 0.1-0.5 variable deduction: [< 3 seconds = no deduction] [3-4 seconds = 0.1-0.2 deduction] [5-6 seconds = 0.3-0.4 deduction] [> 6 seconds = 0.5 deduction]

Unit 3:			
Thrust from wheel 	The thrust from the wheel is achieved by straightening the arms and pushing away from the wheel at the same as the hip angle is fully opened, passing through a handstand position.	• hip angle not fully opened • legs not straight • legs not together • feet not extended • arms not straightened • shoulders below (or weight resting on) rim of wheel • no identifiable handstand position • wheel touches mat before gymnast leaves wheel • wheel rolls into the landing mat such that the rolling movement is severely impaired before the gymnast thrusts from the wheel	• 0.1-0.2 minor deduction • 0.1-0.2 minor deduction • 0.1-0.2 minor deduction • 0.1-0.2 minor deduction • 0.1-0.2 minor deduction • 0.8 fixed deduction • 0.2 fixed deduction • 0.2 fixed deduction • 0.8 fixed deduction
Flight phase 	The half twist is initiated immediately after thrusting from the wheel (not before) by turning the feet and hips at the same time as "opening" the hip angle. The hip level must rise visibly until the gymnast has completed the half twist and is at the top of the flight phase. At this point, the gymnast adopts a tuck position ("cowboy" permitted) for an immediate tuck back somersault at the highest point of the flight phase. An extended body before landing is not required, but the hips must not be below the level of the knees on landing.	• lack of body extension after thrust • twist initiated while still on wheel • lack of height in flight phase • somersault rotation not at highest point in flight phase • less than half the somersault rotation completed above the level of the top of the wheel • hip angle more than 90° • flight phase too short (inside 90 cm zone)	• 0.1-0.2 minor deduction • 0.1-0.2 minor deduction • [0.8 deduction if no identifiable thrust; no deduction as long as there is a visible rise in hip level after thrust from wheel] • 0.2 fixed deduction • 0.2 fixed deduction • 0.1-0.2 minor deduction • 0.2 fixed deduction