

FINA ACROBATICS: REFERENCE SHEETS FOR TECHNICAL CONTROLLERS (v1 26.11.22)

(Summary & clarification of information found in the FINA Acrobatic Catalogue)

Introduction

Dear TC, Judge, Coach, or Athlete: Please remember - Catalogue is an example. These are things you **can** do! There's no need to do exactly like on the picture - it's just an example of what you can choose. You can make a variation. The system calculates more than 64,000 variations of acrobatics according to the components you can see in the catalogue, like a menu in a restaurant - you can build your own dish choosing different components and try different variations. The limit is only in your imagination. For example: you can choose a construction (let's say jump from shoulders), then any direction (let's say reverse), then you choose a position (let's say tuck) and perhaps somersault 720 (and you decide not to add any bonuses). Remember: **You don't need to have all the components**. You can choose like a "salad" - whatever you want, only construction and position is **always there** as a constant. Pictures and diagrams in the catalogue are only examples. The same with Pair Acrobatics. There's no need to do exactly like on a picture! You can modify your lifts, throws or jumps. The main thing is to keep written requirements for exact acro. Thank you! Spread only correct and confirmed information to other people ☺

GENERAL PRINCIPLES FOR ALL ACROBATICS

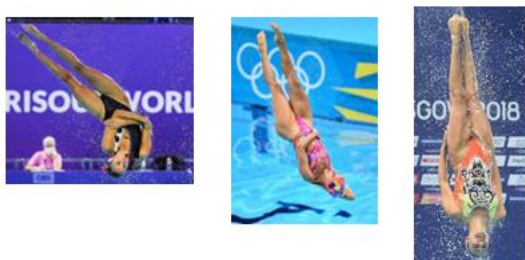
Acrobatic movement - is a general term for jumps, throws, lifts, stacks, platforms, etc., which is an integral part of artistic swimming routines that demonstrate spectacular gymnastic feats and/or risky actions in the air, on a balancing support, or in combination, and are achieved with the assistance of other swimmers. A team acrobatic movement is considered as an Element, starting from 4 swimmers and more (for example: 3 base swimmers + 1 featured swimmer; or 2 base swimmers + 1 support-swimmer who pushes 1 featured-swimmer) Must start and finish in the water! All other actions are considered as pair acrobatics or pair assist actions.

Important tips:

"Start position" also doesn't count:



Any hand movement during acrobatic movement is not considered in DD (only catching of the leg/s and of course for the "grip" connection) and only judged by Execution judges and variety/creativity etc. of these hand-movements judges under Artistic impression. Hands position is optional during somersault, twisting and demonstrating positions.



Going to Base Mark – You must **see something completely different happen than what is declared** (like: different group, wrong number of spotters, wrong position, or change from Position 1 to Position 2 is not performed, etc). Here are some more examples:

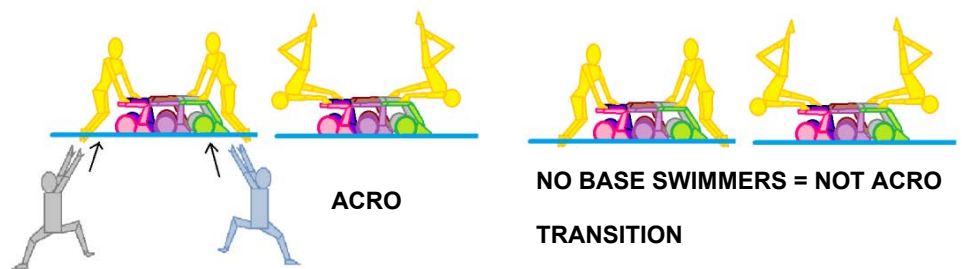
- 1) The acro was declared as Jump from Stack (3 level) but a Lift (2 level) is done, or if a "big" acro (6-9 base swimmers) is declared but instead a "small" acro (3-to 5 base swimmers) is performed.
Note: remember, spotter or "pair of spotters" can also be considered as "formation" (separated part of one whole construction)
- 2) If the construction defines 3 base swimmers but one athlete is doing a boost on the surface or it's clearly seen that 1 of the base swimmers is not participating in the acrobatic movement which makes it only 2 base swimmers = Base Mark.
- 3) If (for example) constructions defines 2 spotters, but only 1 participates = Base Mark

Important:



4) If position of the support swimmer declared (for example) Pike, but TC sees a split = Base Mark.

Important: If there are no base swimmers “under a Float” or in Group C (like Gp C Acro № 68 on p.162) – it is not an acrobatic! It’s a transition.

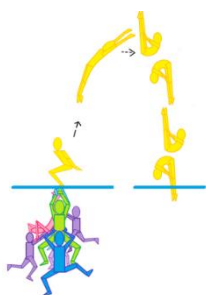


1 SWIMMER LAYING ON FLOAT
NO BASE SWIMMERS = NOT ACRO
TRANSITION

GROUP A

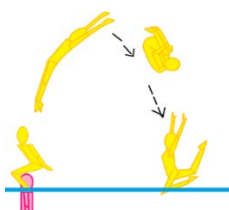
Principles and going to Base Mark:

- For all **somersaults** (regular, frontal, two axes, etc.) every 90° less until submergence = Base Mark.
- Please, do not do somersaults under water! TC needs to see the full body “out” from water when completing a somersault. The only allowance you can have as a swimmer = your legs until “above knee cap” level can be in the water (straight body position, pike, “mid-thigh” (Jay, Kite), “crotch, feet, part of buttocks” in the water (if it’s a tuck).
- For example, coach declares somersault 540° and swimmer “passes it” (before submergence) and continues to rotate when submerging = Not Base Mark (it’s very hard to stop yourself while rotating!), however Elements judges will consider this in execution.
- So, that means that a swimmer can do more but not less before submergence (it will not give an extra DD!).
- However, if you declare 360° somersault (let’s say in a straight body position) but did 270° (“fall on the face”) = Base Mark AND Elements judges have an execution deduction.
- If you declare 360°, pass 360° above surface and do 90 degrees more while submerging = Not Base Mark
- TC should look at the torso and calculate how many “half’s” the body of the featured-swimmer rotates in the air.
- Exception: pike position, where first half is counted when legs pass vertical line (for head-up jumps).



How to calculate somersault rotation: To get value for a “full somersault” featured-swimmer, who jumps head-first needs to enter the water feet-first (after a 360° rotation)! (Or for example it’s ok if a swimmer who jumps head-first and does 1,5 or 2,5 rotations enters the water head first again). We calculate each 180° from the jump.

For example: Tuck position, Pike position, and straight body positions



“Open” or variations of arch positions (Jay, Kite, etc) – the featured-swimmer enters the water demonstrating vertical alignment between shoulders and knees. These positions mean that a full somersault was completed.

• **Group A Twists:**

Number of twists is calculated **until the chest (lower ribs)** level of the featured-swimmer (visible/clear border for detecting rotations).

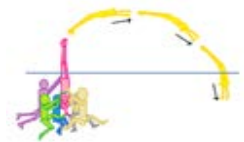
- Every 180° less = Base Mark. You can do more until allowance (chest) but not less! That means: if coach declare 1,5 twist (540 degrees) and swimmer did it and continues to rotate, got additional 70 degrees until allowance (chest) and continue to turn while submerging = not a Base Mark



- **Important:** if there’s no rotation (somersault, dive, twist) it will not be described in the code. If there’s a **dive** (when featured-swimmer jumps head-up and after demonstrating a parabola in the air, without changing a position, enters the water head-first) it should be written in the code as letter “d”.
- If there’s a change of the position, for example: featured-swimmer jumps head-first, making a pike position and the “opens” to a line position to enter the water head-first it would be a half somersault, and written in the code as “s0,5”
- Not entering water head-first (if it is the idea of jump and TC can clearly see it on the video or in the live event) in this situation would be counted just as a change of the position and will not be written as dive nor as half somersault.

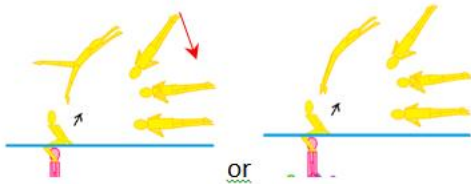
- **Q&A: What is the difference between Dive and 0,5 (half) somersault?**

Dive is some sort of a “broad jump”, where featured-swimmer needs to jump head-up and after showing long parabola enters the water head-down. From beginning until the end there’s no change of the position. If there’s a change of the position (for example: pike and then straight body) - it will be considered as a **half somersault**.



*Exception: Jump in a straight body position, reverse direction (from any construction) is considered as 0,5 somersault (start head-up, when there is a rotation, and finish head-down).



- **Important:** Twist can be started with legs together (after take-off) or with the **fast kick** forward action after take-off (before twisting). We do not consider it as a position!



IMPORTANT: We do not consider “take-off” as a position! (Only if jump starts head-down)



- **Cartwheel and Handspring:** the same principle as for somersault. When these both actions start head-up they should finish head-up after the rotation with feet-down in the water. Allowance 45 degrees from vertical line. 90 degrees (perpendicular to the surface; “whale” falling on the back/side/stomach) = Base Mark.

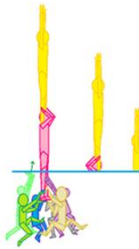
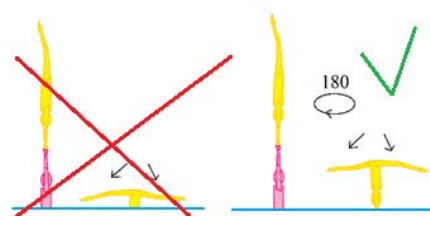
Handspring	
Cartwheel	

- **Execution:**

- Positions have an allowance of +/- 45 degrees otherwise it’s a Base Mark.
- In Group A, it doesn’t matter for the Technical Controller (and for DD) if there’s a capture (grab/hold) of the leg/s or not.
- Bonus: for double acrobatic movements Elements Judges pay attention not to the timing but to the design of the positions. BUT if it was declared in the Coach Card that 2 acrobatic movements were supposed to be simultaneous (Synchronized actions for double acrobatic movements bonus code used), but they were obviously performed one after another (huge difference in time) - bonus will be cut and it will put this acrobatic movement to a Base Mark. If TC can see an attempt to perform it simultaneously and something goes wrong – it’s a synchronization error and in execution.
- In a straight body somersault or opening to a line position after somersaulting it is allowed to have a small arch in the body position, and still it will be declared as line in both cases.
- If during the return on the supports’ hands (declared bonus movement) the featured swimmer falls between them in the water / the return on supports’ hands does not happen = Base Mark.

GROUP B

Going to Base Mark or Not going to Base Mark:

- **Rotation of the construction of the base:** Stack (Group B or C) and rotations: 180°, 360°, 540°, 720°
 - Number of the rotations of the construction base calculates each 180° and until featured-swimmer's "waist" level.
 - It must be a visible rotation – not just a turn of the body (or turn of the torso) of the featured-swimmer.
 - Declared positions are considered as performed until shoulders (if the position is head-down) or knee (if the position is head-up) of featured-swimmer or until the submergence of support swimmer (if featured-swimmer is in a horizontal position)
 - In a Stack each 180° less than declared (until allowance - waist level) = go to Base Mark.
 - For example, a r1,5 (540°) is declared but only a 360° to waist is performed (then either goes down - not continuing rotation, or does another 180° rotation while submerging) = Base Mark
 - However, if a r1,5 (540°) is declared, and a rotation of 450° was done until waist (that means on 90° shorter than declared) = this is ok, not Base Mark
- 
- The featured-swimmer needs to accomplish the declared rotation by the time they reach their waist so the rotation will be counted as "done". Lower than waist (chest, shoulders, neck) = Base Mark.
 - If rotation will be done higher than waist and more rotations than declared (for example declared 360° but does 540°) it will be verified as declared rotation, not penalized, and will not get higher DD.
 - That means: you can do more, but not less than declared (until waist).
- 
- **Change of grip:**
 - For example, if "Feet (featured-swimmer) on palms (support)" is declared (FP) and this is done in the beginning of the acrobatic movement but not at the "highest stop-point" the featured-swimmer performs their first position on 1 leg. Both "connections" were performed so it's not a Base Mark and for all types of position where a coach declares Feet on Palms (FP)
 - But in the case of F1S or FS it's different (and the values are different also), so it's important what the coach declares. It is written in the Catalogue for F1S: Feet (featured-swimmer) on shoulders (support) while stack is lifted up and switch on 1 foot for main phase – so not to confuse TC. And this change to 1 leg stand is not to be declared as bonus "change grip" in Coach Card!
 - **Support's Position:**
 - If in a Stack, the support's position is declared: crane, tuck, split, pike etc. and swimmer performs it "not sure/not stable" or legs are lower (for example on 15 degrees than should be) – this is execution mistake. If TC can recognize what was the "idea" (skeleton) of the whole acrobatic movement or exact (problematic) part – **it is not a Base Mark**.
 - **Positioning:**
 - Sometimes we can see that swimmers (to catch their balance) can show Bamboo Position in a "handstand" (for example), before opening legs to Split. Please, do not penalize swimmers if coach does not declare Bamboo (bb) as Position 1.
 - For example: coach declares Owl as Position 1 (ow), and Bamboo as Position 2 (2bb). So, if you see the swimmer open their legs directly to an Owl – it is ok.
 - If the swimmer opens legs through vertical – also ok (like transition). It's the same "not countable beginning transitional movement" (like take-off in jumps).
 - However, a different situation would be if the featured-swimmer holds this "not countable transitional position" too long – clearly demonstrating the position. **This would be Base Mark**.
 - What do we mean when we say "too long"? It's something visible, "clearly" demonstrated, something like 3 counts (in normal tempo) or more.
 - **Construction, Bonus and Type of grip:**
 - Must be done exactly as declared. No "allowance"
 - For example: coach declares "connection between 2 featured-swimmers" but in reality they didn't even plan to connect (and it looks like separate acrobatics) = Base Mark. The same if they were trying to catch each other but didn't make it = Base Mark. If they try and finally succeed = execution mistake.

- If in construction “Moving base lift it is declared (for example: base swimmers move backward and then return) and they do moving only in one side (move backward) not 2 (as declared) = Base Mark.
- Note: if “Moonwalk” declared all base swimmers can move to change position of a featured swimmer (it’s a bonus w14, not a construction!) it can be either move of 1 leg or both simultaneously.
- If acrobatic movement was performed in the manner of bad execution where the support swimmer/s can’t be seen on the surface – video-review should be done (with underwater camera – if possible). If after the review it appears wrong declaration (for example declared Stack head-down construction but was done Stack head-down tuck position) = Base Mark. If after the review it appears that acrobatic movement was declared right - it goes to Execution.

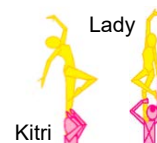
- **Positions:**

- As declared with allowance in performing not more than 45 degrees – otherwise it’s Base Mark
- For example: Ballerina is declared (stand on 1 leg, other leg is at 90°) BUT the horizontal leg is at 30° (so it was lifted up - not to 90° but only to 30°) = Base Mark (because not within 45° allowance). But if the same position (Ballerina), and the horizontal leg was lifted up to 80° degrees = no Base Mark.

- Important tip: Always look at the thigh – it is a measure that help’s to check correctness of the position.

- More important notes:

- In a Kitri position, bent leg’s thigh can also be “not 90°” but +/-45°. It’s not a Base Mark, and it’s not considered as a Lady Position. In Lady Position there’s no arch in back and leg is less than 90°.
- So how to understand “degree-allowance rule” with the Kirti/Lady Position example, and not to penalize swimmers by mistake?
- In the situation with Kitri/Lady Position – the coach knows the abilities of the swimmer and will not declare what they can’t do, and, it’s another situation with (let’s say) Ballerina or Crane. Where coach declares position where leg must be at 90°. But for each deviation from it and depending on “size” of this deviation – swimmer will be penalized in execution. If leg is in “up to 15 degrees” deviation – it’s a small mistake, if 16 degrees and more - big mistake. Execution judges don’t need to know what position was declared (they see a “weak” position) and it’s coach strategy to declare and teach swimmers to perform positions that will be considered by Technical Controllers and not penalized by execution judges.



- If capture (hold) by two hands was declared (as part of the position - such as Turtle, Drop, Queen, or Glass) and it never happens or is done only by 1 hand, or fast-catching but not able to hold it and secure the “catch” = Base Mark.
- If it is “controlled”, choreographed to (for example) “gather” (close) the turtle position and then “ungather” (open) = it’s not a Base Mark. Swimmers need to do this action clear, not to confuse TCs.
- For TC important to look at these “transitions” to a Turtle Position. If a coach declares only Turtle position – it’s ok. Remember the rule of “not countable beginning transitional movement”.
- BUT if coach declares Scissors-Turtle-3rd position (let’s say Scissors again) and didn’t clearly demonstrate the positions (let’s say 1 count in normal tempo like a “stop-spot” were not done) – instead, performing them as transition without pause = Base Mark.

- For all other positions whereby the positions’ design it is not meant to be a 2-hand catch: it can be either 1 leg catch or no catch at all (for example Vertical Split, Swan, Sail, Needle, Scorpio, Birch, etc.) and it will not be a Base Mark.
- Exception 1: Shrimp and Knight. It can be done either with or without hands. It doesn’t influence the value.
- Exception 2: Pin. Capture in this position can be done by 2 hands or 1 opposite to leg hand capture, it will not be a Base Mark.

- Some position variations are in the same time “in two categories of execution”. That means something can be done in the middle between “laying” or “head-down” or both these criteria in the same time (variation of Turtle, Knight, Bridge). They are already sorted in the catalogue by the dominating criteria, and we do not penalize for this!

- Positions can be made either laying on the stomach, or on the back (Scissors, Pirate, Cobra, Flamingo, Turtle, Seastar positions etc...). It’s not a Base Mark!

- **Important Notes on Grip (Connection):**

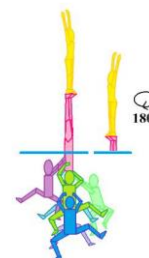
- In “Sultan” grip (connection) “Su” one of the main swimmers didn’t catch another by one hand – execution, by both hands = Base Mark.
- In Lift on 4 heads connection “Li4H”, swimmers were lifting from under water, but 1 leg accidentally slips from head and in the “highest stop-spot” phase they were able to perform acrobatic movement – it’s a

Base Mark. BUT If base swimmer were able to fix the problem, catch the leg of featured-swimmer and continue an acrobatic movement – it will be considered as a very big execution mistake. Very important for TC is to look in the review and to see if in the beginning all 4 swimmers were participating in a grip.

- In “AV” grip (all body lay or sit on feet – spread in “V”) while lifting up from under the water featured-swimmer may touch/stick to the legs of the support-swimmer. It’s not a mistake or Base Mark. It’s technique. The most important is to see that in the “high stop-point” phase hands do not touch support!
- The same applies for SiF, SiS, AP grips.
- If the idea/position is to touch the feet and this type of grip does not exist in the Catalogue – then the coach needs to send the video of this acrobatic movement to FINA (as per communicated process) and it will be reviewed, and if approved calculated and added to the catalogue.

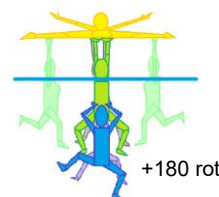
Stack Head-Down and Rotations 180°, 360°, 540°, 720°

- Number of the rotations of the construction base calculates each 180° and until featured-swimmer’s “waist” level. It must be “visible” rotation. Not just a turn of the body of the featured-swimmer.
- **Base Mark:**
 - In “Stack head-down” each 180° less than declared (until waist) is a Base Mark.
 - That means that the featured-swimmer needs to “pass” 180° rotation at least by waist but not less (hips, knees, shins) so the rotation will be counted as “done”.
 - If the rotation will be done higher than waist and more rotations than declared (for example declared 360° but did 540°) it will be counted as declared one, not penalized and will not get higher DD. This means - you can do more, but not less than declared (until waist).
 - If Rotation of the Construction Base was declared but no rotation happened = Base Mark.
 - Construction, Bonus and Type of grip: must be done exactly like declared.
 - Positions: allowance in performing not more than 45 degrees – otherwise it’s Base Mark.



Lift (90°, 180°, 360°)

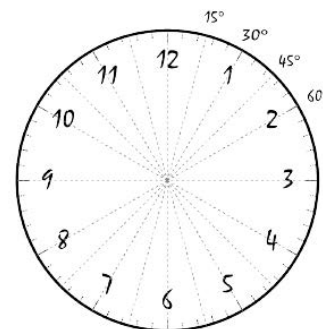
- For a Rotation of the Construction Base in a Lift (where it will rotate at the same time with featured-swimmer on top) – rotation must start at maximum height and finish declared degrees as high as possible and then submerge.
- **Base Mark:**
 - Every 90 degrees “of noncompliance” of the rotation before submerging = Base Mark.



GROUP P

Base Mark:

- If acrobatic movement was performed in the manner of bad execution where the support swimmer/s can't be seen on the surface – video-review should be done (with underwater camera – if possible). If after the review it appears wrong declaration (for example declared Ballet Leg construction but was done straight body) = Base Mark. If after the review it appears that acrobatic movement was declared right - it is Execution.
- Note: in a construction “Straight body with bent knees” we don't check how much they are bent - it's technique. There must be a visible difference between Straight body (legs extended) and Straight body with bent knees. If the support swimmer in Straight body construction is not extended enough and his legs “are weak” = it's execution. So, it is highly recommended for coaches when they train swimmers to make clear the bend of the legs.
- If for the component of the construction Ballet leg or Double Ballet Leg is declared but is done +/- 45 degrees (leg/s) off 90 degrees it's possible - it's technique.
- For “Rotation of the Construction Base” (for both, Platforms and Floats):
 - For a 90-degree rotation: allowance is -15 degrees (then, submerging may start).
 - For a 180-degree rotation: allowance is -30 degrees (then, submerging may start).
 - For a 360-degree rotation: allowance is -45 degrees (then, submerging may start)
 - Otherwise it's Base Mark.
 - Rotation needs to start at maximum height and start submerging only after finishing the rotation.
- When “Travelling” bonus is declared but not performed or moving only slightly = Base Mark. Travelling must be visible/obvious!
- Recommendation for Coaches: to hold Platform at least 2-3 seconds. When Platform is lifted up and then it submerges in a second – it confuses the TC and some constructions can be considered as Stack by mistake.
- In a Float made from hands – there can be no base swimmers.



GROUP C

- **For, direction, somersault, twist, dive, handspring/cartwheel or 2 axes somersault**
 - Same rule as for Group A
- **For rotation of the construction base**
 - Same rule as for Group B applies
- **Bonus:**
 - If “Beyonce fall” was declared but base swimmers didn't catch featured-swimmer = Base Mark
 - If “Twirl” was declared but because of some circumstances the featured-swimmer just makes a small turn of 90 degrees = Base Mark
 - Remember: for all groups, if coach didn't declare torso rotation or some arm movements – it's not a Base Mark! It's probably choreography or execution problems.
 - If “Hula hoop” fall not a circle around support but somewhere to the side = Base Mark
 - If during “Fly above formation” featured-swimmer falls on the lift above which they were supposed to fly above = Base Mark.
- **Positions:**
 - Rules are the same as for Groups A and B but . . . there is the possibility in group C to declare a “passing position”.
 - Important: if the Coach declares a passing position but the featured-swimmer clearly demonstrates it = TC does not penalize - it's a matter of technique.
 - But if coach declares a regular, clear position and featured-swimmer does not perform it (skips it), performs it as “passing position”, or did it not as declared (other position) = Base Mark. For example: declare Bamboo and then Willow, but didn't do a pause in Bamboo and goes directly from lifting legs to Willow.