



Mitglied des Deutschen Olympischen Sportbundes (DOSB)
Mitglied der International Waterski & Wakeboard Federation (IWWF)

ADDITIONAL CABLESKI TECHNICAL RULES FOR ALL-SIZE CABLES

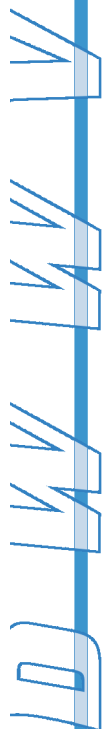
RULES PROPOSAL

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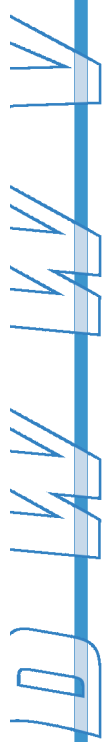
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1. GENERAL

1.1. APPLICABILITY OF THESE RULES

This rule set provides additional rules for cableski competitions on cable installations, which do not comply with the Cableski Technical Rules of the cableski council of the *International Waterski and Wakeboard Federation* (IWWF). The *IWWF Cableski Technical Rules* (CTR) shall apply to all cableski competitions except where otherwise stated below or elsewhere in the Additional Cableski Technical Rules for All-size Cables.

1.2. TRANSPARENCY

Competitions must declare in their announcement, invitation documents and calendar entries, in which mode the competition is conducted for each discipline. Results made public in result sheets and websites must contain the corresponding mode abbreviation.

2. INSTALLATION TYPES

In general, three types of cableway installations are distinguished.

1. cableways with at least 4 deflection pulleys turning counter clockwise (below called "Standard Installations" or "Standard")
2. cableways with at least 4 deflection pulleys turning clockwise (below called "Clockwise Installations" or "Clockwise")
3. cableways with two deflection pulleys (below called "Two-Way Installations" or "Two-Way")

The cable may not necessarily be a 10mm steel cable, but it must be strong enough to stand competition needs. For the slalom and jump events, the cable must have a speedometer calibrated between 25km/h and 60km/h and it must have the power necessary to attain and maintain the required speeds. For the trick event the same holds for the speeds from 25km/h up to 35km/h.

The installations need to be in optimal technical condition, in order to guarantee a smooth running of the competition.

In the following, several competition modes are defined. Competitions can be run using any mode, if the installation fulfills the stated requirements.

3. STANDARD INSTALLATIONS

3.1. TRICK EVENT

The competition area of the trick event begins after the deflection pulley before the trick area and ends at the next deflection pulley. There should be no wakeboard features (kickers, sliders and similar objects) too close to the competition area. The chef judge shall decide on whether the competition area is ready to be used safely.

The applicability of the mode depends on the minimum competition area length available. It is assumed, that the maximum speed for the trick event is 36km/h (10m/s). If a skier wants to run with a faster speed, he is allowed to do so but then he has to be aware of the fact, that he might reach the end of the competition area before his time is up. The skier then neither has the right to rerun at a lower speed nor to finish the rest of his run on another go.

The minimum length of the competition area adds up by 20m preparation, 10m buffer at the end and the *maximum run length*, which is calculated as

$$(\text{number of seconds per run}) * 10\text{m/s}.$$

As an example, a common setting allows the trick run to take 20 seconds. This results in a minimum competition area length of $20\text{m} + 10\text{m} + \left(20\text{s} * \frac{10\text{m}}{\text{s}}\right) = 230\text{m}$.

The number of runs for each skier is limited to a maximum of three and a minimum of two. Three runs are only allowed for competition areas shorter than or equal to 100m. One run shall neither last more than 20 seconds nor less than 5 seconds.

Competitions eligible for ranking list may choose the mode freely considering the above regulations and limits. Records shall only be recorded separately for the following three modes. It is *recommended* but not mandatory to choose one out of these for any trick event.

Mode	Time & Runs	Competition Area
T20	two runs of 20 seconds	min. 230m
T10	two runs of 10 seconds	min. 130m
T5	three runs of 5 seconds	min. 80m

3.2. SLALOM EVENT

The competition area begins at the last deflection pulley before the 1st Slalom buoy and finishes at the next deflection pulley. There should be no wakeboard features (kickers, sliders and similar objects) too close to the competition area. The chef judge shall decide on whether the competition area is ready to be used safely.

The applicability of the mode depends on the minimum competition area length available. The CTR demands a minimum length of 300m for the Slalom event with 6 buoys which we denote as the S6 mode.

For shorter competition areas there shall be only a 4 buoys competition omitting the 5th and 6th buoy of the S6 course. The minimum competition area length for a 4-buoys competition is 217m. It is denoted S4. Diagram 1 and Diagram 2 describe the S6 and the S4 course. The length of the lines denoted by A,B,C,D,E,F are defined in Table 1 and shall be equal to the ones defined in the CTR.

For courses with only 4 buoys, a skier shall follow the main running cable around the deflection pulley before the slalom course, pass around outside of all 4 buoys, and after rounding the 4th buoy, proceed through the end gate, and ski until the carrier has passed the deflection pulley after the slalom course to qualify for the next pass.

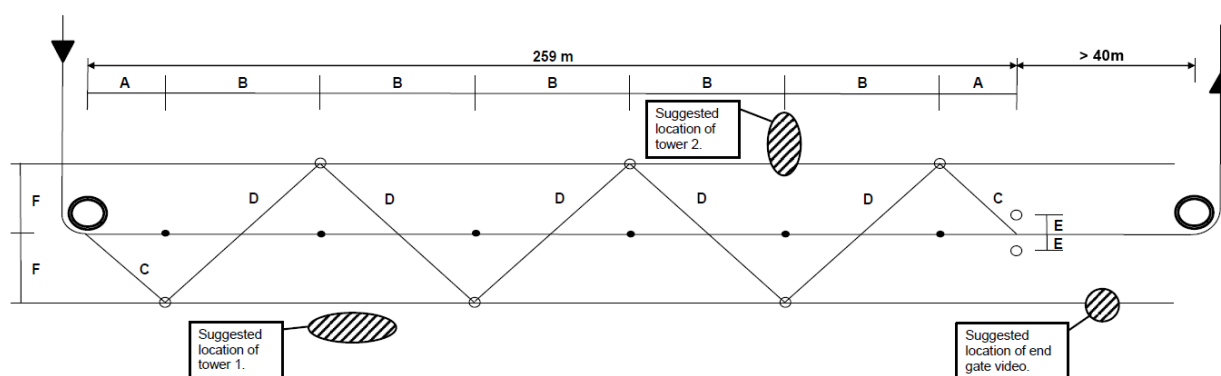


Diagram 1: S6 slalom course

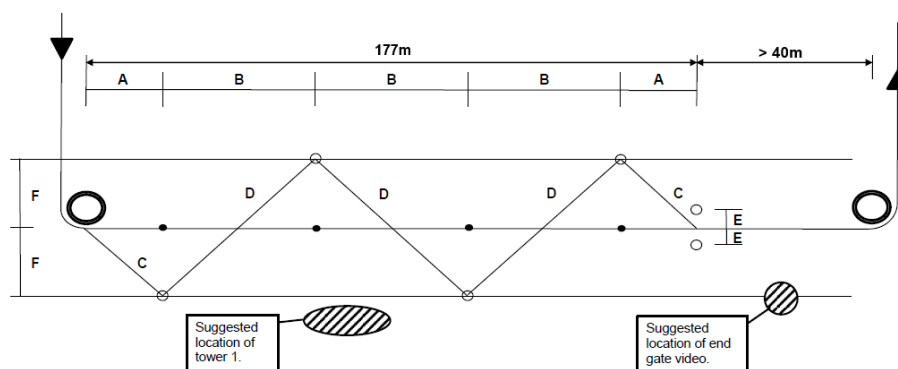


Diagram 2: S4 slalom course

	Regular	Variation	Maximum	Minimum
Overall	259 m	± ¼ %	258,353 m	259,648 m
A	27 m	± ½ %	26,865 m	27,135 m
B	41 m	± ½ %	40,795 m	41,205 m
C	29,347 m	± ½ %	29,200 m	29,494 m
D	47,011 m	± ½ %	46,776 m	47,246 m
E	1,25 m	± 5 %	1,188 m	1,313 m
F	11,5 m	± 1 %	11,385 m	11,615 m

Table 1: slalom course dimensions

The maximum off line distance of the middle line buoys is 0.3m. The average of all measured F dimensions cannot be less than 11.48m.

3.3.JUMP EVENT

The competition area begins at the last deflection pulley before the ramp and ends at the first deflection pulley after the ramp. Depending on the competition area length, the ramp must be situated at one of the following positions.

Mode	Position of the ramp after start of competition area	Competition Area
J290 (Diagram 3)	180-190m	min. 290m
J250 (Diagram 4)	160-170m	min. 250m
J230 (Diagram 5)	140-150m	min. 230m

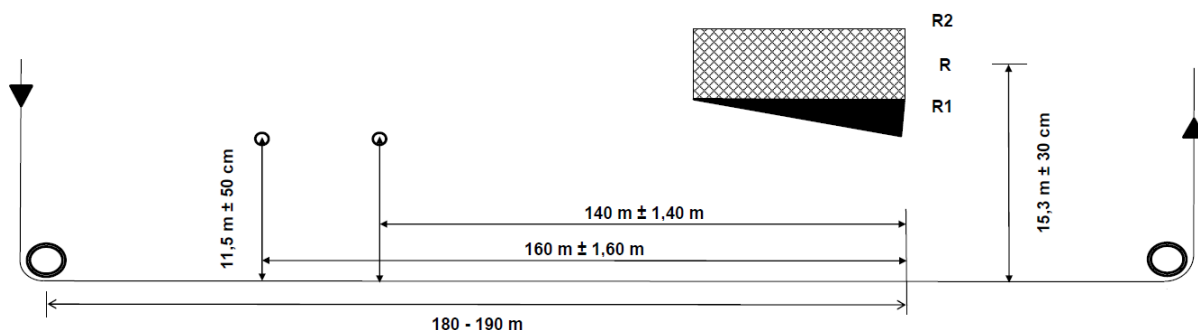


Diagram 3: J290 jump course

For the J290 jump course, there shall be exactly two jump buoys at 160m and 140m before the ramp.

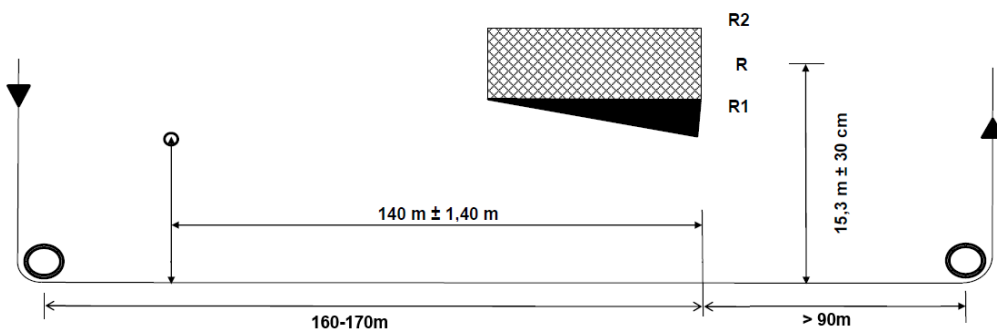


Diagram 4: J250 jump course

For the J250 jump course, there shall be only one jump buoy at 140m before the ramp. The ramp must not be closer than 90m before the end of the competition area.

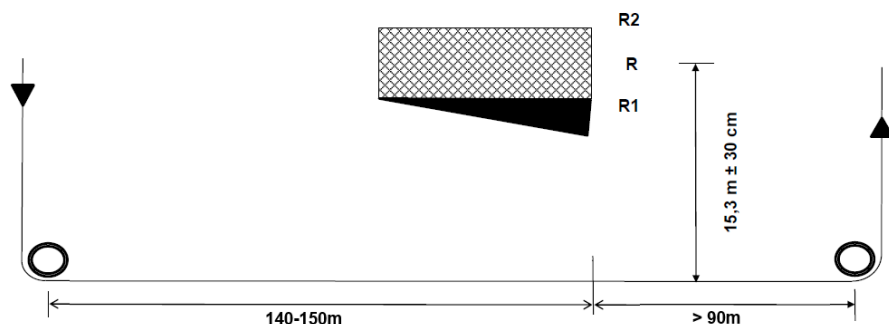


Diagram 5: J230 jump course

For the J230 jump course, there must not be any jump buoy before the ramp. The ramp must not be closer than 90m before the end of the competition area.

The jump buoys will act as guide buoys for the skiers to start their cut. The jump course and the slalom course are incorporated into each other, these two buoys shall have a different color than the slalom buoys.

4. CLOCKWISE INSTALLATIONS

4.1. TRICK EVENT

The rules of Standard installations (section 3.1) shall be applied without any adjustments.

4.2. SLALOM EVENT

For clockwise installations the same minimum competition area lengths apply as for standard installations (section 3.2). The only difference refers to the position of the slalom buoys. The first buoy is placed on the left side of the main running cable instead of the right side. The other buoys also switch sides accordingly. See Diagrams 6 and 7 for an illustration of a six and a four buoys course.

In case of a clockwise installation, a six buoys course is denoted *S6clock*, the four buoys course is denoted *S4clock*.

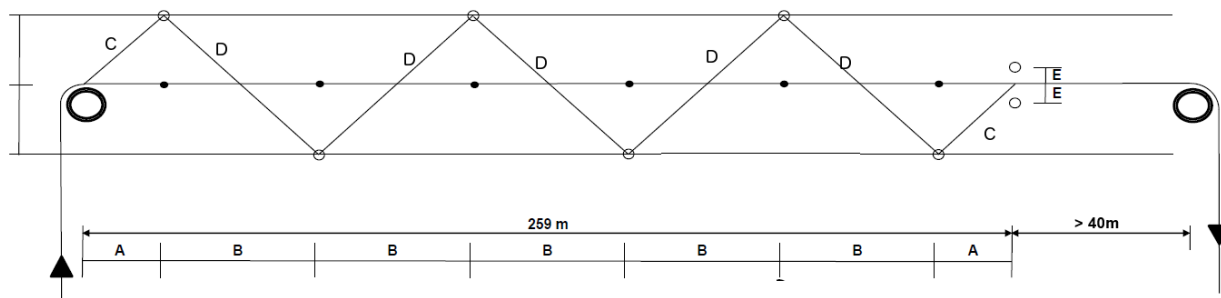


Diagram 6: S6clock slalom course

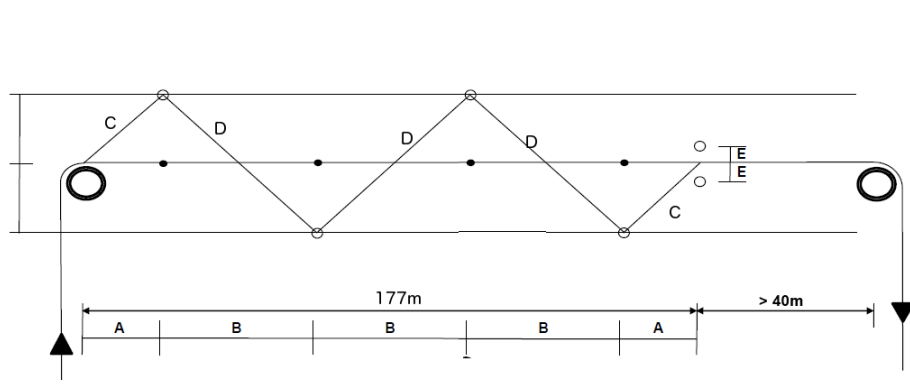


Diagram 7: S4clock slalom course

4.3. JUMP EVENT

For clockwise installations the same minimum competition area lengths apply as for standard installations (section 3.3). The jump ramp as well as the jump buoys still remain on the left side of the main running cable. See the following diagrams for more details.

Mode	Position of the ramp after start of competition area	Competition Area
J290clock (Diagram 8)	180-190m	min. 290m
J250clock (Diagram 9)	160-170m	min. 250m
J230clock (Diagram 10)	140-150m	min. 230m

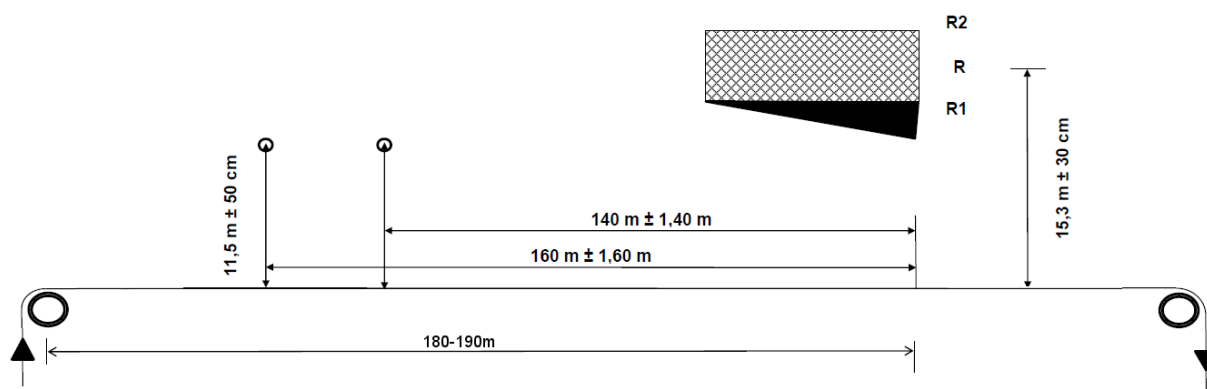


Diagram 8: J300clock jump course

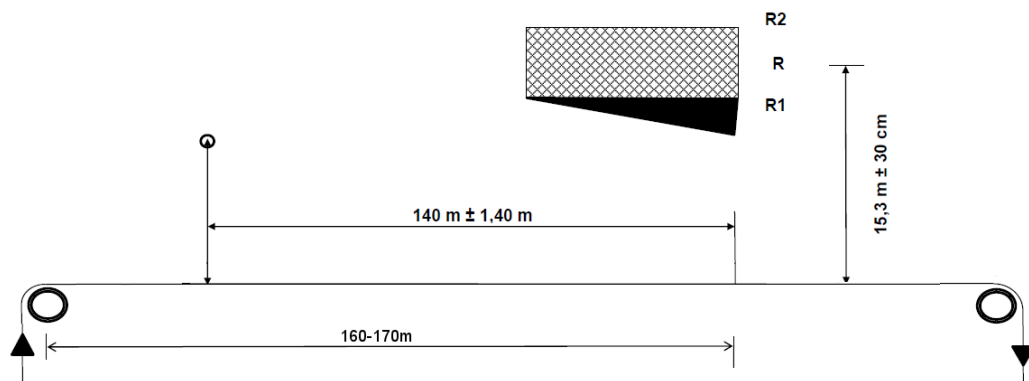


Diagram 9: J250clock jump course

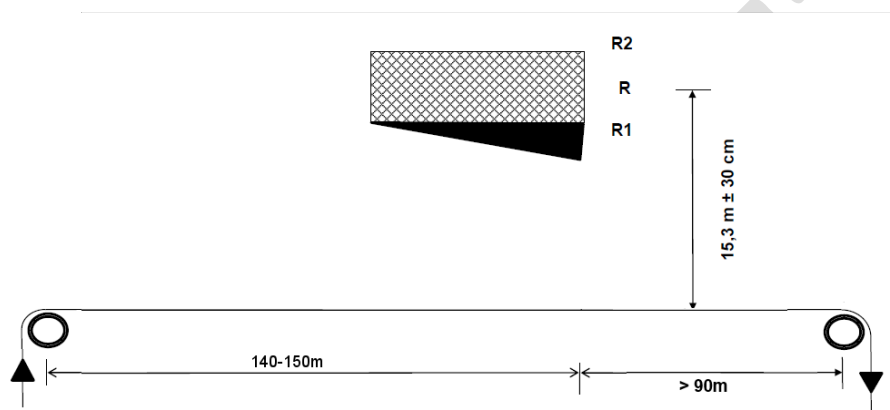


Diagram 10: J230clock jump course

5. TWO-WAY INSTALLATIONS

Two types of two-way installations have to be distinguished. Type 1 refers to installations with only one start platform. Type 2 refers to installations, which are equipped with two start platforms, one at each deflection pulley. Whenever there is a type 2 installation it can just be used as if it were a type 1 installation.

5.1. TRICK EVENT

The maximum run length shall be computed as described in section 3.1. For a two-way installation, the preparation area shall be at least 30m. The end of the preparation area shall be marked with a buoy or a buoy gate. If there is a slalom course, its entry gate can be used.

Type 1

This results in the following minimum competition area length for type 1 two-way installations:

Mode	Time & Runs	Competition Area
T20tw	two runs of 20 seconds	min. 240m

T10tw	two runs of 10 seconds	min. 140m
T5tw	three runs of 5 seconds	min. 90m

See Diagram 11 for the details.

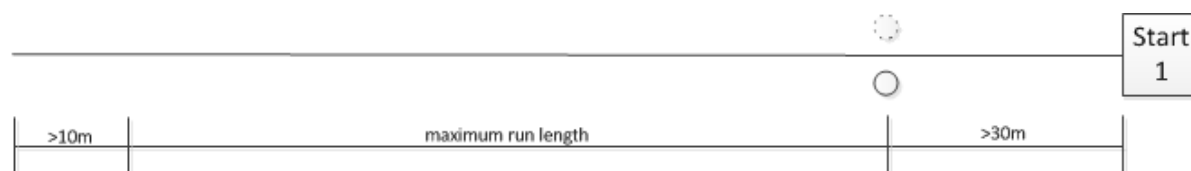


Diagram 11: type 1 two-way installation trick course

For the execution of an event round, every skier starts at the starting dock, begins his run somewhere after the trick buoy, marking the beginning of the competition area and finishes his run after the end of his tricking time or at the next deflection pulley. The installation shall be programmed to stop somewhere after the end of the competition area, which is in the buffer zone at the end. The point of stopping the cable shall be the same for every competitor.

The chief judge may decide, if the skiers get carried back to the starting dock after their runs or they have to walk or swim back.

Type 2

For type 2 installations, the preparation area shall be at both sides. This results in the following minimum area lengths.

Mode	Time & Runs	Competition Area
T20tw	two runs of 20 seconds	min. 260m
T10tw	two runs of 10 seconds	min. 160m
T5tw	three runs of 5 seconds	min. 120m

Diagram 12 shows the details.

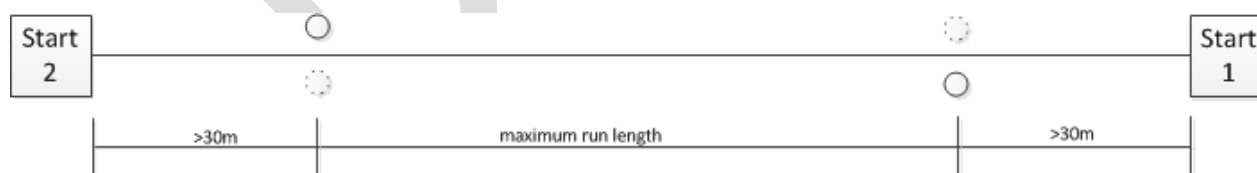


Diagram 12: type 2 two-way installation trick course

For the execution of an event round, the same procedure as for a type 1 installation is applicable. Furthermore, the following way of execution is allowed.

The list of skiers shall be distributed to both starts alternatingly by the starting order. The first skier starts at start 1, the second skier at start 2, the third skier at start 1 again and so forth. Each skier does his first pass, therewith changing the starting dock. Each skier does his second run starting from the opposite

starting dock then. The chief judge shall decide on which start is referred to as the first start. The starting list shall contain information about, from where each skier starts his first run.

5.2.SLALOM EVENT

For the slalom event, an additional entry gate (like at boat slalom courses) is needed. The entry gate shall have the same distance to the first slalom buoy than the exit gate has to the sixth/forth buoy. The preparation area before the entry gates (G) shall be at least 50m. The cable must have reached its desired speed before the carrier crosses the entry gates and shall not reduce its speed before the carrier crosses the end gate. Like for standard and clock cables, it shall be allowed to have a six or a four buoys course. See Diagram 13 and Diagram 14 for details.

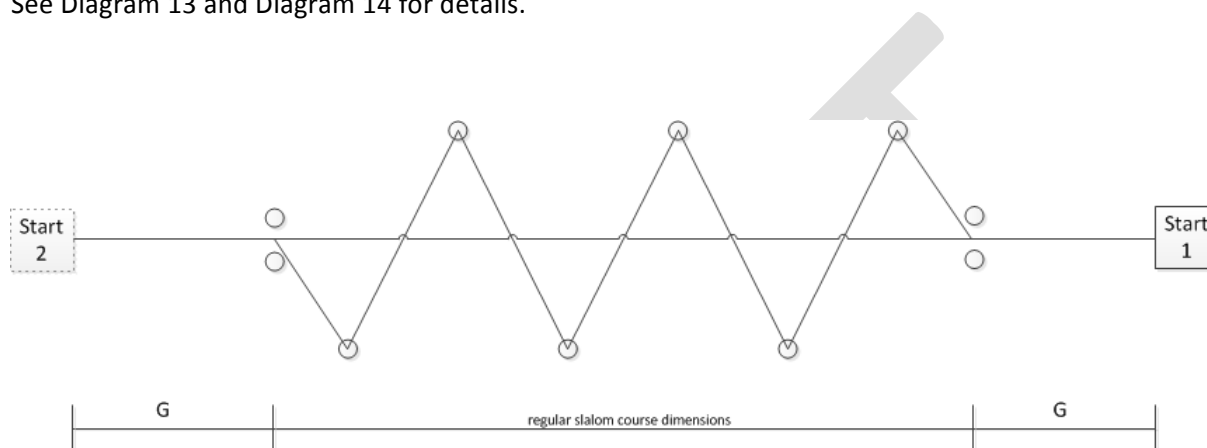


Diagram 13: S6tw slalom course

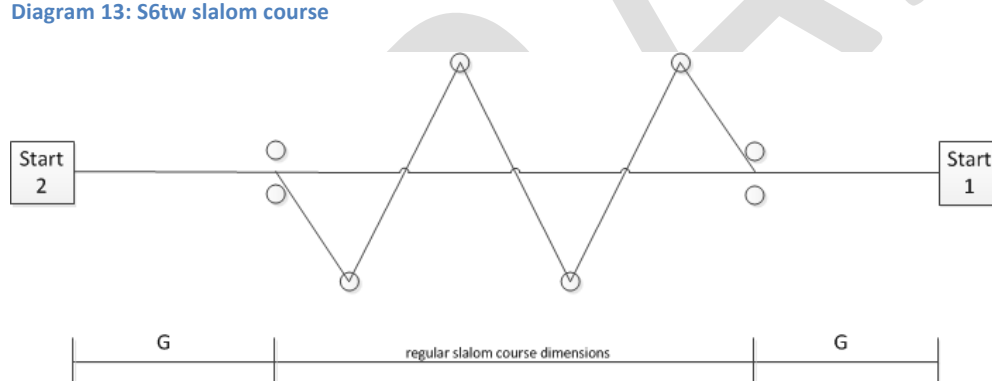


Diagram 14: S4tw slalom course

The execution of an event round again depends on the type of installation.

Type 1

For type 1 installations, the skier starts at the starting dock, passes through the entry gates to directly approach the first slalom buoy. After the first skier has successfully passed his first run, he shall be carried to the start. There he immediately has to start again with the next speed until he reaches the maximum speed. If he also has passed the maximum speed at 18.25m rope, it is the next skiers turn. Subsequently, every skier has to pass the same rope length, before the rope gets shortened again. The chief judge shall decide if the skiers get carried back to the starting dock after finishing a full path at a shorter rope, or if they should walk and swim back.

Type 2

Like for tricks, for type 2 installations, it is allowed to follow the procedure of type 1 installations. Additionally, the following procedure of execution is allowed.

The skier starts at the first starting dock, passes through the entry gates to directly approach the first slalom buoy. After the first skier has successfully passed his first run, he shall immediately start his next run from the second starting dock. The skier continues this until he also has passed the maximum speed at 18.25m rope. Then it is the next skiers turn.

Subsequently, every skier has to pass the same rope length, before the rope gets shortened again.

All skiers remaining at the 16.00m rope then have to start from the first starting dock and have to let go after finishing their pass. Then, for the 14.00m rope, the skiers start from the second dock and so forth.

5.3.JUMP EVENT

For the jump event, just like for standard installations, there are three categories, depending on the installation length. Unlike for standard installations however, the distance from the end of the jump ramp to the end of the competition area has to be always at least 110m. Diagrams Diagram 15, Diagram 16 and Diagram 17 illustrate the three different courses.

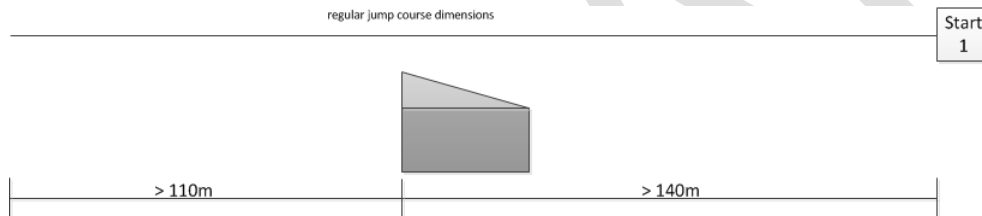


Diagram 15: J250tw jump course

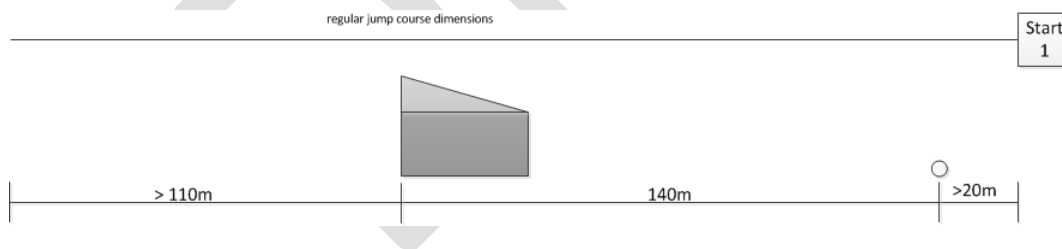


Diagram 16: J270tw jump course

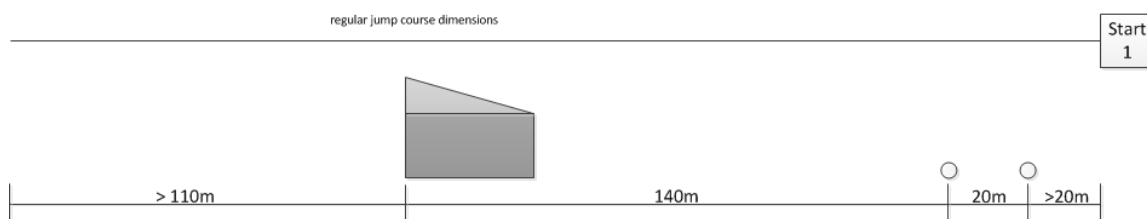


Diagram 17: J290tw jump course

The execution of an event round is independent of the type of the two-way installation. The jump starts at the dock and directly enters the jump course. After the jump, he gets carried back to the start. Then it is the turn of the next jumper, and so forth until every jumper has completed his first jump, then the whole procedure starts with the second jump.

The desired cable speed of the jumper shall be reached at least after 50m.

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