INTERNATIONAL WEIGHTLIFTING FEDERATION

# MANUAL

# SPORT EQUIPMENT LICENSING

2013

INTERNATIONAL WEIGHTLIFTING FEDERATION · FOUNDED 1905 ·

# A. PROCEDURE

## 1.) GENERAL

**IWF Constitution, 10.5**
To be able to supply IWF Events, manufacturers of weightlifting Sport Equipment must obtain an "IWF Licence" and must fully comply with the conditions set out by the IWF.
Any organizer of any IWF Event, as well as any concerned Member, shall be responsible toward the IWF for compliance with specific obligation.

**IWF TCR 3.3.1.1**
At Olympic Games, Youth Olympic Games, Continental, Regional and other Multisport Games, World, Continental and Regional Championships and FISU Events, only IWF-licensed sport equipment shall be used.

## 2.) MANUFACTURER / SUPPLIER

2.1 Shall guarantee that the sport equipment complies with the IWF TCRR and the IWF Sport Equipment Licensing specifications

2.2 Shall send the detailed description and specification about their sport equipment to be licensed to the IWF

## 3.) IWF

3.1 Shall evaluate the detailed description and specification about the sport equipment

3.2 Shall report to Manufacturer / Supplier the compliance or non-compliance (with the reason for non-compliance) of the description and specification about the sport equipment

## 4.) TESTING

4.1 <u>Platform, Barbell, Scale</u>

4.1.1 Sample sport equipment shall be sent to IWF designated Member Federation(s) for testing (number and testing period to be coordinated)

4.1.2 Member Federation(s) shall report to the IWF about the sport equipment

4.1.3 IWF shall report to Manufacturer / Supplier the compliance or non-compliance (with the reason for non-compliance) of the sport equipment

4.2 Technology and Information System (TIS)

4.2.1 TIS shall be tested by IWF TIS experts (costs to be covered by Manufacturer / Supplier)

4.2.2 IWF shall report to Manufacturer / Supplier the compliance or non-compliance (with the reason for non-compliance) of the TIS

## 5.) AGREEMENT

If the sport equipment complies with the IWF TCRR and the IWF Sport Equipment Licensing specifications, an IWF Sport Equipment License Agreement shall be signed.

## 6.) TERM

IWF may grant the IWF Sport Equipment License to one (or more) specific Event(s) or for a determined term up to 4 years.

## 7.) QUALITY CONTROL

7.1 Platform, Barbell, Scale

Manufacturer / Supplier shall guarantee that their equipment is adequate for weightlifting competition and training; and is safe for athletes' health during proper use. IWF Technical Committee members (or representatives) make Quality Control during IWF Events on

- construction and design
- measurement
- weight

and the IWF sends the report to the Manufacturer / Supplier.

7.2 Technology and Information System (TIS)

IWF TIS experts make Quality Control during IWF Events on appropriate operation and the IWF sends the report to the Manufacturer / Supplier.

## 8.) OTHERS

In case of extension of an existing Sport Equipment Licence, the IWF has the right to exclude section 4.) Testing from the procedure.

## B. SPECIFICATIONS

### 1.) PLATFORM

**IWF TCR 3.3.2.1**
Two types of platforms are authorised for use by the IWF: Competition and Training/Warm-up platforms. Both types of platforms must meet the authorised specifications.

**IWF TCR 3.3.2.2**
Competition platform:

- square
- measures four hundred (400) cm on each side
- measures ten (10) cm in height

**Regulation to 3.3.2**
The competition platform must be:

- level
- square
- measure four hundred (400) cm on each side
- manufactured or constructed of hardwood, either solid or laminated; using a maximum of twenty (20) tongue and groove hardwood planks
- hardwood planks must be attached together by a minimum of three (3) steel rods
- ten (10) cm high; (if positioned on a stage, the platform must exceed ten (10) cm above the stage)
- ten (10) cm demarcation; (if surrounding floor is similar colouring, top edge of the platform must have a different colour demarcating the edge of the platform)

**IWF TCR 3.3.2.3**
Training / warm-up platform:

- measures three hundred (300) cm wide
- measures two hundred fifty to three hundred (250-300) cm in length

**Regulation to 3.3.2**
The training / warm-up platform must:

- measure three hundred (300) cm wide by two hundred fifty (250) to threehundred (300) cm in length
- be made of any non-slip material surface
- numbered, starting at one (1)

## 2.) BARBELL

**IWF TCR 3.3.3.1**
The barbell consists of the following parts:

- Bar
- Discs
- Collars

**Regulation to 3.3.3**
Composition of a men's barbell set – 190kg

- 1 x 20kg bar
- 2 x 25kg discs
- 2 x 20kg discs
- 2 x 15kg discs
- 2 x 10kg discs
- 2 x 5 kg discs
- 2 x 2.5kg discs
- 2 x 2 kg discs
- 2 x 1.5kg discs
- 2 x 1kg discs
- 2 x 0.5kg discs
- 2 x collars 2.5kg

Composition of a women's barbell set – 185kg

- 1 x 15kg bar
- 2 x 25kg discs
- 2 x 20kg discs
- 2 x 15kg discs
- 2 x 10kg discs
- 2 x 5 kg discs
- 2 x 2.5kg discs
- 2 x 2 kg discs
- 2 x 1.5kg discs
- 2 x 1kg discs
- 2 x 0.5kg discs
- 2 x collars 2.5kg

Additional discs shall be provided at the competition platform / stage:

- one (1) set of full size discs [forty-five (45) cm] of 5 kg
- one (1) set of full size discs [forty-five (45) cm] of 2.5 kg

**2.1 Bar**

**IWF TCR 3.3.3.2**
Bar

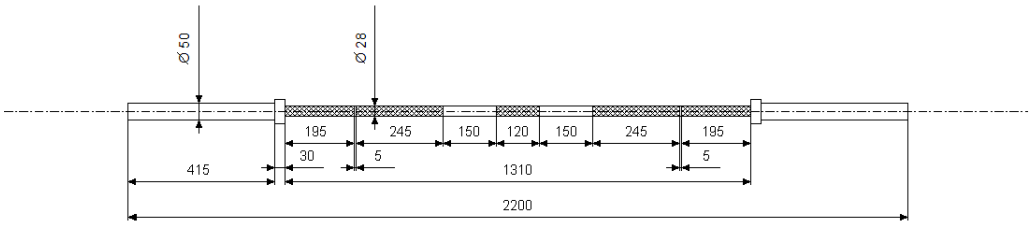
There are two (2) types of bars: men's and women's bars. Both types of bars must meet the following authorized specifications:

**IWF TCR 3.3.3.3**

A men's bar weighs twenty (20) kg.

**Regulation to 3.3.3**

Men's bar

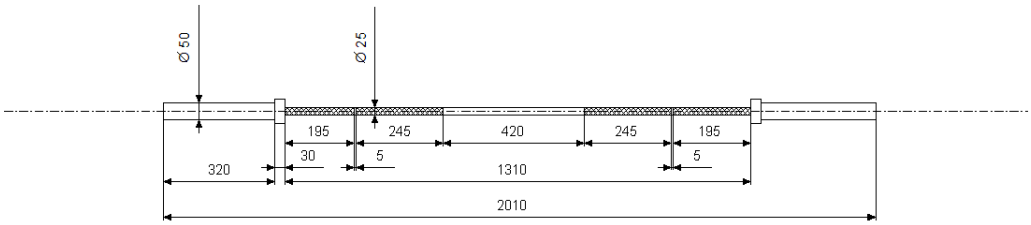



- manufactured from chromed steel
- machined with knurling in grip section
- weight = 20 kg
- length = 220 cm
- outer ends (sleeves) = 5 cm diameter / 41.5 cm long
- grip section = 2.8 cm diameter / 131 cm long
- 2 grip sections = 44.5 cm with non-knurled 0.5 cm strip 19.5 cm from inner sleeve
- centre knurling = 12 cm long
- demarcated with blue identification marking at each end and the centre of the bar
- tolerance = from +0.1% to -0.05%

**IWF TCR 3.3.3.4**
A women's bar weighs fifteen (15) kg.

**Regulation to 3.3.3**

Women's bar




- manufactured from chromed steel
- machined with knurling in grip section
- weight = 15 kg
- length = 201 cm
- outer ends (sleeves) = 5 cm diameter / 32 cm long
- grip section = 2.5 cm diameter / 131 cm long
- 2 grip sections spaced 42 cm apart with non-knurled 0.5 cm strip 19.5 cm from inner sleeve
- demarcated with yellow identification marking at each end and in centre of the bar
- tolerance = from +0.1% to -0.05%

## 2.2 Discs

**IWF TCR 3.3.3.5**
Discs
Two types of discs are authorised for use by the IWF: Competition and Training discs. Both types of discs must meet the following authorized specifications:

**IWF TCR 3.3.3.6**

Competition discs: (*weights in kilograms with corresponding colour)*

| | |
|---|---|
| 30 kg | black* |
| 25 kg | red |
| 20 kg | blue |
| 15 kg | yellow |
| 10 kg | green |
| 5 kg | white |
| 2.5 kg | red |
| 2 kg | blue |
| 1.5 kg | yellow |
| 1 kg | green |
| 0.5 kg | white |

*Note: Details of the introduction of 30 kg discs are subject to further co-ordination.

**Regulation to 3.3.3**

Competition discs:

a) Diameter

- Discs ≥ 10 kg : 45 cm ± 0.1 cm tolerance
- Discs < 10 kg ≤ 45 cm ± 0.1 cm tolerance

b) Material

- Discs ≥ 10 kg: covered with rubber or plastic and coated on both sides with permanent colour
- Discs < 10 kg: may be made of metal or other IWF approved material

c) Tolerance

- Discs > 5 kg: from +0.1% to -0.05%
- Discs ≤ 5 kg: from +10 grams to -0 grams per part

d) Marking

- all discs must be clearly demarcated with the weight in kilograms

**IWF TCR 3.3.3.7**

Training discs

- manufactured in coloured weights as listed above
- may be manufactured in black with corresponding coloured rims and demarcated with “Training”

**Regulation to 3.3.3**

Training discs

- tolerance = from +0.8% to -0.8%
- manufactured in colours with corresponding weight listed in TCR 3.3.3.6
- may be manufactured in black with corresponding coloured rims and demarcated with “Training”

## 2.3 Collars

**IWF TCR 3.3.3.8**
Collars
In order to secure the discs to the bar, each bar must be equipped with collars. Collars must meet the following authorised specifications:

- two (2) collars per barbell
- weight = 2.5 kg each

**Regulation to 3.3.3**
Collars

- manufactured from chromed steel
- hole = 5 cm diameter
- may be designed for either outside loading or inside loading for 2 kg or less
- tolerance = from +10 grams to -0 grams per part

## 2.4 Tolerance Chart

**Regulation to 3.3.3**

| WEIGHT | COMPETITION | | TRAINING | |
|---|---|---|---|---|
| **Bar kg** | **Min. kg** | **Max. kg** | **Min. kg** | **Max. kg** |
| 20 | 19.9900 | 20.0200 | N / A | N / A |
| 15 | 14.9925 | 15.0150 | N / A | N / A |
| | | | | |
| **Disc kg** | | | | |
| 25 | 24.9875 | 25.0250 | 24.800 | 25.200 |
| 20 | 19.9900 | 20.0200 | 19.840 | 20.160 |
| 15 | 14.9925 | 15.0150 | 14.880 | 15.120 |
| 10 | 9.9950 | 10.0100 | 9.920 | 10.080 |
| 5 | 5.0000 | 5.0100 | 4.960 | 5.040 |
| 2.5 | 2.5000 | 2.5100 | 2.480 | 2.520 |
| 2 | 2.0000 | 2.0100 | 1.984 | 2.016 |
| 1.5 | 1.5000 | 1.5100 | 1.488 | 1.512 |
| 1 | 1.0000 | 1.0100 | 0.992 | 1.008 |
| 0.5 | 0.5000 | 0.5100 | 0.496 | 0.504 |
| | | | | |
| **Collar kg** | | | | |
| 2.5 | 2.5000 | 2.5100 | N / A | N / A |

-0.05% / +0.1%

-0 g / +10 g

-0.8% / +0.8%

## 3.) SCALES

**IWF TCR 3.3.4.1**
At World Championships, Olympic Games and other select IWF Events, multiple identical scales are required.

**Regulation to 3.3.4**
Scales must:

- be electronic; with display and/or printout or both
- capacity = weigh up to 200 kg
- precision = 10 grams minimum
- minimum three (3) scales – official scale, test scale and training venue scale
- certified by local authorities within three (3) months from start of the Event
- Olympic Games, Youth Olympic Games – scales must be calibrated daily

## 4.) TECHNOLOGY AND INFORMATION SYSTEM

**IWF TCR 3.3.6**
Technology and Information System (TIS)
The TIS is a complex and integrated competition management application including the competition management software and the following hardware.

### 4.1 Competition Management Software

The Competition Management Software shall manage and run the competition, including:

- data handling
- drawing of Lot numbers
- official documents' production including Verification Form, Start List Package, Weigh-in List, Protocol, Athlete's Card and Final Results Package
- calling order
- supervision of 15/20kg rule (TCR 6.6.5) and adequate warning
- classification of athletes and teams
- feed the hardware elements in real time

**IWF TCR 6.3.1**
Drawing of Lot numbers
After the VFE a randomly generated lot number is drawn for each verified athlete. The athletes retain the lot number throughout the Event. The lot number defines the order of the weigh-in and the order of lifting during the course of the competition in the athlete's relevant group.

**IWF TCR 6.6.6**
Calling order
The following four (4) factors listed in priority must be considered when calling the athletes:

1. The weight of the barbell (lightest weight first)
2. The number of the attempt (lowest number first)
3. The sequence/order of the previous attempt(s) (the athlete who lifted earliest is first)
4. The start number of the athlete (lowest first)

**IWF TCR 6.8.1**
Athlete Classification
The title of Champion is awarded for individual lifts in the Snatch, the Clean & Jerk and the Total (the aggregate of the best Snatch and the best Clean & Jerk results). The athletes who win first, second and third place in the two (2) lifts and in the Total at all IWF Events are awarded gold, silver and bronze medals, respectively.

**IWF TCR 6.8.2**

Factors to decide the classification of athletes in Snatch and Clean & Jerk:

1. best result – highest first; if identical, then:
2. bodyweight – lowest first; if identical, then:
3. best result's attempt(s) number – lowest first; if identical, then:
4. previous attempt(s) – lowest first; if identical, then:
5. lot number – lowest first

Factors to decide the classification of athletes in Total:

1. best result – highest first; if identical, then:
2. bodyweight – lowest first; if identical, then:
3. best Clean & Jerk result – lowest first; if identical, then:
4. best Clean & Jerk result's attempt number – lowest first; if identical, then:
5. previous attempt(s) – lowest first; if identical, then:
6. lot number – lowest first.

The sequence / order of the competition applies when a bodyweight category is divided into multiple groups.

**Regulation to 6.6.6 and 6.8.1**

The calling order is the progression of the competition which determines when an athlete is called to perform their attempt.
The classification of athletes determines the athletes ranking in their specific bodyweight category.

Example: 56 kg Men's Group A and Group B
When bodyweight categories are divided into groups; the order of competing groups is in reverse alphabetical. (i.e.: Group C competes first, Group B second and Group A last)
*Note: The numbers in brackets below indicate the calling order.*

**Group B**

| Lot No. | Name | BW | Snatch | | | | | Clean & Jerk | | | | | Total | Rank |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 1 | 2 | 3 | Result | Rank | 1 | 2 | 3 | Result | Rank | | |
| 100 | A | 55.00 | ~~100~~ (4) | ~~100~~ (9) | 100 (11) | **100** | **10.** | ~~120~~ (6) | ~~120~~ (9) | 120 (12) | **120** | **6.** | **220** | **7.** |
| 101 | B | 56.00 | ~~95~~ (3) | ~~100~~ (8) | --- | **---** | **--** | --- | --- | --- | **---** | **--** | **---** | **--** |
| 102 | C | 55.00 | ~~100~~ (5) | 100 (10) | ~~105~~ (15) | **100** | **7.** | ~~120~~ (7) | 120 (10) | ~~125~~ (14) | **120** | **4.** | **220** | **5.** |
| 103 | D | 56.00 | 90 (1) | 100 (7) | 105 (14) | **105** | **3.** | ~~115~~ (2) | ~~115~~ (4) | 115 (5) | **115** | **10.** | **220** | **9.** |
| 104 | E | 56.00 | ~~94~~ (2) | 101 (12) | ~~105~~ (16) | **101** | **4.** | 110 (1) | 115 (3) | 120 (11) | **120** | **7.** | **221** | **1.** |
| 105 | F | 55.00 | 100 (6) | ~~101~~ (13) | ~~105~~ (17) | **100** | **5.** | 120 (8) | ~~125~~ (13) | ~~125~~ (15) | **120** | **1.** | **220** | **2.** |

**Group A**

| Lot No. | Name | BW | Snatch | | | | | Clean & Jerk | | | | | Total | Rank |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 1 | 2 | 3 | Result | Rank | 1 | 2 | 3 | Result | Rank | | |
| 200 | G | 55.00 | ~~91~~ (3) | ~~95~~ (6) | 100 (12) | **100** | **9.** | ~~115~~ (3) | ~~116~~ (8) | 120 (12) | **120** | **5.** | **220** | **6.** |
| 201 | H | 55.00 | ~~100~~ (7) | 100 (10) | ~~105~~ (16) | **100** | **8.** | ~~115~~ (4) | 120 (10) | ~~125~~ (14) | **120** | **3.** | **220** | **4.** |
| 202 | I | 56.00 | 90 (2) | 95 (5) | 105 (15) | **105** | **2.** | ~~114~~ (2) | ~~115~~ (6) | 115 (7) | **115** | **9.** | **220** | **8.** |
| 203 | J | 55.00 | 85 (1) | 94 (4) | 105 (14) | **105** | **1.** | --- | --- | --- | **---** | **--** | **---** | **--** |
| 204 | K | 56.00 | ~~100~~ (8) | 100 (11) | ~~105~~ (17) | **100** | **11.** | 110 (1) | 115 (5) | 120 (11) | **120** | **8.** | **220** | **10.** |
| 205 | L | 55.00 | 100 (9) | ~~103~~ (13) | ~~105~~ (18) | **100** | **6.** | 120 (9) | ~~125~~ (13) | ~~125~~ (15) | **120** | **2.** | **220** | **3.** |

**IWF TCR 6.8.3**

Team Classification

At World and Continental Championships and other IWF Events, the classification of the teams is calculated by adding the points allocated to each athlete according to the following scale:

| | | | |
|---|---|---|---|
| 1st place | 28 points | 14th place | 12 points |
| 2nd place | 25 points | 15th place | 11 points |
| 3rd place | 23 points | 16th place | 10 points |
| 4th place | 22 points | 17th place | 9 points |
| 5th place | 21 points | 18th place | 8 points |
| 6th place | 20 points | 19th place | 7 points |
| 7th place | 19 points | 20th place | 6 points |
| 8th place | 18 points | 21st place | 5 points |
| 9th place | 17 points | 22nd place | 4 points |
| 10th place | 16 points | 23rd place | 3 points |
| 11th place | 15 points | 24th place | 2 points |
| 12th place | 14 points | 25th place | 1 point |
| 13th place | 13 points | | |

**IWF TCR 6.8.4**

At World Championships and other IWF Events team points according to the ranking in Snatch, Clean & Jerk and Total will be allocated to each team for the Team classification.

**IWF TCR 6.8.5**

When two (2) or more teams have the same points in the Team Classification, the team with more of the higher places must be ranked higher.

**IWF TCR 6.8.6**

Athletes with no valid lifts in the Snatch will not be eliminated from the competition (except in the case of TCR 6.8.8.) They are allowed to compete in the Clean & Jerk and if successful will receive points for team classification according to their place obtained in the Clean & Jerk. Athletes will not receive points for the Total.

**IWF TCR 6.8.7**
Athletes who have been successful in the Snatch but have no valid lifts in the Clean & Jerk receive points for the team classification according to the place obtained in the Snatch but will not receive points for the Total.

**IWF TCR 6.8.8**
In Events where medals are given for Total only athletes having no valid lifts in the Snatch are eliminated from competition and cannot continue in the Clean & Jerk. No team classification points will be allocated to that athlete.

**4.2 Referee Light System**

**IWF TCR 3.3.6.2**
The Referee Light System is the means by which Referees adjudicate the lifts.

**IWF TCR 3.3.6.3**
The Referee Light System consists of one (1) control box for each of the three (3) Referees and a control panel for the Jury.

**IWF TCR 3.3.6.4**
Each of the Referees must give the "Down" signal by pressing the white button for a "Good lift" or the red button for "No lift", according to the relevant rules.

**IWF TCR 3.3.6.5**
When two (2) of the Referees have provided identical decisions, a visual and audible "Down" signal is given to the athlete to replace the barbell on the competition platform.

**IWF TCR 3.3.6.6**
If one (1) Referee presses the white button and another Referee presses the red button and the third Referee does not press either, the latter hears an intermittent audible signal from the control box prompting him/her that a decision is required.

**IWF TCR 3.3.6.7**
The signal is only a reminder to the Referee; the Referees must be certain in their decision of "Good lift" or "No lift". The signal should not force the Referee to make a decision. When two (2) white lights or two (2) red lights have been given by two (2) of the three (3) Referees and the "Down" signal has been seen and heard, the Referee who has not provided a decision is reminded to give his/her decision by way of the intermittent audible signal.

**IWF TCR 3.3.6.8**
Three (3) seconds after the three (3) Referees have given their decision; the "decision lights" light up, indicating the individual decision of the Referees by corresponding colours, either red or white. The decision lights remain lit for a minimum of three (3) seconds.

**IWF TCR 3.3.6.9**
After the visible and audible “Down” signal and before the decision lights operate, the Referees have a three (3) second window to reverse their decision. If a Referee misses the three (3) second window he/she must raise the small flag provided to them to indicate a change in decision.

**IWF TCR 3.3.6.10**
When the “Down” signal has been given and the "decision lights” are on and the athlete does not lower the barbell, the Centre Referee must say “Down” and signal the athlete to replace the barbell to the competition platform.

**IWF TCR 3.3.6.11**
During the competition, the Jury monitors the work of the Referees through a control panel. Every decision by the Referees may be verified as the lights on the control panel light up instantly when the Referees make a decision. Slow, fast or no decision(s) may be identified for immediate or further action. Should the Jury want to call any of the Referees to the Jury table, the Jury President does so by pressing the button on the control panel, which gives an audible signal to the Referee(s) in question.

**Regulation to 3.3.6.1**
<u>Referee Light System</u>
There is one (1) control box for each of the three (3) Referees. Each control box is equipped with:

- two (2) push buttons; one (1) white and one (1) red
- one (1) warning indicator light
- warning indicator sound

One (1) apparatus giving a visual and audible “Down” signal is placed on a stand in front of the competition platform / stage, one hundred (100) cm either side of the Centre Referee. The apparatus must be a minimum of 50 cm in height from the competition platform / stage.

Two (2) or more sets of Referee “decision lights” equipped with three (3) red and three (3) white lights, showing the Referees' decisions to the athletes and the audience in the competition area and one (1) set in the Warm-up area.

A control panel placed on the Jury table, equipped with three (3) red and three (3) white lights that light up instantly when the Referees press the button. The panel are also equipped with a signalling device that may be used to call any or all the Referees to the Jury table.

## 4.3 Jury Control Unit

**IWF TCR 3.3.6.12**
Jury Control Unit
Jury members give their decision on each lift using the equipment located on the Jury table. Each Jury member has a device with a red and white push button.

**Regulation to 3.3.6.12**
Jury Control Unit
This device is equipped with five (5) green lights five (5) white lights and five (5) red lights. Each Jury member has a device with a red and white button. When the Jury members press either one (1) of the buttons, the green light illuminates. The white and red Jury decision lights illuminate only when all Jury members have given their decision. The Jury Control Unit is not programmed with a three (3) second window to change a decision.

## 4.4 Timing Clock

**IWF TCR 3.3.6.14**
Timing Clock
An electronic timing clock with countdown mode in increments of one (1) second must be used. The timing clock must be able to be set to any time up to fifteen (15) minutes.

**Regulation to 3.3.6.14**
Timing Clock
An accurate time measuring device, either electronic or digital, must be equipped with the following characteristics:

- Operate continuously up to a maximum of fifteen (15) minutes
- Indicate minimum intervals of one (1) second
- Provide automatic audible signals at ninety (90) seconds, at thirty (30) seconds and at zero (0)

The elapsed time must be displayed simultaneously in three (3) separate locations within the FOP:

- one (1) element in the warm-up area
- one (1) element facing the audience
- one (1) element facing the competing athlete

## 4.5 Attempt Board

**IWF TCR 3.3.6.15**
Attempt Board
The following information must be displayed on the Attempt Board:

- name (family name displayed upper case text; followed by given name in upper case for the first letter and lower case for subsequent text)
- IWF/IOC code
- weight to be taken
- attempt number
- athlete start number
- Referees' decision, if not displayed elsewhere
- timing clock, if not displayed elsewhere

## 4.6 Scoreboard

**IWF TCR 3.3.6.16**
Scoreboard
A scoreboard must be set up in a prominent place in the FOP in order to record and display the progress and results of the specific category as it happens.

**IWF TCR 3.3.6.17**
The scoreboard must contain the following information for all athletes in the group being contested and for the top three (3) athletes from the previous groups, which must be displayed the entire time:

- athlete start number, in numerical order
- name of each athlete according to the allocated start number
- date of birth
- bodyweight
- IWF/IOC code
- three (3) attempts in the Snatch
- three(3) attempts in the Clean & Jerk
- Total
- final classification
- indication of the athlete called and the one to follow next

Different sign should be provided to identify the actual and next lifter.
The best 3 athletes according to the Total Result from the previous group(s) should be displayed at the bottom.

**IWF TCR 3.3.6.18**
Successful and unsuccessful attempts must be marked differently (by strikethrough or by colour).

## 4.7 Record Display

**IWF TCR 3.3.6.19**

Record Display

The records of the category contested must be displayed on the FOP. The information on the records must be available throughout the entire group and must be updated immediately when a new record is set.