



# Powerlifting

## Sport Rules

*Special Olympics*





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## **1. GOVERNING RULES**

The Official Special Olympics Sports Rules for Powerlifting shall govern all Special Olympics competitions. As an international sports program, Special Olympics has created these rules based upon International Powerlifting Federation (IPF) rules for Powerlifting found at <http://www.powerlifting-ipf.com/IPF> or National Governing Body (NGB) rules shall be employed except when they are in conflict with the Official Special Olympics Sports Rules for Powerlifting or Article I. In such cases, the Official Special Olympics Sports Rules for Powerlifting shall apply.

Refer to Article 1, <http://media.specialolympics.org/resources/sportseentials/general/Sports-Rules-Article-1.pdf>, for more information pertaining to Codes of Conduct, Training Standards, Medical and Safety Requirements, Divisioning, Awards, Criteria for Advancement to Higher Levels of Competition, and Unified Sports.

## **2. OFFICIAL EVENTS**

The range of events, including fundamental events, and individual events, is intended to offer competition opportunities for athletes of all abilities. Programs may determine the events offered and, if required, guidelines for the management of those events. Coaches are responsible for providing training and event selection appropriate to each athlete's skill and interest.

The following is a list of official events available in Special Olympics:

- 2.1 Squat
- 2.2 Bench press
- 2.3 Dead lift
- 2.4 Combination (Bench press and Dead lift)
- 2.5 Combination (Squat, Bench press and Dead lift)
- 2.6 Unified Sports Powerlifting

## **3. DIVISIONING AND COMPETITION SCHEDULE**

### **3.1 Divisions**

3.1.1 Athletes shall be placed in divisions according to gender, weight class, age and ability.

### **3.1.2 Age Divisions**

- 3.1.2.1.1 Minimum age to compete: 14
- 3.1.2.1.2 Sub-Junior: 14-18
- 3.1.2.1.3 Junior: 19-23
- 3.1.2.1.4 Senior: 24-39
- 3.1.2.1.5 Master: 40 and over

### **3.1.3 Weight Classes**

3.1.3.1 Weight classes are a divisioning tool which groups athletes according to body weight, which is the primary determinant of ability.



3.1.3.2 The IPF Formula (<https://goodlift.info/public/gl-calc/gl-calc.html>) should be used when there are not enough athletes to have at least three athletes per weight class or to place the combined score of an athlete and partner for Special Olympics Unified Sports® powerlifting.

Male		Female	
Kilograms	Pounds	Kilograms	Pounds
53 kg	116.75 lb	43 kg	94.75 lb
59 kg	130 lb	47 kg	103.5 lb
66 kg	145.5 lb	52 kg	114.50 lb
74 kg	163 lb	57 kg	125.50 lb
83 kg	183 lb	63 kg	139 lb
93 kg	205 lb	69 kg	152 lb
105 kg	231.5 lb	76k	167.5lb
120 kg	264.5 lb	84 kg	185 lb
120+ kg	264.75+ lb	84+ kg	185.25+ lb

3.1.3.3 Divisions within gender, weight categories and age should be based upon “opening attempts”. The athlete’s opening attempt should be based upon a previous official performance and should not be significantly higher or lower (except in the case of injury). In that case, the athlete’s previous performance must have been within the previous six (6) to twelve (12) months. A signed score sheet or score card must be provided to verify the athlete’s prior performance.

**3.2 WEIGH-IN**

3.2.1 An athlete’s weight category must be declared at the technical meeting to be scheduled and announced prior to the first day of competition.

3.2.2 The weigh-in of competitors must take place two hours before the beginning of competition for a particular category and be completed in no more than one hour and thirty minutes. All the lifters in the category must attend the weigh-in, which shall be carried out in the presence of the three referees appointed for the category.

3.2.3 The weigh-in for each competitor will be carried out in a room with the door closed, with only the competitor, his/her coach or manager and the two/three referees present. For reason of hygiene, the lifter should wear socks/paper towel on scales platform.

3.2.4 Lifters may be weighed nude or in underwear which complies with the specifications set out in the appropriate section of the rule book and which does not effectively change the lifter’s weight. If a questions exists regarding the weight of undergarments, a re-weigh in the nude may be requested. In competitions in which women are competitors, the weigh-in procedure may be altered to ensure that lifters are weighed by officials of their own sex. Additional female officials (not necessarily referees) may be appointed for this purpose.



- 3.2.5 Weigh-in will be in secret and the lifters will be allowed in, one at a time. The weigh-in room will be locked and the persons allowed in it are the referees for the body-weight classes, the lifter and his/her coach or trainer. The weigh-in results will not be made known until all the lifters in a particular weight class have been weighed in.
- 3.2.6 Each competitor can only have his/her official weight registered once. Only those heavier or lighter than the category limit are allowed to return to the scales within the limits of the hour and thirty minutes allowed from the beginning of the weigh-in.
- 3.2.7 An athlete weighing in above the upper limit for a weight class will be moved to the next heavier weight class. An athlete weighing in below the minimum limit for a weight class may, at the discretion of the Chief Referee, be permitted to lift in the next lightest weight class if that competition is available. If competition in the lighter weight class is not available, the athlete will be permitted to lift outside the official competition and receive a participation ribbon.
- 3.2.8 Lifters should check the squat and bench press rack heights and foot blocks prior to the start of the competition. The rack height sheet must be signed or initialed after the check by the lifter or coach. It is in their best interest. A copy of this official document goes to the Jury, Speaker and Platform Manager.

#### **4. EQUIPMENT AND SPECIFICATIONS**

##### **4.1 SCALES**

- 4.1.1 Scales must be of an electronic digital type and register to the second place of decimals. They must have the capacity to weigh up to 180kg. A scales certificate to accompany the scales must be current to within one year of the date of the competition.

##### **4.2 PLATFORM**

- 4.2.1 All lifts should be carried out on a platform measuring between 2.5m x 2.5m minimum and 4.0m x 4.0m maximum. It must not exceed 10cm in height from the surrounding stage or floor. The surface of the platform must be flat, firm, level and covered with a material of non-slip smooth carpet (i.e. free from irregularities and projections). Rubber matting or similar sheeting materials are not permitted.

##### **4.3 BARS AND DISCS**

- 4.3.1 For all powerlifting contests organized under the rules of the IPF, only disc barbells are permitted. The use of discs which do not meet the current specifications will invalidate the contest and any records accomplished. Only those bars and discs that meet all specifications may be used throughout the entire competition and for all lifts. The bar shall not be changed during the competition unless it is bent or damaged in some way as determined by the Technical Committee, Jury or Referees. Bars to be used at all IPF Championships shall not be chromed on the knurling. Only bars and discs that have official IPF approval may be used at IPF World Championships or the setting of World Records. As from 2008 the "knurling" distances on IPF approved bars will become universal/standard based on one of the originally approved bars.
- 4.3.2 The bar shall be straight and well knurled and grooved and shall conform to the following dimensions:

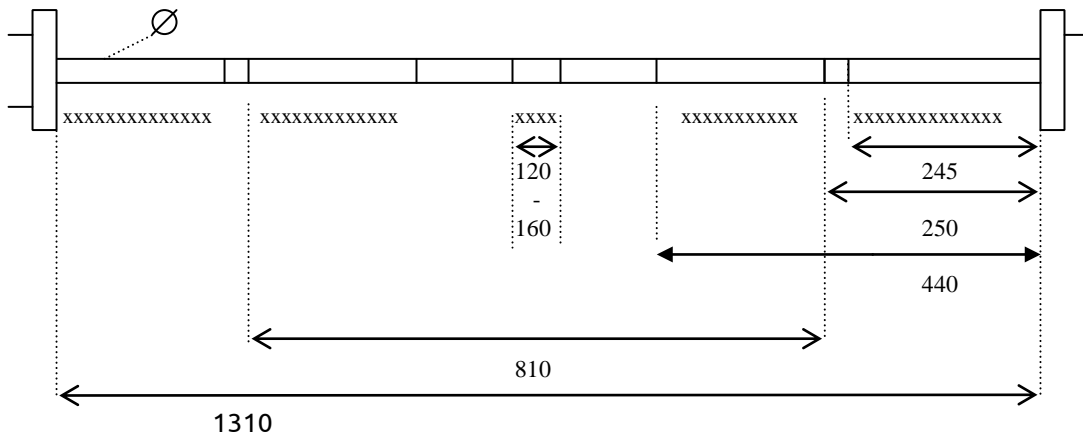


- 4.3.2.1 The total overall length not to exceed 2.2m.
- 4.3.2.2 Distance between the collar faces is not to exceed 1.32m or be less than 1.31m.
- 4.3.2.3 Diameter of the bar is not to exceed 29mm or be less than 28mm.
- 4.3.2.4 Weight of the bar and collars are to be 25kg.
- 4.3.2.5 Diameter of the sleeve not to exceed 52mm or be less than 50mm.
- 4.3.2.6 There shall be a diameter machined marking or the bar taped so as to measure 81cm between marking tape.

**IPF recognized powerlifting bar**

**Guideline of knurling distances**

Measurements in mm (knurling distances inside the collar sleeves)



- 4.3.2.7 An athlete may have the option of using a 15kg bar for the bench press only. This bar may be used up to the point that the 20kg bar can be used by the athlete. The bar will have the following characteristics and measurements:

- 4.3.2.7.1 Weight: 15kg
- 4.3.2.7.2 Length: 201cm
- 4.3.2.7.3 Outer Ends (sleeves): 5cm diameter/32cm long and must rotate
- 4.3.2.7.4 Grip section: 2.5cm diameter/131cm long
- 4.3.2.7.5 Two (knurled) grip sections spaced 42cm apart with non-knurled 0.5cm strip, 19.5cm from inner sleeves. Clip collars can be used for 15kg bar.

- 4.3.2.8 Discs shall conform as follows:

- 4.3.2.8.1 All discs used in competition must weigh within 0.25 percent or 10 grams of their face value.



Face Value in Kilos	Maximum	Minimum
25.0	25.0625	24.9375
20.0	20.05	19.95
15.0	15.0375	14.9625
10.0	10.025	9.975
5.0	5.0125	4.9875
2.5	2.51	2.49
1.25	1.26	1.24
.5	.51	.49
.25	.26	.24

- 4.3.2.8.2 The hole size in the middle of the disc must not exceed 53mm or be less than 52mm.
- 4.3.2.8.3 Discs must be within the following range: 1.25kg, 2.5kg, 5kg, 10kg, 15kg, 20kg and 25kg.
- 4.3.2.8.4 For record purposes, lighter discs may be used to achieve a weight of at least 0.5kg more than the existing record.
- 4.3.2.8.5 Discs weighing 20kg and over must not exceed 6cm in thickness. Discs weighing 15kg and under must not exceed 3cm in thickness. Rubber discs do not have to conform to the stated thickness.
- 4.3.2.8.6 Discs must conform to the following color code: 10kg and under-any color, 15kg-yellow, 20kg-blue, 25kg-red.
- 4.3.2.8.7 All discs must be clearly marked with their weight and loaded in the sequence of heavier discs innermost with the smaller discs in descending weight arranged so that the referees can read the weight on each disc.
- 4.3.2.8.8 The first and heaviest discs loaded on the bar must be loaded face in; with the rest of the discs loaded face out.
- 4.3.2.8.9 The diameter of the largest discs shall not be more than 45cm.
- 4.3.2.8.10 Rubber or rubber covered discs are acceptable provided there is a minimum of 10cm from the outside of the collars to the end of the bar, for spotter grip outside of the discs.

**4.4 COLLARS**

- 4.4.1 Shall always be used.
- 4.4.2 Must weight 2.5kg each.

**4.5 SQUAT RACKS**

- 4.5.1 Only squat racks from Commercial Manufacturers officially registered and approved by the Technical Committee shall be permitted for use in International Powerlifting Championships.
- 4.5.2 The squat racks shall be designed to adjust from a minimum height of 1.00m in the lowest position to extend to a height of at least 1.70m in 5cm increments.
- 4.5.3 All hydraulic racks must be capable of being secured at the required height by means of pins.



#### 4.6 BENCH

4.6.1 Only bench racks and benches from Commercial Manufacturers officially registered and approved by the Technical Committee shall be permitted for use in International Powerlifting Championships.

4.6.1.1 bench shall conform to the following dimensions:

4.6.1.2 Length: not less than 1.22m and shall be flat and level.

4.6.1.3 Width: not less than 29cm and not exceeding 32cm.

4.6.1.4 Height: not less than 42cm and not exceeding 45cm measured from the floor to the top of the padded surface of the bench without it being depressed or compacted. The height of the uprights, which must be adjustable, shall be a minimum of 75cm to a maximum of 110cm measured from the floor to the bar rest position.

4.6.1.5 Minimum width between insides of bar rests shall be 1.10m.

4.6.1.6 The head of the bench shall extend 22cm beyond the center of the uprights with a tolerance of 5cm either way.

4.6.1.7 Attached safety stands must be used in all events.

4.6.1.8 Minimum height of Safety Rack shall be 36cm, having 10 holes in increments of 2.5cm and 40cm in length

4.6.1.9 Disabled Flat Level Bench

4.6.1.9.1 Length: 2.1m overall

4.6.1.9.2 Head end width: 30.5cm

4.6.1.9.3 Height: 45-50cm

4.6.1.9.4 Main body width: 61cm

#### 4.7 CLOCKS

4.7.1 Timing clocks visible to all (venue, platform, warm-up area) must be used which operate continuously up to a minimum of twenty minutes and display elapsed time. Additionally, a clock displaying time left in which to enter the next attempts should also be made visible to the coach or lifter.

#### 4.8 LIGHTS

4.8.1 A system of lights shall be provided whereby the referees make known their decisions. A system of lights similar to those used in weightlifting may be used, whereby when a referee detects an infraction he activates his control. If a majority activates their control a buzzer sounds and the lifter knows that his lift has failed. He is not then required to finish the attempt. Each referee will control a white and red light. These two colors represent a "good lift" and "no lift", respectively. The lights shall be arranged horizontally to correspond with the positions of the three referees. They must be wired in such a way that they light up together and not separately when activated by the three referees. For emergency purposes, i.e. a breakdown in the electrical system, the referees will be provided with small white or red flags or paddles with which to make known their decisions on the Chief Referee's audible command "flags".





**4.9 FAILURE CARDS/PADDLES**

4.9.1 After the lights have been activated and appeared, the referee(s) will raise a card or paddle or activate a light system to make known the reason(s) why the lift has been failed.

**Referees numbered card system - reason for failure.**

Color of the cards:  
Failure no. 1 = red card  
Failure no. 2 = blue card  
Failure no. 3 = yellow card



<b>SQUAT</b>	<b>BENCH PRESS</b>	<b>DEADLIFT</b>
<p><b>1. (red)</b> Failure to bend the knees and lower the body until the top surface of the legs at the hip joint is lower than the top of the knees.</p>	<p><b>1. (red)</b> Bar is not lowered to chest or abdominal area i.e. not reaching the chest or abdominal area, or is touching the belt.</p>	<p><b>1. (red)</b> Failure to lock the knees straight at the completion of the lift.</p> <p>Failure to stand erect with the shoulders back.</p>
<p><b>2. (blue)</b> Failure to assume an upright position with the knees locked at the commencement and at the completion of the lift.</p> <p>Double bouncing or more than one recovery attempt at the bottom of the lift or any downward movement during the ascent.</p>	<p><b>2. (blue)</b> Any downward movement of the whole of the bar in the course of being pressed out.</p> <p>Failure to press the bar to straight arm length, elbows locked at the completion of the lift.</p>	<p><b>2. (blue)</b> Any downward movement of the bar before it reaches the final position. If the bar settles as the shoulders come back this should not be reason to disqualify the lift.</p> <p>Supporting the bar on the thighs during the performance of the lift. If the bar edges up the thighs but is not supported, this is not reason for disqualification.</p>



<p><b>3. (yellow)</b> Stepping backward or forward or moving the feet laterally. Rocking the feet between the ball and heel is permitted.</p> <p>Failure to observe the Chief Referees signals at the commencement or completion of the lift.</p> <p>Contact with bar or lifter by the spotters/loaders between the Chief Referee’s signals, in order to make the lift easier.</p> <p>Contact of elbows or upper arms with the legs, which has supported and been of aid to the lifter. Slight contact that is of no aid may be ignored.</p> <p>Any dropping or dumping of the bar after completion of the lift.</p> <p>Failure to comply with any of the requirements contained in the general description of the lift, which precedes this list of disqualification.</p>	<p><b>3. (yellow)</b> Heaving, or sinking the bar after it has been motionless on the chest or abdominal area, in such a way as to aid the lifter.</p> <p>Failure to observe the Chief Referees signals at the commencement, during or completion of the lift.</p> <p>Any change in the elected lifting position during the lift proper, i.e. any raising movement of the head, shoulders or buttocks from their original points of contact with the bench, or lateral movement of the hands on the bar.</p> <p>Contact with the bar or the lifter by the spotters/loaders between the Chief Referees signals, in order to make the lift easier.</p> <p>Any contact of the lifters feet with the bench or its supports.</p> <p>Deliberate contact between the bar and the bar rest supports during the lift in order to make the lift easier.</p> <p>Failure to comply with any of the requirements contained in the general description of the lift, which precedes this list of disqualification.</p>	<p><b>3. (yellow)</b> Lowering the bar before receiving the Chief Referee’s signal.</p> <p>Allowing the bar to return to the platform without maintaining control with both hands, i.e. releasing the bar from the palms of the hand.</p> <p>Stepping backward or forward or moving the feet laterally. Rocking the feet between the ball and heel is permitted. Foot movement after the command “Down” will not be cause for failure. Failure to comply with any of the requirements contained in the general description of the lift, which precedes this list of disqualification</p>
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**4.10 SCOREBOARD**

4.10.1 A proper detailed scoreboard visual to the spectators, officials, and all concerned with the progress of the competition must be provided. The lifters names should be arranged by lot numbers for each session.

<b>Championships Scoreboard</b>																
<b>Group:</b>				<b>SQUAT</b>			<b>BENCH PRESS</b>					<b>DEADLIFT</b>				
LOT	NAME	NAT	BD/ WT	RD1	RD2	RD3	RD1	RD2	RD3	SUB TOT	RD1	RD2	RD3	TOT	PLACE	
1																
2																
3																
14																

**4.11 COSTUME AND PERSONAL EQUIPMENT**

- 4.11.1 Special Olympics Powerlifting will only include Classic or Raw competition with both conventional and Unified Powerlifting divisions.
- 4.11.2 The non-supportive lifting suit must conform to the following specifications:
- 4.11.3 The suit shall be one-piece and form fitting without any looseness when worn.
- 4.11.4 The suit must be constructed entirely of fabric or synthetic textile material, such that no support is given to the lifter by the suit in the execution of any lift.
- 4.11.5 The suit’s material shall be of a single thickness, other than a second thickness of material of up to 12cm x 24cm allowed in the area of the crotch.
- 4.11.6 There must be legs to the suit, extending a minimum of 3cm and a maximum of 25cm, from the top of the crotch down the inside of the leg, as measured when worn by the lifter in a standing position.
- 4.11.7 The suit may bear the logos or emblems:
  - 4.11.7.1 Of the manufacturer of the suit.
  - 4.11.7.2 Of the lifter’s nation
  - 4.11.7.3 Of the lifter’s name.
  - 4.11.7.4 As per rule of “Sponsors Logos” for Special Olympics.
    - 4.11.7.4.1 Special Olympics World and Regional Games powerlifting competitions, all competitors must wear a lifting suit which conforms to the above stated specifications, the only exception being the full length aerobic suit worn in the bench press by athletes with physical disabilities.



4.11.8 Muslim women shall be allowed to wear a tight fit, non-supportive, full body suit that covers the legs and arms.

#### 4.12 T-SHIRT

4.12.1 A t-shirt must be worn under the lifting suit by all lifters in the Squat and Bench Press and the Deadlift.

4.12.2 The t-shirt must conform to the following specifications:

4.12.2.1 The shirt must be constructed entirely of fabric or a synthetic textile and shall not consist, in whole or part, of any rubberized or similar stretch material, nor have any reinforced seams or pockets, buttons, zippers, other than a round neck collar.

4.12.2.2 The t-shirt must have sleeves. Those sleeves must terminate below the lifters' deltoid and must not extend onto or below the lifter's elbow. The sleeves may not be pushed or rolled up onto the deltoid when the lifter is competing.

4.12.2.3 The t-shirt may be plain, i.e. of a single color.

#### 4.13 BRIEFS

4.13.1 A standard commercial "athletic supporter" or standard commercial brief of any mixture of cotton, nylon, or polyester shall be worn under the lifting suit.

4.13.2 Women may also wear a commercial or sports bra.

4.13.3 Swimming trunks or any garment consisting of rubberized or similar stretch material except in the waistband, shall not be worn under the lifting suit.

4.13.4 Any supportive undergarment is not legal for use in IPF competition.

#### 4.14 SOCKS

4.14.1 Socks may be worn.

4.14.1.1 They may be of any color or colors and may have manufacturer's logos.

4.14.1.2 They shall not be of such length on the leg that they come into contact with the knee wraps or knee cap supporter.

4.14.1.3 Full length leg stockings, tights or hose are strictly forbidden.

4.14.1.4 Shin length socks must be worn to cover and protect the shins while performing the deadlift.

#### 4.15 BELT

4.15.1 Competitors may wear a belt. If worn, it shall be on the outside of the lifting suit.

4.15.2 Materials and construction:

4.15.2.1 The main body shall be made of leather, vinyl or other similar non-stretch material in one or more laminations which may be glued and/or stitched together.

4.15.2.2 It shall not have additional padding, bracing or supports of any material either on the surface or concealed within the laminations of the belt.

4.15.2.3 The buckle shall be attached at one end of the belt by means of studs and/or stitching.

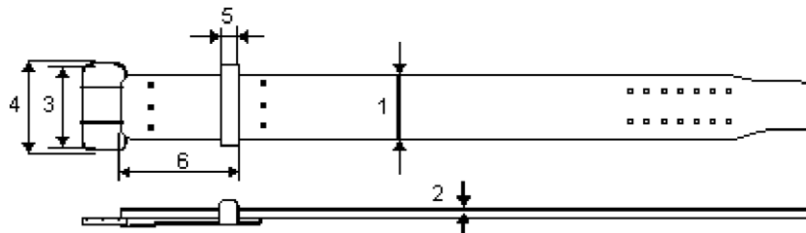


- 4.15.2.4 The belt may have a buckle with one or two prongs or “quick release” type (“quick release” referring to lever).
- 4.15.2.5 A tongue loop shall be attached close to the buckle by means of studs or stitching.
- 4.15.2.6 The belt may be plain, i.e. of single color, or two or more colors and with no logos, or may bear the logo or emblem.

**4.15.3 Dimensions**

- 4.15.3.1 Width of belt: 10cm maximum
- 4.15.3.2 Thickness of belt: 13mm maximum along the main length
- 4.15.3.3 Inside width of buckle: 11cm maximum
- 4.15.3.4 Outside width of buckle: 13cm maximum
- 4.15.3.5 Tongue loop width: 5cm maximum
- 4.15.3.6 Distance between end of belt and far end of tongue loop: 25cm maximum

Correct Points of Measurement:



**4.16 SHOES OR BOOTS**

- 4.16.1 Shoes or boots shall be worn.
  - 4.16.1.1 Shoes shall be taken to include only sports shoes/sports boots; Weightlifting/Powerlifting boots or Deadlift slippers. The above is referring to indoor sports, e.g. wrestling/basketball. Hiking boots do not fall into this category.
  - 4.16.1.2 No part of the underside shall be higher than 5cm.
  - 4.16.1.3 The underside must be flat, i.e. no projections, irregularities or a doctoring from the standard design.
  - 4.16.1.4 Loose inner soles that are not part of the manufactured shoe shall be limited to one centimeter thickness.
  - 4.16.1.5 Socks with a rubber outside sole lining is not allowed in disciplines - Squat/Bench Press/Deadlift.

**4.17 KNEE SLEEVES**

- 4.17.1 Sleeves, being cylinders of neoprene, may be worn only on the knees by the lifter in the performance of any lift in the competition; sleeves cannot be worn or used on any part of the body other than the knees.



- 4.17.2 Must meet all the specifications of the IPF Technical Rules; knee sleeves which breach any IPF Technical Rule shall not be permitted for use in competitions.
- 4.17.3 Knee sleeves must conform to the following specifications:
- 4.17.3.1 The sleeves must be constructed entirely of a single ply of neoprene, or predominantly of a single layer of fabric over the neoprene. There may be stitched seams of the fabric and/or of the fabric onto the neoprene. The entire construction of the sleeves may not be such as to provide any appreciable support or rebound to the lifter's knees.
  - 4.17.3.2 Knee sleeves shall be of a maximum thickness of 7mm and a maximum length of 30cm.
  - 4.17.3.3 Knee sleeves shall not have any additional strapping, Velcro, drawstrings, padding or similar supportive devices in or on them.
  - 4.17.3.4 When worn by the lifter in competition, knee sleeves must not be in contact with the lifter's suit or socks and must be centered over the knee joint.
  - 4.17.3.5 The Technical Controller shall reject any knee sleeves that have been put on the lifter using the assistance of any method such as the use of plastic slidings, the use of lubricants, and so on, or with the assistance of any other person other than that which is typically required by the athlete for assistance with wrist wraps or with dressing on a daily basis (such as assistance regularly needed with putting on personal items such as shoes, socks, etc...).
  - 4.17.3.6 A female lifter is not allowed to use knee wraps or knee sleeves over a full body suit in Equipped or Classic competitions

#### 4.18 WRAPS

- 4.18.1 Non-supportive wraps: Wraps made of medical crepe or bandage and sweatbands do not require Technical Committee approval.
- 4.18.2 Wrists
- 4.18.2.1 Wrist wraps shall not exceed 1m in length and 8cm in width. Any sleeves and Velcro patches/tabs for securing must be incorporated within the one meter length. A loop may be attached as an aid to securing. The loop shall not be over the thumb or fingers during the actual lift.
  - 4.18.2.2 Standard commercial sweat bands may be worn, not exceeding 12cm in width. A combination of wrist wraps and sweat bands is not allowed.
  - 4.18.2.3 A wrist covering shall not extend beyond 10cm above and 2cm below the center of the wrist joint and shall not exceed a covering width of 12cm.
  - 4.18.2.4 Female Muslim lifter may wear a Hijab (head scarf) while lifting.

#### 4.19 MEDICAL TAPE

- 4.19.1 Two layers of medical tape may be worn around the thumbs. Medical tape, or it's like, may not be worn anywhere else on the body without official permission of the Jury, or Chief Referee. Medical tape may not be used as aids to the lifter in holding the bar.
- 4.19.2 Contingent upon prior approval by the Jury, Official Doctor, Paramedic, or Paramedical personnel on duty, medical tape may be applied to bodily injuries in a fashion that would not grant the lifter an undue advantage.



4.19.3 At all competitions where a jury may not be present and no medical personnel are on duty. The Chief Referee shall have jurisdiction over the use of medical tape.

#### **4.20 INSPECTION OF PERSONAL EQUIPMENT**

- 4.20.1 The inspections of personal equipment for each and every lifter in the competition may take place at any time (times may be announced at the Technical Meeting) throughout the meet prior to within twenty minutes of the start for their particular bodyweight category.
- 4.20.2 A minimum of two (2) referees shall be appointed to fulfill this duty. All items shall be examined and approved before being officially stamped or marked.
- 4.20.3 Wraps over permitted length shall be rejected but may be cut to the correct length and resubmitted.
- 4.20.4 Any item considered unclean or torn shall be rejected.
- 4.20.5 The signed inspection sheet shall be handed to the president of the Jury at the end of the inspections period.
- 4.20.6 If after the inspections a lifter appears on the platform wearing or using any illegal item, other than that which may have inadvertently been passed by the referees, the lifter shall immediately be disqualified from the competition.
- 4.20.7 All items mentioned previously under personal equipment shall be inspected.
- 4.20.8 Hats are strictly forbidden to be worn on the platform during lifting. Items such as watches, costume jewelry, mouthpieces, eye wear and feminine hygiene articles need not be inspected.
- 4.20.9 Before any attempt, the lifter will be inspected by the Technical Controller. If the lifter is found to be wearing or using any illegal item, other than that may have inadvertently been passed by the referees, the lifter shall be disqualified from the competition.

#### **4.21 MODIFICATION**

- 4.21.1 Athletes with physical disabilities (e.g. wheelchair, cerebral palsy, amputees), may wear a two-piece outfit with both upper and lower pieces being form fitting; either snug-fitting track trousers or snug-fitting shorts may be worn. A full-length aerobic suit may be worn while performing the bench press. Lifting with a prosthesis is allowed and orthosis shoes will be allowed.

#### **4.22 GENERAL**

- 4.22.1 The use of oil, grease or other lubricants on the body, or personal equipment is strictly forbidden.
- 4.22.2 Baby powder, resin, talc or magnesium carbonates are the only substances that may be added to the body and attire. Not the wraps.
- 4.22.3 The use of any form of adhesive on the underside of footwear is strictly forbidden. This applies to any built-in adhesive, e.g. glass paper, emery cloth, etc. And to include resin and magnesium carbonate. A spray of water is acceptable.
- 4.22.4 No foreign substances may be applied to the powerlifting equipment. This takes into account all substances other than that which may be used periodically as a sterile agent in the cleaning of the bar, bench or platform.
- 4.22.5 Light protective guards between sock and shin may be worn.



## **5. POWERLIFTS AND RULES OF PERFORMANCE**

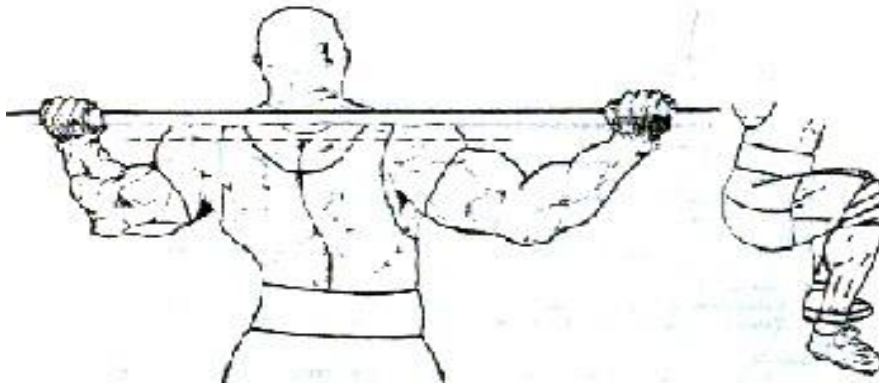
### **5.1 SQUAT**

- 5.1.1 The lifter shall face the front of the platform. The bar shall be held horizontally across the shoulders, hands and fingers gripping the bar. The hands may be positioned anywhere on the bar inside or in contact with the inner collars.
  - 5.1.2 After removing the bar from the racks, (the lifter may be aided in removal of the bar from the racks by the spotters/loaders) the lifter must move backwards to establish the starting position. When the lifter is motionless, erect (slight deviation is allowable) with knees locked, the Chief Referee will give the signal to begin the lift. The signal shall consist of a downward movement of the arm and the audible command "squat". Before receiving the signal to "squat" the lifter may make any position adjustments within the rules, without penalty. For reasons of safety the lifter will be requested to "replace" the bar, together with a backward movement of the arm, if after a period of five (5) seconds he/she is not in the correct position to begin the lift. The Chief Referee will then convey the reason why the signal was not given.
  - 5.1.3 Upon receiving the Chief Referee's signal, the lifter must bend the knees and lower the body until the top surface of the legs at the hip joint is lower than the top of the knees. Only one decent attempt is allowed. The attempt is deemed to have commenced when the lifters knees have locked.
  - 5.1.4 The lifter must recover at will to an upright position with the knees locked. Double bouncing at the bottom of the squat attempt or any downward movement, is not permitted. When the lifter is motionless (in apparent final position) the Chief Referee will give the signal to rack the bar.
  - 5.1.5 The signal to rack the bar will consist of a backward motion of the arm and the audible command "rack". The lifter must then return the bar to the racks. Foot movement after the rack signal will not be cause for failure. For reasons of safety, the lifter may request the aid of the spotter/loaders in returning the bar to, and placing it in the racks. The lifter must stay with the bar during this process.
  - 5.1.6 Not more than five (5) and not less than two (2) spotters/loaders shall be on the platform at any time. The referees may decide the number of spotters/loaders required on the platform at any time two (2), three (3), four (4) or five (5).
- 5.2 Causes for disqualification of a Squat:
- 5.2.1 Failure to observe the Chief Referee's signals at the commencement or completion of a lift.
  - 5.2.2 Double bouncing at the bottom of the lift, or any downward movement during the ascent.
  - 5.2.3 Failure to assume an upright position with the knees locked at the commencement or completion of the lift.
  - 5.2.4 Stepping backward or forward or moving feet laterally. Rocking the feet between the ball and heel is permitted.
  - 5.2.5 Failure to bend the knees and lower the body until the top surface of the legs at the hip joint is lower than the top of the knees, as in diagram below.
  - 5.2.6 Contact with the bar or the lifter by the spotters/loaders between the Chief Referee's signals in order to make the lift easier.





- 5.2.7 Contact of the elbows or upper arms with the legs. Slight contact is permitted if there is no supporting that might aid the lifter.
- 5.2.8 Any dropping or dumping of the bar after completion of the lift.
- 5.2.9 Failure to comply with any of the items outlined under Rules of Performance for the Squat.
- 5.3 **An athlete with Down syndrome who has been diagnosed with Atlanto-axial Instability may not participate in the squat lift in powerlifting. For additional information and the procedure for waiver of this restriction, please refer to *General Rules Article 2, Section 2.02G*.**
- 5.4 The diagrams below indicate the typical bar position, but not obligatory and required depth in the squat:



- 5.5 Bench Press
  - 5.5.1 The bench press shall be placed on the platform with the head facing the front or angled up to 45 degrees.
  - 5.5.2 The lifter must lie on his/her back with head, shoulders and buttocks in contact with the bench surface. The feet must be flat on the floor (as flat as the shape of the shoe will allow). His/her hands and fingers must grip the bar positioned in the rack stands with a thumbs around grip. This position shall be maintained throughout the lift. Foot movement is permissible but must remain flat on the platform. The hair must not hide the back of the head when lying down on the bench. The Jury or Referees may require the lifter to affix his/her hair accordingly.
  - 5.5.3 To achieve firm footing the lifter may use flat surfaced plates, or blocks not exceeding 30cm in total height and a minimum dimension of 60cm x 40cm, to build up the surface of the platform. Blocks in the range of 5cm, 10cm, 20cm and 30cm, should be made available for foot placement at all international competitions.
  - 5.5.4 Not more than five (5) and not less than two (2) spotters/loaders shall be on the platform at any time. After correctly positioning his/herself, the lifter may enlist the help of the spotters/loaders in removing the bar from the racks. The lift off, if assisted, by the spotters/loaders must be at arms' length.
  - 5.5.5 The spacing of the hands shall not exceed 81cm measured between the forefingers (both forefingers must be within the 81cm marks and the whole of the forefingers

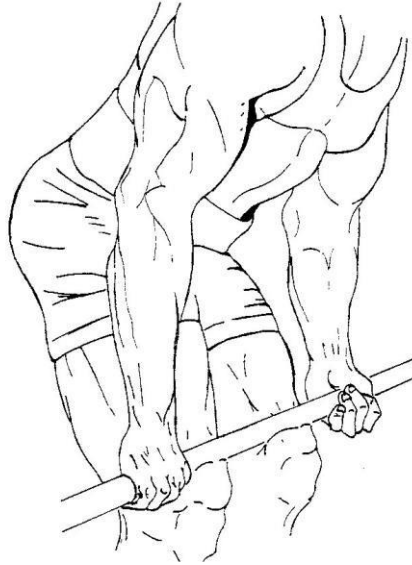


must be in contact with the 81cm marks if maximum grip is used). The use of the reverse grip is forbidden.

- 5.5.6 After removing the bar from the racks, with or without help of the spotters/loaders, the lifter shall wait with straight arms, elbows locked, for the Chief Referee's signal. The signal shall be given as soon as the lifter is motionless and the bar properly positioned. For reasons of safety, the lifter will be requested to "replace" the bar, together with a backward movement of the arm, if after a period of five (5) seconds, he is not in the correct position to begin the lift. The Chief Referee will convey the reason of why the signal was not given.
- 5.5.7 The signal to begin the attempt shall consist of a downward movement of the arm together with the audible command "start".
- 5.5.8 After receiving the signal, the lifter must lower the bar to the chest or abdominal area (the bar shall not touch the belt), hold it motionless, after which the Chief Referee will signal the audible command "press". The lifter must then return the bar to straight arms' length, elbows locked. When held motionless in this position, the audible command "rack" shall be given together with a backward motion of the arm. If the bar is lowered to the belt or does not touch the chest or abdominal area, the Chief Referee's command is "rack".
- 5.5.9 Lifters with physical disabilities shall be given the opportunity to use either the standard or the special bench for disabled lifters. The hands must grip the bar with the thumbs around the grip, thus locking the safely in the hands. The use of the reverse grip is forbidden. Lifters with physical disabilities may be strapped to the bench from the ankles to the hips using a strapping belt not to exceed 10cm in width.
- 5.5.10 Rules for the disabled competing in IPF single lift Bench Press Championships.
  - 5.5.10.1 Bench press championships shall be organized without a special division for disabled lifters, e.g. blind, sight impaired, mobility impaired. They may be assisted to, and from, the bench. Assisted to mean "with the help of the coach and/or with use of crutches, sticks/canes, or wheelchair". The rules of competition apply equally to that of the able bodied. For lifters who have an amputated lower limb, a prosthetic device, shall be considered the same as the natural limb. The lifter shall be weighed in without the device, with compensatory weight added according to the established fraction chart. Refer to WEIGHING-IN item 5. For lifters with dysfunctional lower limbs that require leg braces or similar devices for walking, the device shall be considered as part of the natural limb and the lifter shall be weighed-in wearing the device.
- 5.6 Causes for Disqualification of a Bench Press:
  - 5.6.1 Failure to observe the Chief Referee's signals at the commencement, during or completion of the lift.
  - 5.6.2 Any change in the elected lifting position during the proper lift, i.e. any raising movement of the head, shoulders, or buttocks from the bench, or lateral movement of hands on the bar.
  - 5.6.3 Heaving, or sinking the bar into the chest or abdominal area after it is motionless in such a way as to make the lift easier.



- 5.6.4 Any downward movement of the whole bar in the course of being pressed out.
- 5.6.5 Bar is not lowered to chest or abdominal area, i.e. not reaching the chest or abdominal area, or the bar is touching the belt.
- 5.6.6 Failure to press the bar to straight arms' length, elbows locked, at the completion of the lift.
- 5.6.7 Contact with the bar or the lifter by the spotters/loaders between the Chief Referee's signals, in order to make the lift easier.
- 5.6.8 Any contact of the lifter's feet with the bench or its supports.
- 5.6.9 Deliberate contact between the bar and the bar rests support.
- 5.6.10 Failure to comply with any of the items outlined under the Rules of Performance.
- 5.7 **DEADLIFT**
  - 5.7.1 The lifter shall face the front of the platform with the bar laid horizontally in front of the lifter's feet, gripped with an optional grip in both hands and lifted until the lifter is standing erect.
  - 5.7.2 On completion of the lift, the knees shall be locked in a straight position and the shoulders back.
  - 5.7.3 The Chief Referee's signal shall consist of a downward movement of the arm and audible command "down". The signal will not be given until the bar is held motionless and the lifter is in the apparent finished position.
  - 5.7.4 Any rising of the bar or any deliberate attempt to do so will count as an attempt. Once the attempt has begun no downward movement is allowed until the lifter reaches the erect position with the knees locked. If the bar settles as the shoulders come back (slightly downward on completion) this should not be the reason to disqualify the lift.
- 5.8 **Causes for Disqualification of a Deadlift:**
  - 5.8.1 Any downward movement of the bar before it reaches the final position.
  - 5.8.2 Failure to stand with the shoulders back.
  - 5.8.3 Failure to lock the knees straight at the completion of the lift.
  - 5.8.4 Supporting the bar on the thighs during the performance of the lift. If the bar edges up the thigh, but is not supported, this is not reason for disqualification. The lifter should benefit in all decisions of doubt made by the referee.
  - 5.8.5 Stepping backward or forward or moving the feet laterally. Rocking the feet between the ball and heel is permitted. Foot movement after the command "down" will not be cause for failure.
  - 5.8.6 Lowering the bar before receiving the Chief Referee's signal.
  - 5.8.7 Allowing the bar to return to the platform without maintaining control with both hands, i.e. releasing the bar from the palms of the hand.
  - 5.8.8 Failure to comply with any of the items outlined under Rules of Performance.
  - 5.8.9 The diagram below shows a description of supporting the bar on the thighs:



## 5.9 COMBINATION DIVISIONS

5.9.1 An athlete is required to compete in the bench press and dead lift combination, or the squat, bench press and deadlift combination to qualify for final score in the combination event.

5.9.2 An athlete's final score is calculated by adding together the maximum weight he/she successfully lifted in the bench press and dead lift, or the squat, bench press and dead lift. Three unsuccessful attempts in any of the lifts will automatically eliminate the lifter from a Combination Event.

## 6. ORDER OF COMPETITION

### 6.1 THE ROUND SYSTEM

6.1.1 At the weigh-in, the lifter or his coach must declare a starting weight for all three lifts. These must be entered on the appropriate first attempt card, signed by the lifter or his coach and retained by the official conducting the weigh-in. The speaker's card is deemed to be the appropriate first attempt card. The lifter will then be given eleven blank attempt cards for use during the competition. Three (3) for the squat, three (3) for the bench press, and five (5) for the deadlift. Each lift distinguished by using a different color card. Having made his/her first attempt at a lift, the lifter or his/her coach must decide upon the weight required for his/her second attempt. This weight must be filled in where indicated upon the card and submitted to the competition secretary or other appointed official before the one (1) minute time allowance has elapsed. The same procedure is to be used for the second and third attempts on all three lifts. Responsibility for submitting attempts within the time limit rests solely with the lifter or his/her coach. Under the round system, the need for numerous marshals is eliminated, the attempt card being handed directly to



the official. Examples of attempt cards are illustrated below. Remember that the box for first attempts on the cards in the lifter's possession is only to be used for the permitted first attempt change is required. Similarly, the fourth and fifth boxes on the deadlift card are only to be used for the two permitted changes on the third attempt deadlift, if required. In single bench press competitions, a card similar to that of the deadlift will be used.

<b>SPEAKER'S CARD</b>					
<b>Name, Surname:</b>			<b>Birth date:</b>		
<b>Nation:</b>		<b>Bodyweight:</b>		<b>Weight Class:</b>	
<b>IPF formula:</b>			<b>Lot number:</b>		
<b>Signature: lifter / coach</b>					
<b>Discipline</b>	<b>1<sup>st</sup> attempt</b>	<b>2<sup>nd</sup> attempt</b>	<b>3<sup>rd</sup> attempt</b>	<b>Best attempt</b>	
<b>Squat</b>					
<b>Bench Press</b>					
<b>Subtotal</b>					<b>Subtotal</b>
<b>Deadlift</b>					
<b>Grouping: 1, 2, 3, 4, 5</b>		<b>Placing:</b>		<b>Wilks points:</b>	
				<b>Total</b>	

6.2 ATTEMPT CARDS:



**SQUAT**

NAME: .....

Signed: .....

Chosen weight here.

**BENCH PRESS**

NAME: .....

1st      2nd      3<sup>rd</sup>

Signed: .....

Coach or Lifter.

**DEADLIFT**

NAME: .....

1st      2nd      3<sup>rd</sup>

Signed: .....

For changing 3<sup>rd</sup> attempt.

6.3 Where ten (10) or more lifters are competing in a session, groups may be formed consisting of approximately equal numbers of lifters. However, groups must be formed when fifteen (15) or more lifters are competing in the same session. A session can be composed of a single bodyweight category or any combination of bodyweight categories at the discretion of the organizer for purpose of presentation. In single lift Bench Press Championships groups of up to twenty (20) may be formed. Grouping



shall be determined by examining the lifter's best totals achieved at national or international level during the previous twelve months. The lifters with the lowest totals will form the first group to lift with progressively higher totals forming further groups as necessary. Where a lifter has not provided a total for the previous twelve months, then that lifter shall automatically be placed in the first group to lift.

- 6.4 Each lifter shall take his/her first attempt in the first round, his/her second attempt in the second round and his/her third attempt in the third round.
- 6.5 When a group consists of less than six (6) lifters, compensatory time allowances shall be added at the end of each round as follows: For five (5) lifters add one (1) minute; Four (4) lifters add two (2) minutes; Three (3) lifters add three (3) minutes; Three (3) minutes is the maximum allowance permitted at the end of a round. Should a lifter follow himself when the compensatory clock is in operation, three (3) minutes is the maximum allowance permitted. For compensatory time where groups are involved, unloading of the bar will take place at the end of the compensatory time, reloaded, then the one (1) minute to begin the attempt.
- 6.6 The bar must be loaded progressively during each round on the principle of a rising bar. At no time will the weight on the bar be lowered within a round, except for errors as described in item (i), and then only at the end of a round.
- 6.7 Lifting order within each round will be determined by the lifter's choice of weight for that round. In the event of two (2) lifters choosing the same weight, the lifter with the lowest lot number drawn at the weigh-in will lift first. The same applies to third round deadlift attempts, whereby the weight may be changed twice, subject to the bar not having already been loaded to the lifter's originally chosen weight and the lifter having been called to the bar by the speaker.

*Example: Lifter A with lot number 5 puts in 250.0kg.*

*Lifter B with lot number 2 puts in 252.5kg.*

*Lifter A fails with 250.0kg. Can Lifter B drop the weight to 250.0kg to win?*

*No, the order of lifting is still determined by the lot number.*

- 6.8 If unsuccessful with an attempt, the lifter does not follow him/herself, but must wait until the next round before he/she can attempt that weight, again.
- 6.9 If in a round an attempt is unsuccessful due to a wrongly loaded bar, spotter error or equipment failure, the lifter will be granted a further attempt at the correct weight. If the fault is a wrongly loaded bar and the attempt has not actually started, then the lifter shall be given the option of either continuing at that time or taking another attempt at the end of the round. In all other cases, the lifter shall take his/her extra attempt at the end of the round. If the lifter also happens to be the last lifter in the



- round, he/she shall be granted a three (3) minute rest prior to making his/her attempt, last but one in the round two (2) minutes, last but two (2) in the round one (1) minute. In these cases, where lifters are following themselves and given compensatory rest time, the bar will be loaded as soon as the new attempt is turned in. The compensatory time will then be added to the usual one (1) minute to begin the attempt. The clock will be started and the lifter will have that time to begin his/her attempt. Lifters following themselves will have four (4) minutes time placed on the clock, during which time the lifter can begin his/her attempt as soon as he/she is ready. Lifters last but one (1) in the round will be given three (3) minutes, last but two (2) in the round will be given two (2) minutes, all others will be given the usual one (1) minute to begin the attempt.
- 6.10 A lifter is permitted one (1) change of weight on the first attempt of each lift. The change of weight may be higher or lower than that originally submitted and the order of lifting in the first round will change accordingly. If he/she in the first group, this change may take place at any time up to within three (3) minutes before the start of the first round of that lift. The following groups are accorded a similar privilege up to within three (3) attempts from the end of the previous group's last round of that lift. Prior notice of these deadlines shall be announced by the speaker. If proper notice of these deadlines is not given, then an announcement authorizing such changes shall be made and a lifter may make a change within one (1) minute of such announcement.
- 6.11 A lifter must submit his/her second and third attempts within one (1) minute of completing his/her preceding attempt. The one (1) minute will begin from will begin from the time that the lights are activated. If no weight is submitted within the one (1) minute time allowance, the lifter will be granted a 2.5kg increase on his/her next attempt. Should the lifter have failed his/her previous attempt and not submitted a weight for a further attempt within the one (1) minute time allowance, then the bar will be loaded to the failed weight.
- 6.12 Weights submitted for second round attempts on all three (3) lifts cannot be changed. Similarly, third round attempts on the squat and bench press cannot be changed. Under this rule, once an attempt is turned in, it cannot be withdrawn. The bar shall be loaded to the turned in weight and the clock will be run.
- 6.13 In the third round of the deadlift, two (2) changes are permitted. The change of the weight may be higher or lower than the lifter's previously submitted third attempt. However, there are only permitted provided that the lifter has not been called to the bar already loaded to his/her previously submitted weight by the speaker.
- 6.14 In bench press single lift competition rules in general are the same as for three lift competitions. However, in the third round, two (2) weight changes are permitted and the rules as stated in (m) above for the deadlift apply equally here.
- 6.15 If a lifting session consists of a single group, i.e. up to a maximum of fourteen (14) lifters, an interval of twenty (20) minutes shall be allowed





between the lifts. This is to ensure adequate time for warm up and platform organization.

- 6.16 When two (2) or more groups take part in a session upon a single platform, lifting will be organized on a group repetition basis. No time interval will be allowed between rounds other than that necessary for arranging the platform. For example, if there are two groups taking part in a session, the first group will complete all three (3) rounds of the squat. They will be followed immediately by the second group who will complete their three (3) rounds of squat. The platform will then be set up for the bench press and the first group will complete their three (3) rounds of the bench press, immediately followed by the second group who will similarly complete their three (3) rounds of the bench press. The platform will then be set up for the deadlift and the first group will complete their three (3) rounds of the deadlift, immediately followed by the second group who will similarly complete their three (3) rounds of the deadlift. This system thus eliminates any time waste other than that necessary for arranging the platform between the lifts.
- 6.17 After the end of each discipline consisting of more than one group (squat, bench press) a time interval of 10 minutes is to be given between the disciplines.

**7. THE TECHNICAL COMMITTEE WITH THE COOPERATION AND ASSISTANCE OF THE ORGANIZER WILL APPOINT THE FOLLOWING OFFICIALS:**

- 7.1 Speaker/Announcer, a National or International Referee who is able to converse in English and that of the host nation.
- 7.2 Technical Secretary, an International Referee preferably able to converse and write in English and that of the host nation.
- 7.3 Time Keeper (a qualified referee).
- 7.4 Marshals/Expeditors.
- 7.5 Scorers.
- 7.6 Spotters/Loaders. Correct code of dress – Meet t-shirt or regular t-shirt uniform in color. Track suit trousers uniform in color. Trainers or sports shoes. Athletic shorts may be worn in hot weather on the ruling of the Jury.
- 7.7 Technical Controller (a qualified International Referee).
- 7.8 Additional officials may be appointed as required, e.g. doctors, paramedics, etc...
- 7.9 Responsibilities of the Officials are:
- 7.9.1 The speaker is responsible for the efficient running of the competition. He acts as Master of Ceremonies and arranges the attempts chosen by the lifters in an orderly fashion, dictated by weight and, if necessary, lot number. He announces the weight required for the next attempt and the name of the lifter. When the bar is loaded and the platform cleared for lifting, the Chief Referee will indicate the fact to the Speaker. When the Speaker announces that the bar is ready and calls this lifter to the platform, the clock will begin.

*To clarify – when the Speaker announces that the bar is “ready/loaded”, then the lifter is committed to the attempt. Attempts*



*announced by the speaker must be displayed upon the scoreboard erected in a prominent position, with the lifters names in order of lot number.*

- 7.9.2 The Technical Secretary is responsible for attending the technical meeting prior to the competition. In the absence of the Technical Committee or a member of that committee the Technical Secretary will compile the Jury and Referee schedules from the names of those referees declared available for duty throughout the competition. He will complete the necessary "Duty Referees and Jury Members" lists for the competition and inform the referees of categories to which they have been allocated. After the technical meeting, when final team nominations have been compiled, the Technical Secretary will initiate a score sheet, non-itemized equipment check sheet, rack height sheet and order or weigh-in sheet for each category in the competition, entering the names of all lifters nominated in that category. Lots may also be drawn at this stage to establish weigh-in and lifting order. He will also make out speaker competition cards for every lifter in the category. The above paperwork together with an adequate supply of lifter's attempt slips/cards will be placed in the appropriate envelope for each bodyweight category in the competition and handed to the Chief Referee for that category. The Technical Secretary will attend each weigh-in and advise the duty referees upon procedure and any matters that require attention. He should be an International Referee preferably from the host nation and able to deal with any problem that may arise due to language difficulties at the venue. It is the responsibility of the meet director to provide all necessary blank forms and paperwork to enable the Technical Secretary to carry out his work. A complete dossier on the job description together with all relative paperwork can be obtained from the Technical Committee free of charge to all Meet Directors.
- 7.9.3 The timekeeper is responsible for accurately recording the lapse between the announcement that the bar is ready and the lifter starting his/her attempt. He is also responsible for recording time allowances whenever required, e.g. after an attempt the lifter shall leave the platform within 30 seconds. Once the clock is running for a lifter, it can only be stopped by the completion of a time allowance, by the start of the lift, or at the discretion of the Chief Referee. Consequently, it is of great importance that the lifter or his/her coach check the height of the squat racks prior to being called, as once the bar is announced as being ready, the clock will be started. Any further adjustments to the racks:
- 7.9.4 Must be made within the lifter's one (1) minute allowance, unless the lifter has nominated his/her rack height and this has been incorrectly set by the spotters/loaders. It is therefore essential that the rack height sheet be signed or initialed by the lifter or coach. This is an official document, which should verify in any dispute. The lifter is allowed one (1) minute in which to start his/her attempt after the Speaker calls the lifter to the bar. If he/she does not start his/her within this time allowance, the timekeeper will call time and the Chief Referee shall give the audible command "rack" together with a backward movement of the



arm. The lift will be declared “no lift” and the attempt forfeited. When the lifter starts the lift within the prescribed time allowance, the clock will be stopped. The definition of the start of an attempt depends upon the particular lift being performed. In the squat and bench press, the start is to coincide with the Chief Referee’s commencement signal. Refer to “Referees” item 3. In the deadlift, the start is when the lifter makes a determined attempt to raise the bar.

7.9.5 Marshals/Expeditors are responsible for collecting the weight of required attempts from the lifters or their coaches and passing the information without delay to the Speaker, via the Marshal, of the weight required for his next attempt.

7.9.6 Scorers are responsible for accurately recording the progress of the competition, and on completion, ensuring that the three (3) referees sign the official score sheets, record certificates or any other document requiring signatures. Speaker to make announcement to this effect before the referees disappear.

7.9.7 Spotters/loaders are responsible for loading and unloading the bar, adjusting squat racks and benches as required. Cleaning the bar or platform at the request of the Chief Referee, and generally ensuring that the platform is well maintained and presents a neat and tidy appearance at all times. At no time shall there be less than two (2) or more than five (5) spotters/loaders on the platform. When the lifter prepares for his/her attempt, the spotters/loaders may assist him/her in removing the bar from the racks. They may also assist in replacing the bar after the attempt. However, they shall not touch the lifter or the bar during the actual attempt, i.e. during the period of time that elapses between the commencement and completion signals. The only exception to this rule being that if the lift is in jeopardy and likely to result in injury to the lifter, the spotters/loaders may, either at the request of the Chief Referee or the lifter him/herself, step in and relieve the lifter of the bar. If the lifter him/herself is deprived of an otherwise successful attempt by the error of a spotter/loader and through no fault of his/her own, he/she shall be awarded another attempt at the discretion of the Referees and Jury at the end of the round.

7.9.8 The Technical Controller will ensure that the lifter is that as announced and properly attired before mounting the platform. He/she must also attend the equipment control.

## **8. MISCELLANEOUS RULES (LOADING ERRORS, MISCONDUCT, APPEALS, etc...)**

8.1 During any competition taking place on a platform or stage, only the lifter and his/her coach, members of the Jury, officiating referees, spotters/loaders and the Technical Controller will be allowed around the platform or on the stage. During the execution of the lift, only the lifter, spotters/loaders and the referees are permitted to be present on the platform. Coaches shall remain within the designated coaching area as defined by the Jury or Technical Officer in charge. The coaching area must be made in such a way that allows the coach to place himself with a good view to the lifter with the possibility to give instructions and signals to the lifter regarding technical details (e.g. depth in



- squat). The coach area should be on a distance of no longer than 5m from the stage and it should be longer than the lifting stage that permits a walking area for the coach to see the lift from any side, back or side front angle. Dress code for coaches at International events shall be national team tracksuit plus team or IPF approved t-shirt, or sport shorts plus team or IPF approved t-shirt and the coach must adhere to this code failing which on the ruling of the Technical Controller or Jury it may result in the coach being excluded from the event warm up room and competition surrounds.
- 8.2 A lifter shall not wrap, adjust his/her costume or use ammonia within view of the public. The only exception to this rule being that he may adjust his belt.
  - 8.3 In IPF recognized competitions, the weight of the barbell must always be a multiple of 2.5kg, unless attempts are made on records, the progression must be at least 2.5kg between all attempts.
  - 8.4 The Chief Referee will be solely responsible for decisions taken in the case of loading errors or incorrect announcements by the Speaker. His decisions will be given to the speaker who will make the appropriate announcement. Examples of errors in loading:
    - 8.4.1 If the bar is loaded to a lighter weight than originally requested and the attempt is successful, the lifter may accept the successful attempt or elect to take the attempt, again, at the originally requested weight. In both the above cases, further attempts may only be taken at the end of the round in which the error occurred.
    - 8.4.2 If the bar is loaded to a heavier weight than originally requested and the attempt is successful, the lifter will be granted the attempt. However, the weight may be reduced again if required for other lifters. If the attempt is not successful, the lifter will be granted a further attempt at the end of the round in which the error occurred.
    - 8.4.3 If the loading is not the same on each end of the bar; or any change occurs to the bar or discs during the execution of the lift; or the platform is disarranged, if despite these factors, the lift is successful, the lifter may accept the attempt or elect to take the attempt again. If the successful attempt is not a multiple of 2.5kg, then the lower closest, multiple of 2.5kg will be recorded on the score sheet. If the attempt is unsuccessful, the lifter will be granted a further attempt. Further attempts may only be taken at the end of the round in which the error occurred.
    - 8.4.4 If the speaker makes a mistake by announcing a weight lighter or heavier than that requested by the lifter. The Chief Referee will make the same decisions as for errors in loading.
    - 8.4.5 If for any reason it is not possible for the lifter or his coach to remain in the vicinity of the platform in order to follow the progress of the competition and the lifter misses his attempt because the speaker omitted to announce him/her at the appropriate weight, then the weight will be reduced as necessary and the lifter allowed to take his/her attempt, but only at the end of the round.
  - 8.5 Three unsuccessful attempts in any lift will automatically eliminate the lifter from the overall competition. He/she may still compete for awards on individual lifts, if he/she makes bona fide attempts on each of the lifts, i.e. weights attempted must be within his reasonable capabilities. If this is questionable, the Jury will decide.



- 8.6 Other than initial removal of the bar from the racks, the lifter will not receive any help from the spotters/loaders in positioning him/herself for an attempt.
- 8.7 On the completion of an attempt, a lifter shall leave the platform within 30 seconds; failure to comply with this rule may result in disqualification of the attempt at the discretion of the referees. This rule was designed for lifters who may have received some injury during the course of the lift, or perhaps the less able bodied, e.g. the blind lifter.
- 8.8 If, during warm up or competition, a lifter suffers injury or in any other way exhibits signs of a condition which may unduly or significantly jeopardize the competitor's health and wellbeing, the official doctor has the right to examination. If the doctor considers it inadvisable for the lifter to continue, he may, in consultation with the Jury, insist upon the lifter retiring from the competition. The team manager or coach must officially be informed of such a decision. To avoid contamination, a solution of one-part household bleach to ten-parts water is recommended to clean blood to tissue from the bar or platform and that in the warm up area should "accidents" occur.
- 8.9 Any lifter or coach, who by reason of his/her upon or near the competition platform is likely to discredit the sport, shall be officially warned. If the misconduct continues, the Jury or Referees in the absence of the Jury, may disqualify the lifter or coach and order the lifter or coach to leave the venue. The team manager must be officially informed of both warning and disqualification.
- 8.10 The Jury and Referees may by a majority decision, immediately disqualify a lifter or official if they are of the opinion that any misconduct is serious enough to warrant immediate disqualification rather than an official warning. The team manager must be informed of the disqualification.
- 8.11 In International competition, all appeals against referee's decisions, complaints regarding the progress of the competition or against the behavior of any person or persons taking part in the competition must be made to the Jury. The Jury may require the appeal to be made in writing. The appeal or complaint must be lodged with the Chairman of the Jury by the team manager, coach or in his absence by the lifter. This must be done immediately following the action upon which the appeal or complaint is based. It will not be considered, unless these terms are met.
- 8.12 If deemed necessary, the Jury may temporarily suspend the progress of the competition and retire to consider its verdict. After due consideration, and upon reaching a unanimous verdict, the Jury will return and the Chairman will inform the complainant of its decision. The Jury's verdict will be considered final and there will be no right of appeal to any other body. Upon recommencement of the competition which has been suspended, the next lifter shall be given three (3) minutes in which to commence his lift. In the event of a complaint being made against a lifting member or official of an opposing team, the written complaint shall be accompanied by the cash sum of Euro 75 or its equivalent in any currency. Should the Jury, in its verdict, consider that the complaint is of a frivolous or mischievous nature, then the whole or portion of the sum may be retained and donated to the IPF at the discretion of the Jury.



**9. REFEREES**

- 9.1 The referees shall be three (3) in number, the Chief Referee or Center Referee and two (2) side referees. Their International Referee cards should be in date, and that of the Technical Controller, and placed on the Jury table
- 9.2 The Chief Referee is responsible for giving the necessary signals for all three lifts.
- 9.3 Signals required for the lifts are as follows:

<b>Lift</b>	<b>Commencement</b>	<b>Completion</b>
<b>Squat</b>	A visual signal consisting of a downward movement of the arm together with the audible command "squat"	A visual signal consisting of a backward movement of the arm together with the audible command "rack"
<b>Bench Press</b>	A visual signal consisting of a downward movement of the arm together with the audible command "start".  <b>During:</b> The audible command "Press" after motionless at the chest and the visible signal of an upward movement of the arm.	A visual signal consisting of a backward movement of the arm together with the audible command "rack"
<b>Deadlift</b>	No signal required	A visual signal consisting of a downward movement of the arm together with the audible command "down"
When a lifter fails to complete a squat or a bench press, the command is "rack".		

- 9.4 Once the bar has been replaced in the racks or on the platform at the completion of the lift, the referees will announce their decision by means of lights. White for a "good lift" and red for "no lift". The cards will then be raised to indicate the reason for the "no lift".
- 9.5 The three (3) referees may seat themselves in what they consider to be the best viewing positions around the platform in a range not farther than 4 meters for each of the three (3) lifts. However, the Chief Referee must always bear in mind the need to be visible to the lifter performing the squat or deadlift, and the side referees should always bear in mind the need to be visible to the Chief Referee, so that he can observe their raised arms.
- 9.6 Before the contest, the three (3) referees shall jointly ascertain that:



- 9.6.1 The platform and competition equipment comply in all respects with the rules. Bars and discs are checked for weight discrepancies and defective equipment discarded. A second bar and collars should be readied and put aside in case of damage to the original bar or collars.
- 9.6.2 The scales work correctly and are accurate (currently certified).
- 9.6.3 The lifters weigh-in within the limits of weight and time for their bodyweight category.
- 9.6.4 The lifter's personal equipment has been inspected to comply with the rules in all respects. It is the duty of the lifter to ensure that all items he wished to wear on the platform have passed the scrutiny of the examining referees. Lifters discovered wearing or using apparel that has not been checked in may be subject to penalty, e.g. disqualification of the last attempt.
- 9.7 During the contest the three (3) referees must jointly ascertain that:
  - 9.7.1 The weight of the loaded bar agrees with the weight announced by the speaker. Referees may be issued with loading charts for this purpose. It is their joint responsibility.
  - 9.7.2 On the platform the lifter's personal equipment complies with the rules. If any referee has reason to doubt a lifter's integrity in this respect he must after completion of the lift, inform the Chief Referee of his suspicions. The president of the Jury may then examine the lifter's personal equipment. If the lifter is found to be wearing or using any illegal item other than that which may have inadvertently been passed in error by the examining referees, the lifter shall be immediately disqualified from the competition. If wearing illegal item passed in error by the examining referees, and the lift in which the discovery was made is successful, the lift will be rejected and then the lifter will be granted a new attempt (having removed the illegal item) at the end of the round. Should a Technical Controller be in evidence, the lifter's attire will be scrutinized before he/she is allowed onto the platform.
- 9.8 Prior to the commencement of the Squat and Bench press, the side referees will raise their arms and keep them raised until the lifter is in the correct position to begin the lift. If there is a majority opinion among the referees that a fault exists, the Chief Referee will not signal to commence the lift. The lifter has the remainder of his/her unexpired time allowance in which to correct the position of the bar or his/her stance in order to receive the commencement signal. Once a lift has commenced, the side referees will not call attention to faults during the execution of the lift.
- 9.9 Referees shall abstain from commentary and not receive any document or verbal account concerning the progress of the competition. Therefore, it is essential that the lot number of each lifter accompanies his/her name on the scoreboard so that the referees can follow the order of lifting.
- 9.10 A referee shall not attempt to influence the decisions of the other referees.
- 9.11 The Chief Referee may consult with the side referees, the Jury or any other official as necessary, in order to expedite the competition.
- 9.12 At his discretion, the Chief Referee may order that the bar and/or platform be cleaned. If the lifter or coach request the bar and/or platform to be cleaned, the request must be made via the Chief Referee not the spotters/loaders. In the final round of the deadlift,



- the bar must be cleaned before every attempt, and in any of the other two (2) rounds, should the coach or lifter desire.
- 9.13 After the completion, the three (3) referees shall sign the official score sheets, record certificates or any other documents requiring a signature.
- 9.14 In International Competition, referees will be selected by the Technical Committee and must prove their competence at International or National Championships.
- 9.15 In International Competition, two (2) referees of the same nationality cannot be selected to adjudicate the same category in a contest of more than two (2) nations. If a category consists of more than one group, all groups should have the same referees. If a change of a referees is necessary, the change should be made between the disciplines, so that all the lifters have the same referees in the same discipline.
- 9.16 The selection of a referee to act as Chief Referee in one category does not preclude the selection as side referee in another category.
- 9.17 At World Championships, or any other championships where attempts may be made on world records, only IPF Category 1 or Category 2 referees adjudicate. Each nation may nominate a maximum of three (3) referees to serve at the World Championships, plus extra Category 1 referees for Jury duty, if there is an insufficient number. All nominated referees attending a championship, must be available for at least two (2) days.
- 9.18 Referees and members of the Jury will be uniformly dressed as follows:
- |                |  |
|----------------|--|
| Men, winter:   | Dark blue blazer with appropriate IPF badge on the left breast.<br>Grey trousers with white shirt and appropriate IPF tie.                     |
| Men, summer:   | Grey trousers with a white shirt and appropriate IPF tie.  |
| Women, winter: | Dark blue blazer with appropriate IPF badge the left breast.<br>Grey skirt or trousers and a white blouse or shirt, and appropriate scarf/tie. |
| Women, summer: | Grey skirt or trousers and a white blouse or shirt.  |

IPF badges and scarf/ties are red for Category 1 referees and blue for Category 2 referees. The Jury shall determine whether winter or summer dress will be worn. Shoes known as "trainers" do NOT compliment blazer and trousers!

Dress/Day wear black shoes and black socks, must be worn.

## **10. JURY AND TECHNICAL COMMITTEE**

### **10.1 JURY**

- 10.1.1 At World and Continental Championships, a Jury will be appointed to preside over each lifting session.
- 10.1.2 The Jury shall consist of three (3) or five (5) Category 1 referees. In the absence of the Technical Committee, the most senior member of the three (3) or five (5)





shall be designated the President of the Jury. The five (5) man jury can be installed only at the World Games or Men's and Women's Open Championships in Powerlifting.

- 10.1.3 The members of the Jury shall all be from different nations with the exception of the IPF President and the Chairman of the Technical Committee.
- 10.1.4 The function of the Jury is to ensure that the technical rules are correctly applied.
- 10.1.5 During the competition the Jury may, by a majority vote, replace any referee whose decisions in its opinion, prove him to be incompetent. The referee concerned, must have received a warning prior to any action of dismissal.
- 10.1.6 The impartiality of referees cannot be doubted, but a mistake in refereeing can be committed in good faith. In such a case, the referee shall be allowed to give his explanation for making the decision which is the subject of his warning.
- 10.1.7 If a protest is made to the Jury against a referee, then the referees may be informed of the protest. The Jury should not put unnecessary stress on the platform referees.
- 10.1.8 If a serious mistake occurs in the refereeing which is contrary to the technical rules, the Jury make take appropriate action to correct the mistake. They may at their discretion, grant the lifter a further attempt.
- 10.1.9 Only in extreme circumstances when there has been an obvious or blatant mistake in the refereeing will the Jury be in consultation with the referees, by unanimous jury vote, reverse the decision. Only 2 to 1 referees' decisions can be considered by the Jury.
- 10.1.10 The members of the Jury will be positioned to ensure an unimpeded view of the competition.
- 10.1.11 Before each competition, the President of the Jury must satisfy himself that the members of the Jury have a knowledge of their role and any new regulations that amend or supplement those contained in the current edition of the handbook.
- 10.1.12 If music accompanies the lifting, the Jury will determine the volume. The music will terminate when the lifter takes the weight of the bar in the squat and bench press or begins the pull in the deadlift.
- 10.1.13 The referees' cards will be signed at the completion of the weight class.

## **11. UNIFIED SPORTS®**

11.1 This division will be composed of Special Olympics athletes and their Unified partner. While there should be an attempt to match athlete and partner teams by weight and ability, this is not always possible or necessary when each partner and athlete are provided a coefficient from the IPF formula (<https://goodlift.info/public/gl-calc/gl-calc.html>). Athlete and partner competition and scoring will be based upon the following:

- 11.1.1 Each team includes a Special Olympics athlete and Special Olympics Unified partner.
- 11.1.2 Each athlete and partner compete against other athletes and partner teams.
- 11.1.3 Each athlete and partner are scored based upon combined weight lifted.
- 11.1.4 Example: Athlete (Team A) squats 150kgs, bench presses 100kgs and deadlifts 200kgs for a total of 450kgs. Partner (Team A) squats 175kgs, bench presses



125kgs and deadlifts 250kgs for a total of 550kgs. Their combined weight lifted total 1000kgs.

- 11.1.5 They are competing against an Athlete (Team B) who squats 185kgs, bench presses 105kgs and deadlifts 205kgs for a total of 495kgs. The athlete's partner (Team B) squats 165kgs, bench presses 110kgs and deadlifts 225kgs for a total of 530kgs. Their combined weight lifted total is 1025kgs.
- 11.2 In order to take away any advantage of bodyweight and athlete and partner might have, a formula (IPF coefficient) is applied to each of the athlete and partner's bodyweight to put them on a level playing field.
- 11.3 In the case above, athlete (Team A) weighs 60kgs and partner (Team A) weighs 95kgs. Athlete (Team B) weighs 70kgs and partner (Team B) weighs 110kgs. Each athlete and partner team places are determined based upon combine IPF coefficient, based upon their body weight times combined weight lifted.
- 11.4 Competitions may include or be exclusively two (2) lift meets (Bench Press and Deadlift). In this case, the same scoring process as outlined above would apply.
- 11.5 While most athlete and partner teams will be gender specific, mixed or coed teams may be included in a specific division, e.g. male athlete and female partner competing against other male athlete and female partner teams or female athlete and male partner team competing against other female athlete and male partner teams.
- 11.6 For IPF Unified Powerlifting competitions, the scoring process outlined above, would also apply. With the only requirement being the athlete and partner are IPF members.



**KILO CONVERSION TABLE**

To convert kilos to pounds, multiply kilos by 2.2046. Rules state that poundages shall be rounded off by reducing to the nearest quarter, i.e., 107.5 kilos multiplied by 2.2046 equals 236.99450. The poundage then becomes 236-3/4 rather than 237.

KILOS	POUNDS	KILOS	POUNDS	KILOS	POUNDS	KILOS	POUNDS
27.5	60.5	145	319.5	260	573	377.5	832
30	66	147.5	325	262.5	578.5	380	837.5
32.5	71.5	150	330.5	265	584	382.5	843-1/4
35	77	152.5	336	267.5	598.5	385	848-3/4
37.5	82.5	155	341.5	270	595	387.5	854-1/4
40	88	157.5	347	272.5	600-3/4	390	859-3/4
42.5	93.5	160	352.5	275	606-1/4	392.5	865-1/4
45	99	162.5	358	277.5	611-3/4	395	870-3/4
47.5	104.5	165	363-3/4	280	617-1/4	397.5	876-1/4
50	110	167.5	369-1/4	282.5	622-3/4	400	881-3/4
52.5	115.5	170	374-3/4	285	628-1/4	402.5	887-1/4
55	121-1/4	172.5	380-1/4	287.5	633-3/4	405	892-3/4
57.5	126-3/4	175	385-3/4	290	639-1/4	407.5	898-1/4
60	132-1/4	177.5	391-1/4	292.5	644-3/4	410	903-3/4
62.5	137-3/4	180	396-3/4	295	650-1/4	412.5	909-1/4
65	143-1/4	182.5	402-1/4	297.5	655-3/4	415	914-3/4
67.5	148-3/4	185	407-3/4	300	661-1/4	417.5	920-1/4
70	154-1/4	187.5	413-1/4	302.5	666-3/4	420	925-3/4
72.5	159-3/4	190	418-3/4	305	672-1/4	422.5	931-1/4
75	165-1/4	192.5	424-1/4	307.5	677-3/4	425	936-3/4
77.5	170-3/4	195	429-3/4	310	683-1/4	427.5	942-1/4
80	176-3/4	197.5	435-1/4	312.5	688-3/4	430	947-3/4
82.5	181-3/4	200	440-3/4	315	694-1/4	432.5	953-1/4
85	187-1/4	202.5	446-1/4	317.5	699-3/4	435	959
87.5	192-3/4	205	451-3/4	320	705-1/4	437.5	964.5
90	198-1/4	207.5	457-1/4	322.5	710-3/4	440	970
92.5	203-3/4	210	462-3/4	325	716-1/4	442.5	975.5
95	209-1/4	212.5	468-1/4	327.5	722	445	981
97.5	214-3/4	215	473-3/4	330	727.5	447.5	986.5
100	220-1/4	217.5	479.5	332.5	733	450	992
102.5	225-3/4	220	485	335	738.5	452.5	99705
105	231-1/4	222.5	490.5	337.5	744	455	1003
107.5	236-3/4	225	496	340	749.5	457.5	1008.5
110	242.5	227.5	501.5	342.5	755	460	1014
115	253.5	230	507	345	760.5	462.5	1019.5
117.5	259	232.5	512.5	347.5	766	465	1025
120	264.5	235	518.555	350	771.5	467.5	1030.5
122.5	270	237.5	523.5	352.5	777	470	1036
125	275.5	240	529	355	782.5	472.5	1041.5
127.5	281	242.5	534.5	357.5	788	475	1047
130	286.5	245	540	360	793.5	477.5	1052.5
132.5	292	247.5	545.5	362.5	799	480	1058
135	297.5	250	551	367.5	810	482.5	1063.5
137.5	303	252.5	556.5	370	815.5	485	1069
140	308.5	255	562	372.5	821	487.5	1074.5
142.5	314	257.5	567.5	375	826.5	490	1080-1/4

KILOS	POUNDS	KILOS	POUNDS	KILOS	POUNDS	KILOS	POUNDS
492.5	1085-3/4	622.5	1372-1/4	750	1653-1/4	877.5	1934-1/2
495	1091-1/4	625	1377-3/4	752.5	1658-3/4	880	1940
497.5	1096-3/4	627.5	1383-1/4	755	1664-1/4	882.5	1945-1/2
500	1102-1/4	630	1388-3/4	757.5	1669-3/4	885	1951
502.5	1107-3/4	632.5	1394-1/4	760	1675-1/4	887.5	1956-1/2
505	1113-1/4	635	1399-3/4	762.5	1681	890	1962
510	1124-1/4	637.5	1405-1/4	765	1686-1/2	892.5	1967-1/2
512.5	1129-3/4	640	1410-3/4	767.5	1692	895	1973
515	1135-1/4	642.5	1416-1/4	770	1697-1/2	897.5	1978-1/2
517.5	1140-3/4	645	1421-3/4	772.5	1703	900	1984
520	1146-1/4	647.5	1427-1/4	775	1708-1/2	902.5	1989-1/2
522.5	1151-3/4	650	1432-3/4	777.5	1714	905	1995
525	1157-1/4	652.5	1438-1/2	780	1719-1/2	907.5	2000-1/2
527.5	1162-3/4	655	1444	782.5	1725	910	2006
530	1168-1/4	657.5	1449-1/2	785	1730-1/2	912.5	2011-1/2
532.5	1173-3/4	660	1455	787.5	1736	915	2017
535	1179-1/4	662.5	1460-1/2	790	1741-42	917.5	2022-1/2
537.5	1184-3/4	665	1466	792.5	1747	920	2028
540	1190-1/4	667.5	1471-1/2	795	1752-1/2	922.5	2033-1/2
542.5	1195-1/4	670	1477	797.5	1758	925	2039-1/4
545	1201-1/2	672.5	1482-1/2	800	1763-1/2	927.5	2044-3/4
547.5	1207	675	1488	802.5	1769	930	2050-1/4
550	1212-1/2	677.5	1493-1/2	805	1774-1/2	932.5	2055-3/4
552.5	1218	680	1499	807.5	1780	935	2061-1/4
555	1223-1/2	682.5	1504-1/2	810	1785-1/2	937.5	2066-3/4
557.5	1229	685	1510	815	1791	940	2072-1/4
560	1234-1/2	687.5	1515-1/2	815	1796-1/2	942.5	2077-3/4
562.5	1240	690	1521	817.5	1802-1/4	945	2083-1/4
565	1245-1/2	692.5	1526-1/2	820	1807-3/4	947.5	2088-3/4
570	1256-1/2	695	1532	822.5	1813-1/4	950	2094-1/4
572.5	1262	697.5	1537-1/2	825	1818-3/4	952.5	2099-3/4
575	1267-1/2	700	1543	827.5	1824-1/4	955	2105-1/4
577.5	1273	702.5	1548-1/2	830	1829-3/4	957.5	2110-3/4
580	1278-1/2	705	1554	832.5	1835-1/4	960	2116-1/4
582.5	1284	710	1565-1/4	835	1840-3/4	962.5	2121-3/4
585	1289-1/2	712.5	1570-3/4	837.5	1846-1/4	965	2127-1/4
587.5	1295	715	1576-1/4	840	1851-3/4	967.5	2132-3/4
590	1300-1/2	717.5	1581-3/4	842.5	1857-1/4	970	2138-1/4
592.5	1306	720	1587-1/4	845	1862-3/4	972.5	2143-3/4
595	1311-1/2	722.5	1592-3/4	850	1873-3/4	975	2149-1/4
597.5	1317	725	1598-1/4	852.5	1879-1/4	977.5	2154-3/4
600	1322-3/4	727.5	1603-3/4	855	1884-3/4	980	2160-1/2
602.5	1328-1/4	730	1609-1/4	857.5	1890-1/4	982.5	2166
605	1333-3/4	732.5	1614-3/4	860	1895-3/4	985	2171-1/2
607.5	1339-1/4	735	1620-1/4	862.5	19.1-1/4	990	2182-1/2
610	1344-3/4	737.5	1625-3/4	865	1906-3/4	992.5	2188
612.5	1350-1/4	740	1631-1/4	867.5	1912-1/4	995	2193-1/2
615	1355-3/4	742.5	1636-3/4	870	1918	997.5	2199
617.5	1361-1/4	745	1642-1/4	872.5	1923-1/2	1000	2204-1/2
620	1366-3/4	747.5	1647-3/4	875	1929		