



SPRING BALANCERS







We have introduced several safety features into the new designed Spring Balancer which has made it user friendly and eliminating chances of Industrial accident. Large batch production has been introduced through new Pressure Dies which has made the product look better and has reduced the Delivery Time. Product is in use in over 85 countries with the largest automobile manufactures.

Features in Spring Balancer

- CLOSED BODY AND COVER: Prevents industrial accident by preventing ingress of fingers inside the assembly.
- BODY LINER: To prevent the wear of body by wire rope. Increases life of the balancer.
- VERTICAL AXIS SPRING ADJUSTMENT: This will facilitate adjustment of spring tension from ground level.
- CONTAINERISED SPRING ASSEMBLY: Concealed containers are easy in handling during maintenance and replacement of springs.
- WIRE ROPE REPLACEMENT WITHOUT DISMANTLING: A slot on balancer facilitates removal and installation of wire rope without disassembly of balancer. This facility is not available for long range balancer.
- PRESSURE DIE CASTING: Parts are manufactured through pressure die hence there is consistency in surface finish and total interchangeability of spares. Facilitates large batch production hence reduced delivery period.
- SAFETY LOCK PIN: Locks drum pulley in the event of spring failure and thus prevents the fall of costly equipment & injury to the operator from falling load.
- FORGED TOP HOOK: Permits 360 degree swivel of balancer.

SWF Series:

| Capacity | Model | Travel | Weight |
|---------------|-----------|--------|--------|
| kg | No. | meter | kg |
| 0.5 - 1.5 | SWF - 01 | 1.0 | 1.1 |
| 1.0 - 2.0 | SWF - 02 | 1.0 | 1.1 |
| 1.5 - 3.0 | SWF - 03 | 1.3 | 1.6 |
| 2.5 - 5.0 | SWF - 05 | 1.3 | 1.8 |
| 4.5 - 9.0 | SWF - 09 | 1.3 | 3.9 |
| 9.0 - 15.0 | SWF - 15 | 1.3 | 4.0 |
| 15.0 - 22.0 | SWF - 22 | 1.5 | 7.5 |
| 22.0 - 30.0 | SWF - 30 | 1.5 | 7.5 |
| 30.0 - 40.0 | SWF - 40 | 1.5 | 10.0 |
| 40.0 - 50.0 | SWF - 50 | 1.5 | 10.3 |
| 50.0 - 60.0 | SWF - 60 | 1.5 | 10.7 |
| 60.0 - 70.0 | SWF - 70 | 1.5 | 11.2 |
| 70.0 - 85.0 | SWF - 85 | 1.5 | 11.6 |
| 85.0 - 100.0 | SWF - 100 | 1.5 | 11.9 |
| 75.0 - 90.0 | SWF - 90 | 1.5 | 26.2 |
| 90.0 - 105.0 | SWF - 105 | 1.5 | 26.5 |
| 100.0 - 120.0 | SWF - 120 | 1.5 | 26.8 |
| 120.0 - 140.0 | SWF - 140 | 1.5 | 27.2 |
| 140.0 - 170.0 | SWF - 170 | 1.5 | 33.5 |
| 170.0 - 200.0 | SWF - 200 | 1.5 | 33.6 |

| Capacity | Model | Travel | Weight |
|---------------|-------------|--------|--------|
| kg | No. | meter | kg |
| 1.5 - 3.0 | SWF - 03 L | 2.5 | 3.3 |
| 2.5 - 5.0 | SWF - 05 L | 2.5 | 3.7 |
| 4.5 - 9.0 | SWF - 09 L | 2.3 | 6.9 |
| 9.0 - 15.0 | SWF - 15 L | 2.3 | 7.2 |
| 15.0 - 22.0 | SWF - 22 L | 2.3 | 7.7 |
| 22.0 - 30.0 | SWF - 30 L | 2.3 | 7.7 |
| 30.0 - 40.0 | SWF - 40 L | 2.3 | 10.2 |
| 40.0 - 50.0 | SWF - 50 L | 2.3 | 10.3 |
| 50.0 - 60.0 | SWF - 60 L | 2.3 | 10.9 |
| 60.0 - 70.0 | SWF - 70 L | 2.3 | 11.4 |
| 70.0 - 85.0 | SWF - 85 L | 2.5 | 26.0 |
| 85.0 - 100.0 | SWF - 100 L | 2.5 | 26.2 |
| 100.0 - 120.0 | SWF - 120 L | 2.5 | 33.2 |
| 110.0 - 130.0 | SWF - 130 L | 2.5 | 33.5 |
| | | | |

SPRING BALANCERS

SWA Series:

These balancers are provisioned with wire arrest mechanism, which locks the drum pulley in case of bottom hook failure or accidental tool disengagement.

| Capacity | Model | Travel | Weight |
|-------------|----------|--------|--------|
| kg | No. | meter | kg |
| 9.0 - 15.0 | SWA - 15 | 1.3 | 5.5 |
| 15.0 - 22.0 | SWA - 22 | 1.5 | 8.5 |
| 22.0 - 30.0 | SWA - 30 | 1.5 | 8.6 |
| 30.0 - 40.0 | SWA - 40 | 1.5 | 11.2 |
| 40.0 - 50.0 | SWA - 50 | 1.5 | 11.8 |
| 50.0 - 60.0 | SWA - 60 | 1.5 | 12.3 |
| 60.0 - 70.0 | SWA - 70 | 1.5 | 12.8 |

| Capacity | Model | Travel | Weight |
|-------------|------------|--------|--------|
| kg | No. | meter | kg |
| 9.0 - 15.0 | SWA - 15 L | 2.3 | 8.5 |
| 15.0 - 22.0 | SWA - 22 L | 2.3 | 8.6 |
| 22.0 - 30.0 | SWA - 30 L | 2.3 | 8.7 |
| 30.0 - 40.0 | SWA - 40 L | 2.3 | 11.4 |
| 40.0 - 50.0 | SWA - 50 L | 2.3 | 12.0 |
| 50.0 - 60.0 | SWA - 60 L | 2.3 | 12.5 |
| 60.0 - 70.0 | SWA - 70 L | 2.3 | 13.0 |

SBH Series:

New introduction to meet the long standing requirement of HEAVY WEIGHT balancers both in Standard range & Long range.

| Capacity | Model | Travel | Weight |
|-----------|-----------|--------|--------|
| kg | No. | meter | kg |
| 200 - 225 | SBH - 225 | 1.5 | 48.5 |
| 225 - 250 | SBH - 250 | 1.5 | 49.0 |
| 250 - 275 | SBH - 275 | 1.5 | 49.6 |
| 275 - 300 | SBH - 300 | 1.5 | 53.0 |

| Capacity | Model | Travel | Weight |
|-----------|-----------|--------|--------|
| kg | No. | meter | kg |
| 85 - 100 | SBH - 100 | 3.0 | 46.5 |
| 100 - 120 | SBH - 120 | 3.0 | 47.0 |
| 120 - 140 | SBH - 140 | 3.0 | 48.5 |
| 140 - 160 | SBH - 160 | 3.0 | 49.5 |

I-BEAM Trolley:

I-Beam trolley has been designed specially to suspend SPRING BALANCER in Weld Shop, Assembly Line for Transformer, Welding Gun and Pneumatic Tools in Automobile manufacturing Plants.







SIT-500

SIT-250

SIT-70

| Capacity | Model No. | Beam Width | Weight |
|----------|--------------|------------|--------|
| kg | | mm | kg |
| 70 | SIT - 70 | 50, 75 | 1.0 |
| 250 | SIT - 250 | 75, 125 | 4.5 |
| 500 | SIT - 500 | 50, 75 | 7.5 |
| 1000 | SIT - 1000 | 50, 75 | 8.6 |

SPRING BALANCERS SAFETY FEATURES

Safety Features

Prior to the safety initiatives and modifications undertaken by Powermaster America older design Spring Balancers had only limited safety provisions, due to which these older type Spring Balancers were prone to operational hazards and industrial accidents leading tohuge compensations.

Powermaster America has introduced several safety features into our new designed Spring Balancers while retaining all the existing safety features. Powermaster America Balancers have thus become more user friendly, eliminating chances of accidents.

Existing Safety Features Retained:

- SAFETY PIN: Stops and locks drum pulley in the event of spring failure and thus prevents the fall of costly equipment and
 injury to the operator from falling load.
- ADDITIONAL EYE: For fixing secondary support chain remains.

Exclusive Safety Features Introduced:

1. ENCLOSED BODY

Spring Balancers from other suppliers are supplied with opening both in Body and Cover causing accidental crunch of operator's fingers between revolving drum and the body of the Spring Balancers. To prevent this, side windows on the body and cover have been eliminated. This would prevent industrial accidents.



2. WIRE ARREST MECHANISM (SWA SERIES)

In the unfortunate event of accidental dislodging of the suspended weight, breakage of bottom hook / wire rope, spring tension will pull back the wire rope, resulting in whipping action likely to hurt personnel around.

This mechanism will lock the last revolving drum pulley and the wire rope assembly will be stopped with max. 20cm travel.

This will prevent the whipping of wire rope assembly and avoided any injury to operator or any personnel around.

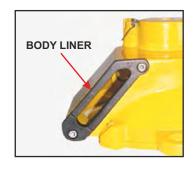


3. BODY LINER

In order to prevent wear of the slot of the Spring Balancer body, a split type Nylon liner for wire rope has been introduced in the new design Spring Balancers.

This liner can be removed and installed on site without any need for dismantling of the wire rope.

This will prevent wear of the costly body resulting in overall saving and reduced down time of equipment.



SPRING BALANCERS SAFETY FEATURES

Safety Features

4. EASY ADJUSTMENT OF SPRING TENSION

In Spring Balancers from other manufactures the worm gear box for adjustment of Spring Tension worked in the horizontal axis. Gear box position has been rotated through 90 degrees so that spring tension adjustment can be made by working in vertical axis.

This will facilitate adjustment from ground level without any need to rise up to Spring Balancer hanging level. This reduces down time, facilities easy operation and reduces the chance of any mishap during an operator rising to the level of the balancer.



5. WIRE ROPE REPLACEMENT WITHOUT DISMANTLING

A small slot has been provided to facilitate removal and Re-installation of the wire rope without any need for dismantling of the Spring Balancers. This will reduce the down time of the equipment. This facility is not available for long range Spring Balancers.



6. CONTAINERISED SPRING ASSEMBLY

No longer do you need to handle open springs which are difficult and dangerous to handle with sharp edges. All springs are now supplied in concealed containers for easy replacement. With containerised springs accidents are avoided during maintenance and replacements of springs.



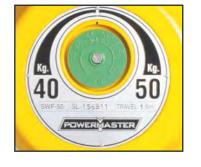
7. DRUM LOCK SYSTEM

Available to lock the spool while replacing a tool.



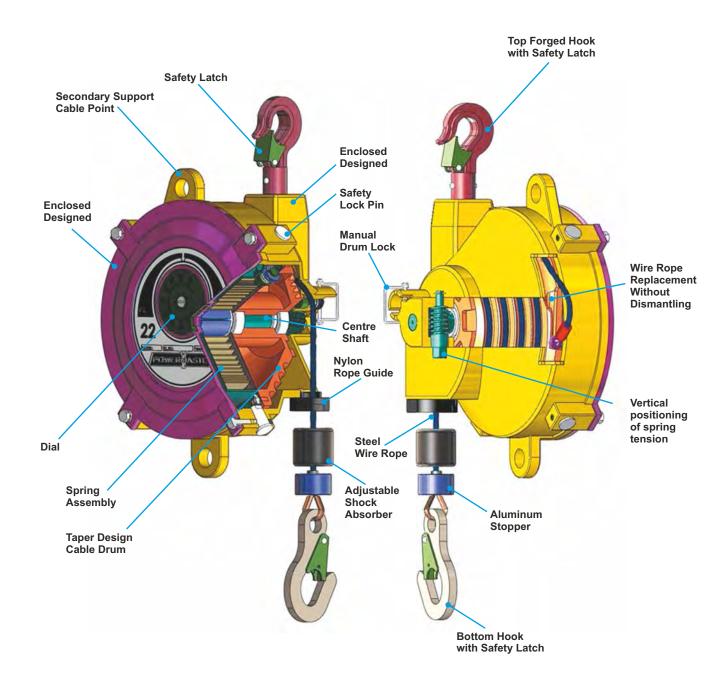
8. TENSION GAUGE

Lets operator see tension setting.



SPRING BALANCERS FEATURES

Features



Reduced Delivery Time - Improved Looks - Better Value - Safety Standards

- With the modification and introduction of new design, DIES have been changed to PRESSURE CAST type.
- Large batch production has been introduced with most models now available from stock.
- Pressure Dies has improved looks.
- Productivity and safety features ensure that your company gets VALUE FOR YEARS!!
- All Powermaster America Balancers meet CE, IS and Industrial safety standards.
- In use in over 85 countries with the largest automobile manufacturers.

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