

Spring Loaded Power Slip (Eq. to PS 15)

Model: SDTISPS-27

The Spectrum Spring Loaded Power Slip (SDTISPS-27) is a foot-operated device designed to eliminate the manual lifting and setting of slips. It uses coil springs as a counterbalance to offset the weight of the slips when in the upper, released position.

The slip can be set simply by applying pressure to the slip set ring and released by pressing the foot pedal. This Power Slip is capable of handling drill pipes and tubing ranging from 3.1/2" to 5.1/2" in size. It is compatible with 27.1/2", 37.1/2", and 49.1/2" Rotary Tables with API standard Pin Drive Master Bushings.



Spring Loaded Power Slip
Figure No. 34

The unit consists of three major assemblies as follows:

1. Top Cover Assembly:

The Top Cover Assembly is ergonomically designed in two halves with a slip-set ring. It is mounted on four slip hangers with pins for secure attachment.

2. Slip Assembly:

The Slip Assembly consists of four slip segments, each with a 16.1/2" grip length for handling tubular sizes from 3.1/2" to 5.1/2". The slips are equipped with 48 inserts, 4 insert retaining rings, and 8 Allen screws for a secure grip.

3. Bowl Assembly:

The Bowl Assembly is composed of two halves connected by a hinge pin, allowing easy installation and removal of the Power Slip from the Master Bushing. It includes four coil spring cartridges and a foot pedal for releasing the slips.

Part List of Spring Loaded Power Slip:

| S. No. | P/N | Description | Qty. Per Unit |
|--------|--------|--|---------------|
| 1. | SPS-28 | Spring Cartridges | 4 No. |
| 2. | SPS-29 | Foot Pedal | 1 No. |
| 3. | SPS-31 | Slip Hangers | 4 No. |
| 4. | SPS-32 | 5.1/2" Slip Segment to handle 4.1/2"-5.1/2" Drill Pipe. | 4 No. |
| 5. | SPS-33 | 4.1/2" Slip Segment to handle 3.1/2"-4.1/2" Drill Pipe. | 4 No. |
| 6. | SPS-40 | Slip Bowl | 1 No. |
| 7. | SPS-41 | Top Cover | 1 No. |
| 8. | SPS-42 | Brass Bush | 4 No. |
| 9. | SPS-43 | Hinge Pin for Bowl | 1 No. |
| 10. | SPS-44 | Hanger Top Pin | 4 No. |
| 11. | SPS-45 | Hanger Bottom Pin | 4 No. |
| 12. | SPS-46 | Lifting Sling (Four Hook Type) | 1 No. |
| 13. | SPS-47 | Oil Seal | 4 No. |
| 14. | SPS-48 | Foot Pedal Pin | 1 No. |
| 15. | 5163 | Inserts to handle 3.1/2" Drill Pipe for Slip Body Size 4.1/2" (One set consists of 08 no. of Inserts) | 4 Set |
| 16. | 5163-B | Inserts (Taper Design) to handle 3.1/2" Drill Pipe for Slip Body Size 4.1/2" (One set consists of 04 no. of Inserts) | 4 Set |
| 17. | 5164 | Inserts to handle 4" Drill Pipe for Slip Body Size 4.1/2" (One set consists of 08 no. of Inserts) | 4 Set |
| 18. | 5164-B | Inserts (Taper Design) to handle 4" Drill Pipe for Slip Body Size 4.1/2" (One set consists of 04 no. of Inserts) | 4 Set |
| 19. | 5165 | Inserts to handle 4.1/2" Drill Pipe for Slip Body Size 4.1/2" (One set consists of 12 no. of Inserts) | 4 Set |
| 20. | 5168 | Inserts to handle 4.1/2" Drill Pipe for Slip Body Size 5.1/2" (One set consists of 08 no. of Inserts) | 4 Set |
| 21. | 5168-B | Inserts (Taper Design) to handle 4.1/2" Drill Pipe for Slip Body Size 5.1/2" (One set consists of 04 no. of Inserts) | 4 Set |
| 22. | 5169 | Inserts to handle 5" Drill Pipe for Slip Body Size 5.1/2" (One set consists of 08 no. of Inserts) | 4 Set |
| 23. | 5169-B | Inserts (Taper Design) to handle 5" Drill Pipe for Slip Body Size 5.1/2" (One set consists of 04 no. of Inserts) | 4 Set |
| 24. | 5170 | Inserts to handle 5.1/2" Drill Pipe for Slip Body Size 5.1/2" (One set consists of 12 no. of Inserts) | 4 Set |