

# MEROL ENERGY SERVICES PRIVATE LIMITED

## ROTARY SLIPS

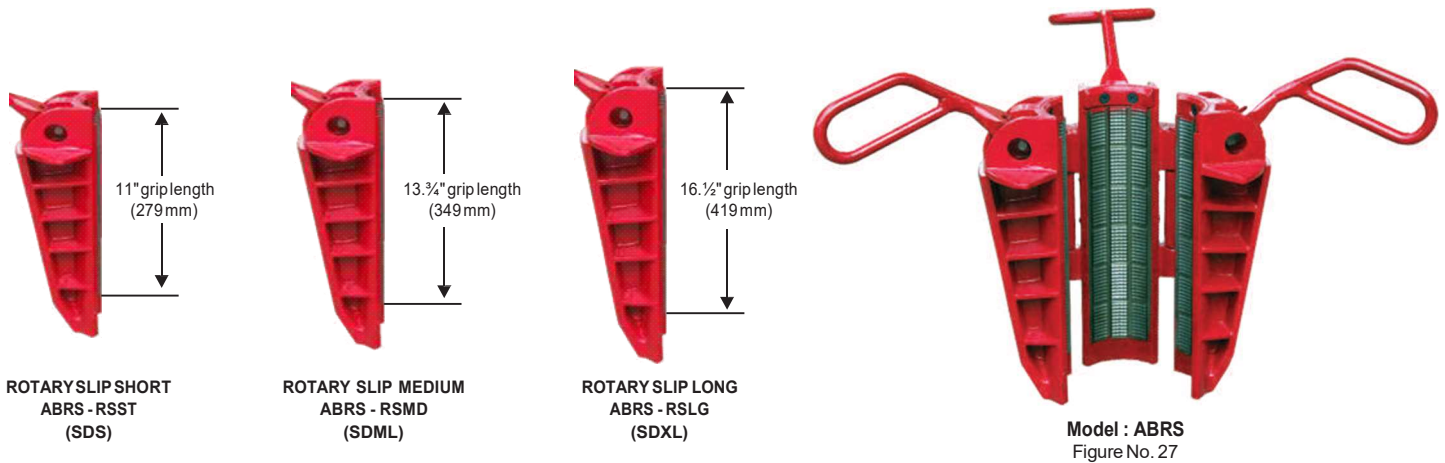
Rotary Slips are one of the important handling tools used at Onshore & Offshore drilling operations and are used to hold the tubular firmly in the Rotary Table while carrying out specific operations. These slips are named as per their usage/handling of tubular i.e. Drill Pipe Slips, Drill Collar Slips, Tubing Slips and Casing Slips. These are classified as per size of the tubular used and depth of the wells and manufactured as per API-7K specification .

### Drill Pipe Slips

We make - RSST, RSMD & RSLG Rotary Slip are for use in standard API-7K insert bowls. Slips having an API taper of 4 inches per foot on the diameter. The superior design provides for full distribution of load throughout the length of the slips which helps in preventing bottlenecking damage of drill pipes. We make slips have the maximum load carrying capacity, light weight and provide great strength.

The Inserts can be changed at rig site in a very short period by simply removing the locking arrangement and retainers.

Load Rating for SDS - 100 Ton, SDML - 150 Ton & SDXL - 250 Ton.



### Part List of ABRs - RSST Short Rotary Slips (SDS)

| Slip Body Size (Inches)         | 3-1/2                         |         |         | 4-1/2   |         |         |
|---------------------------------|-------------------------------|---------|---------|---------|---------|---------|
|                                 | API Pipe Sizes (OD in Inches) | 2.3/8   | 2.7/8   | 3.1/2   | 3.1/2   | 4       |
| Slip Complete w/Insert Part No. | 5101                          | 5102    | 5103    | 5104    | 5105    | 5106    |
| Weight Complete with Inserts    | 61 Kg.                        | 59 Kg.  | 56 Kg.  | 73 Kg.  | 70 Kg.  | 66 Kg.  |
| Insert Part No.                 | 5160-24                       | 5161-24 | 5162-24 | 5163-36 | 5164-36 | 5165-36 |

| Slip Body Size (Inches) | 3-1/2                            |               | 4-1/2    |               |          |
|-------------------------|----------------------------------|---------------|----------|---------------|----------|
|                         | Description                      | Qty. Per Unit | Part No. | Qty. Per Unit | Part No. |
|                         | Slip Segment - Right             | 1             | 5107     | 1             | 5118     |
|                         | Slip Segment - Center            | 1             | 5108     | 1             | 5119     |
|                         | Slip Segment - Left              | 1             | 5109     | 1             | 5120     |
|                         | Handle - Right                   | 1             | 5110     | 1             | 5110     |
|                         | Handle - Center                  | 1             | 5111     | 1             | 5111     |
|                         | Handle - Left                    | 1             | 5112     | 1             | 5112     |
|                         | Handle Pin w/Washer & Cotter Pin | 3             | 5113     | 3             | 5113     |
|                         | Hinge Pin w/Cotter Pin           | 2             | 5114     | 2             | 5114     |
|                         | Retaining Ring                   | 3             | 5115     | 3             | 5115     |
|                         | Insert Retaining Screw w/Washer  | 6             | 5116     | 6             | 5116     |
|                         | Kit - (Hex Nuts, Bolts & Wrench) | 1             | 5117     | 1             | 5117     |

## Part List of ABRS-RSMD Medium Rotary Slips (SDML)

| Slip Body Size (Inches)         | 3-1/2   |         |          | 4-1/2   |         |         |
|---------------------------------|---------|---------|----------|---------|---------|---------|
| API Pipe Sizes (OD Inches)      | 2.3/8   | 2.7/8   | 3.1/2    | 3.1/2   | 4       | 4.1/2   |
| Slip Complete w/Insert Part No. | 5121    | 5122    | 5123     | 5124    | 5125    | 5126    |
| Weight Complete with Inserts    | 84 Kg.  | 84 Kg.  | 81.5 Kg. | 94 Kg.  | 91 Kg.  | 86 Kg.  |
| Insert Part No.                 | 5160-30 | 5161-30 | 5162-30  | 5163-45 | 5164-45 | 5165-45 |

| Slip Body Size (Inches)         | 5        |         |         | 5-1/2    |         |          |
|---------------------------------|----------|---------|---------|----------|---------|----------|
| API Pipe Sizes (OD Inches)      | 4        | 4.1/2   | 5       | 4.1/2    | 5       | 5.1/2    |
| Slip Complete w/Insert Part No. | 5127     | 5128    | 5129    | 5130     | 5131    | 5132     |
| Weight Complete with Inserts    | 92.5 Kg. | 89 Kg.  | 84 Kg.  | 91 Kg.   | 84 Kg.  | 82.5 Kg. |
| Insert Part No.                 | 5168-45A | 5166-45 | 5167-45 | 5168-45B | 5169-45 | 5170-45  |

| Slip Body Size (Inches)          | 3-1/2         |      | 4-1/2         |      | 5             |      | 5-1/2         |      |
|----------------------------------|---------------|------|---------------|------|---------------|------|---------------|------|
| Description                      | Qty. Per Unit | P/N  | Qty. Per Unit | P/N  | Qty. Per Unit | P/N  | Qty. Per Unit | P/N  |
| Slip Segment - Right             | 1             | 5133 | 1             | 5137 | 1             | 5141 | 1             | 5145 |
| Slip Segment - Center            | 1             | 5134 | 1             | 5138 | 1             | 5142 | 1             | 5146 |
| Slip Segment - Left              | 1             | 5135 | 1             | 5139 | 1             | 5143 | 1             | 5147 |
| Handle - Right                   | 1             | 5110 | 1             | 5110 | 1             | 5110 | 1             | 5110 |
| Handle - Center                  | 1             | 5111 | 1             | 5111 | 1             | 5111 | 1             | 5111 |
| Handle - Left                    | 1             | 5112 | 1             | 5112 | 1             | 5112 | 1             | 5112 |
| Handle Pin w/Washer & Cotter Pin | 3             | 5113 | 3             | 5113 | 3             | 5113 | 3             | 5113 |
| Hinge Pin w/Cotter Pin           | 2             | 5136 | 2             | 5136 | 2             | 5136 | 2             | 5136 |
| Retaining Ring                   | 3             | 5140 | 3             | 5140 | 3             | 5144 | 3             | 5148 |
| Insert Retaining Screw w/Washer  | 6             | 5116 | 6             | 5116 | 6             | 5116 | 6             | 5116 |
| Kit - (Hex Nuts, Bolts & Wrench) | 1             | 5117 | 1             | 5117 | 1             | 5117 | 1             | 5117 |

## Part List of ABRS - RSLG Extra Long Rotary Slips (SDXL)

| Slip Body Size (Inches)         | 4-1/2   |         |         | 5        |         |         |
|---------------------------------|---------|---------|---------|----------|---------|---------|
| API Pipe Sizes (OD Inches)      | 3-1/2   | 4       | 4.1/2   | 4        | 4-1/2   | 5       |
| Slip Complete w/Insert Part No. | 5152    | 5153    | 5154    | 5155     | 5156    | 5157    |
| Weight Complete with Inserts    | 104 Kg. | 99 Kg.  | 93 Kg.  | 108 Kg.  | 103 Kg. | 97 Kg.  |
| Insert Part No.                 | 5163-54 | 5164-54 | 5165-54 | 5168-54A | 5166-54 | 5167-54 |

| Slip Body Size (Inches)         | 5-1/2    |         |         | 7       |         |         |
|---------------------------------|----------|---------|---------|---------|---------|---------|
| API Pipe Sizes (OD Inches)      | 4-1/2    | 5       | 5-1/2   | 5-7/8   | 6-5/8   | 7       |
| Slip Complete w/Insert Part No. | 5158     | 5159    | 5180    | 5198    | 5199    | 5200    |
| Weight Complete with Inserts    | 106 Kg.  | 102 Kg. | 95 Kg.  | 120 Kg. | 110 Kg. | 105 Kg. |
| Insert Part No.                 | 5168-54B | 5169-54 | 5170-54 | 5171-72 | 5172-72 | 5173-72 |

| Slip Body Size (Inches)          | 4-1/2         |      | 5             |      | 5-1/2         |      | 7             |      |
|----------------------------------|---------------|------|---------------|------|---------------|------|---------------|------|
| Description                      | Qty. Per Unit | P/N  | Qty. Per Unit | P/N  | Qty. Per Unit | P/N  | Qty. Per Unit | P/N  |
| Slip Segment - Right             | 1             | 5185 | 1             | 5188 | 1             | 5191 | 1             | 5194 |
| Slip Segment - Center            | 1             | 5186 | 1             | 5189 | 1             | 5192 | 1             | 5195 |
| Slip Segment - Left              | 1             | 5187 | 1             | 5190 | 1             | 5193 | 1             | 5196 |
| Handle - Right                   | 1             | 5110 | 1             | 5110 | 1             | 5110 | 1             | 5110 |
| Handle - Center                  | 1             | 5111 | 1             | 5111 | 1             | 5111 | 1             | 5111 |
| Handle - Left                    | 1             | 5112 | 1             | 5112 | 1             | 5112 | 1             | 5112 |
| Handle Pin w/Washer & Cotter Pin | 3             | 5113 | 3             | 5113 | 3             | 5113 | 3             | 5113 |
| Hinge Pin w/Cotter Pin           | 2             | 5184 | 2             | 5184 | 2             | 5184 | 2             | 5184 |
| Retaining Ring                   | 3             | 5140 | 3             | 5144 | 3             | 5148 | 3             | 5149 |
| Insert Retaining Screw w/Washer  | 6             | 5116 | 6             | 5116 | 6             | 5116 | 6             | 5116 |
| Kit - (Hex Nuts, Bolts & Wrench) | 1             | 5117 | 1             | 5117 | 1             | 5117 | 1             | 5117 |