



| TOOL SIZE | | CONNECTION | PULL TO FULLY OPEN | MAXIMUM PULL AFTER FULLY OPEN | TOTAL STROKE | DRILL COLLAR WEIGHT | | MAXIMUM TORQUE | BODY JOINT TORQUE |
|-----------|----------|------------|--------------------|-------------------------------|--------------|---------------------|------------|----------------|-------------------|
| OD | ID | | | | | MIN. | MAX. | | |
| 2-7/8" | 1" | 2-3/8" PAC | 22,000 lbs | 170,000 lbs | 10" | 1,800 lbs | 3,600 lbs | 4,000 ft/lbs | 2,400 ft/lbs |
| 73.02 mm | 25.40 mm | | 9,786 daN | 75,616 daN | 254.00 mm | 801 daN | 1,601 daN | 5,420 Nm | 3,252 Nm |
| 3-1/8" | 1" | 2-3/8" REG | 30,000 lbs | 176,000 lbs | 10" | 2,000 lbs | 4,000 lbs | 4,900 ft/lbs | 3,700 ft/lbs |
| 79.37 mm | 25.40 mm | | 13,344 daN | 78,285 daN | 254.00 mm | 890 daN | 1,779 daN | 6,640 Nm | 5,014 Nm |
| 3-3/4" | 1-1/4" | 2-3/8" IF | 37,500 lbs | 300,000 lbs | 10" | 4,000 lbs | 6,000 lbs | 9,200 ft/lbs | 5,500 ft/lbs |
| 95.25 mm | 31.75 mm | | 16,680 daN | 133,440 daN | 254.00 mm | 1,779 daN | 2,669 daN | 12,466 Nm | 7,453 Nm |
| 4-3/4" | 2" | 3-1/2" IF | 55,000 lbs | 470,000 lbs | 10" | 5,000 lbs | 8,000 lbs | 19,000 ft/lbs | 11,400 ft/lbs |
| 120.65 mm | 50.80 mm | | 24,464 daN | 209,056 daN | 254.00 mm | 2,224 daN | 3,558 daN | 25,745 Nm | 15,447 Nm |
| 5-1/4" | 2-1/4" | 4" FH | 74,500 lbs | 600,000 lbs | 10" | 10,000 lbs | 14,000 lbs | 26,000 ft/lbs | 15,000 ft/lbs |
| 133.35 mm | 57.15 mm | | 33,138 daN | 266,880 daN | 254.00 mm | 4,448 daN | 6,227 daN | 35,230 Nm | 20,325 Nm |
| 6-1/4" | 2-1/4" | 4-1/2" XH | 107,000 lbs | 828,000 lbs | 10" | 12,000 lbs | 16,000 lbs | 33,000 ft/lbs | 20,000 ft/lbs |
| 158.75 mm | 57.15 mm | | 47,594 daN | 368,294 daN | 254.00 mm | 5,338 daN | 7,117 daN | 44,715 Nm | 27,100 Nm |
| 6-3/4" | 2-1/2" | 4-1/2" IF | 149,000 lbs | 1,063,000 lbs | 10" | 15,000 lbs | 18,000 lbs | 47,800 ft/lbs | 28,700 ft/lbs |
| 171.45 mm | 63.50 mm | | 66,275 daN | 472,822 daN | 254.00 mm | 6,672 daN | 8,006 daN | 64,769 Nm | 38,889 Nm |
| 8" | 2-3/4" | 6-5/8" REG | 175,000 lbs | 1,200,000 lbs | 12" | 17,000 lbs | 20,000 lbs | 68,700 ft/lbs | 41,240 ft/lbs |
| 203.20 mm | 69.85 mm | | 77,840 daN | 533,760 daN | 304.80 mm | 7,562 daN | 8,896 daN | 93,089 Nm | 55,880 Nm |
| 9" | 2-3/4" | 7" H90 | 203,450 lbs | 1,800,000 lbs | 10" | 18,000 lbs | 22,000 lbs | 105,800 ft/lbs | 63,500 ft/lbs |
| 228.60 mm | 69.85 mm | | 90,495 daN | 800,640 daN | 254.00 mm | 8,006 daN | 9,786 daN | 143,359 Nm | 86,043 Nm |

NOTE: All specifications are accurate within 15%. Other sizes available upon request.

The Lee Oilfield Service Ltd. Compounder is designed with a patented multi-chamber system that facilitates lower internal working pressures which provides longer jarring periods. The compounder should be used with the Lee type hydraulic jars which can withstand the higher impact forces created by the compounder.

Jarring effectiveness is determined by how rapidly you can impact weight into the jars. When jarring without a compounder you rely only on pipe stretch to lift the drill collars upwards after the jar releases to create the upwards impact in the jar. This accelerated upward movement will often be reduced by the friction of the working string along the sides of the well bore, reducing the speed of upwards movement of the drill collars which impact into the jar. At shallow depths jar impact is not achieved because of lack of pipe stretch in the working string.

The Lee Oilfield compounder is energized when you over pull on the working string and compress a compressible fluid through a distance of 10" to 12" of stroke and at the same time

activating the fishing jar. When the fishing jar releases the stored energy in the compounder, it lifts the drill collars upwards at a high rate of speed creating a high impact in the jar.

When running the Lee Oilfield compounder it is recommended you place jars on bottom, pick up 3 to 6 drill collars and place the compounder on top of the drill collars. It is not necessary or recommended that any more drill collars be run on top of the compounder.

It should be noticed that when jarring with a compounder the surface action is greatly reduced or in most cases eliminated entirely. This is because all the jarring action is taking place between the compounder and the fishing jar.