

**The specification list Drill Rod HDD( Single piece)**

| Specification(one piece<br>drilling rod) | Dimension of the drilling rod |                          |       |        |                     |                                                          | Material | Minimum<br>bending<br>radius m | Length of rod<br>to bend 90°<br>m | Max<br>angle(°s) | Max %<br>slope %<br>/rod | Torque |
|------------------------------------------|-------------------------------|--------------------------|-------|--------|---------------------|----------------------------------------------------------|----------|--------------------------------|-----------------------------------|------------------|--------------------------|--------|
|                                          | OD of the<br>tube             | Thickness of<br>the tube | Lenth | Weight | OD of the<br>joints | Bid clamp space of<br>the pin joints and box<br>joins mm |          |                                |                                   |                  | %                        | KN.m   |
|                                          | mm                            | mm                       | m     | Kg     | mm                  |                                                          |          |                                |                                   |                  |                          |        |
| 50(2")                                   | 50                            | 6.5                      | 2     | 20     | 57                  | pin joints:110                                           | G        | 38                             | 60                                | 3.0"             | 5.2                      | 2.9    |
|                                          |                               |                          | 2.5   | 25     |                     | Box joints:175                                           | S        | 30                             | 47.1                              | 4.8"             | 8.3                      | 3      |
| 60.3(2 3/8")                             | 60.3                          | 7.5                      | 2     | 25.3   | 67                  | pin joints:130                                           | G        | 42                             | 66                                | 2.7"             | 4.8                      | 6      |
|                                          |                               |                          | 3     | 37     |                     | Box joints:180                                           | S        | 33                             | 51.8                              | 5.2"             | 9.1                      | 6.3    |
| 73(2 7/8")                               | 73                            | 8                        | 3     | 45     | 80                  | pin joints:120                                           | G        | 58                             | 91.1                              | 3.0"             | 5.2                      | 12     |
|                                          |                               |                          | 4     | 58     |                     | Box joints:180                                           | S        | 45                             | 70.7                              | 3.8"             | 5                        | 13     |
| 73(2 7/8")                               | 73                            | 10                       | 3     | 58     | 87                  | pin joints:120                                           | G        | 67                             | 105                               | 2.6"             | 4.5                      | 14.5   |
|                                          |                               |                          | 4     | 78     |                     | Box joints:180                                           | S        | 51                             | 80                                | 4.5"             | 7.8                      | 16     |
| 83(3 1/4")                               | 83                            | 9                        | 3     | 59     | 92                  | pin joints:130                                           | G        | 73                             | 114.7                             | 2.4"             | 4.1                      | 16.8   |
|                                          |                               |                          | 4.5   | 84     |                     | Box joints:190                                           | S        | 65                             | 102.1                             | 4.0"             | 6.9                      | 18     |
| 89(3 1/2")                               | 88.9                          | 10                       | 4.5   | 102    | 104                 | pin joints:150                                           | G        | 80                             | 125.7                             | 3.2"             | 5.6                      | 22.3   |
|                                          |                               |                          | 6     | 130    |                     | Box joints:230                                           | S        | 72                             | 113                               | 4.8"             | 8.3                      | 24     |

| Grade | Yield Strength |     | Tensile Strength |      | Extension Rate |      | Impact Power Akv J |        |
|-------|----------------|-----|------------------|------|----------------|------|--------------------|--------|
|       | Min            |     | Max              |      | Min            |      | 10×10              |        |
|       | Psi            | Mpa | Psi              | Mpa  | Psi            | Mpa  | %                  | (-20℃) |
| G105  | 105,000        | 724 | 135,000          | 931  | 115,000        | 793  | 15                 | ≥68    |
| S135  | 135,000        | 931 | 165,000          | 1138 | 145,000        | 1000 | 13                 | ≥54    |