

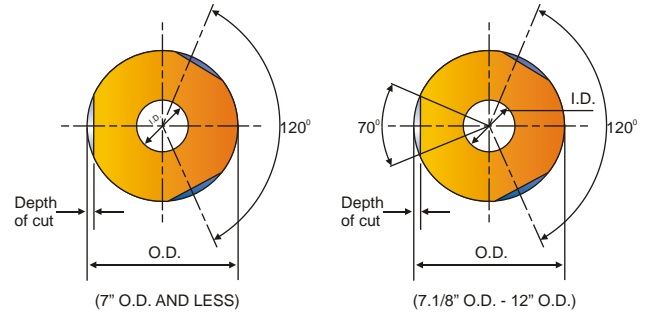


## DRILL COLLARS

### C. SECTIONAL VIEW OF DRILL COLLAR SPIRAL

**When Ordering drill collars, Please specify:**

1. Outside Diameter.
2. Inside Diameter.
3. Length.
4. Connection Size & Type:  
Stress Relief Groove (SRG) Or without SRG Feature.  
Bore Back Box or without.
5. Slip and/or elevator recess.
6. Spiral details.
7. Hard banding.
8. Standard or Heavy duty Thread Protectors.
9. Any Special Features, such as Phosphating etc.



### NON MAGNETIC DRILL COLLARS

PARVEEN's Non magnetic drill collars meet the standards for chemical composition used in directional drilling and in addition have.

1. Extremely clean steel.
2. Low permeability, high mechanical properties and superior resistance to corrosion cracking.
3. Display high strength and low permeability throughout the product.

### CHEMICAL COMPOSITION

These Non magnetic Drill Collars are of Cr-Mn Type. The Chemical Composition will be such so as to satisfy the following mechanical properties and permeability.

| Mechanical Properties |                           |                               |                               |                      |
|-----------------------|---------------------------|-------------------------------|-------------------------------|----------------------|
| Size                  | Yield Strength<br>(0.2%)  | Tensile Strength<br>(minimum) | Minimum Elongation<br>Percent | Charpy Impact Value. |
| 3.1/2" THRU<br>6.7/8" | 110,000PSI<br>(758N/MM2)  | 120,000PSI<br>(827 N/MM2)     | 18                            | MIN. 40<br>FT LB     |
| 7" THRU<br>11"        | 100,000PSI<br>(689 N/MM2) | 110,000 PSI<br>(758 N/MM2)    | 20                            | MIN.40<br>FT LB      |



## DRILL COLLARS

### PERMEABILITY

Relative Magnetic permeability shall be less than 1.010 through the entire length and the level of such permeability to be uniform. This level of permeability remains stable despite fluctuation of local plastic deformation and temperature fluctuation during operation.

### SIZES

Size conform to API Spec. 7.

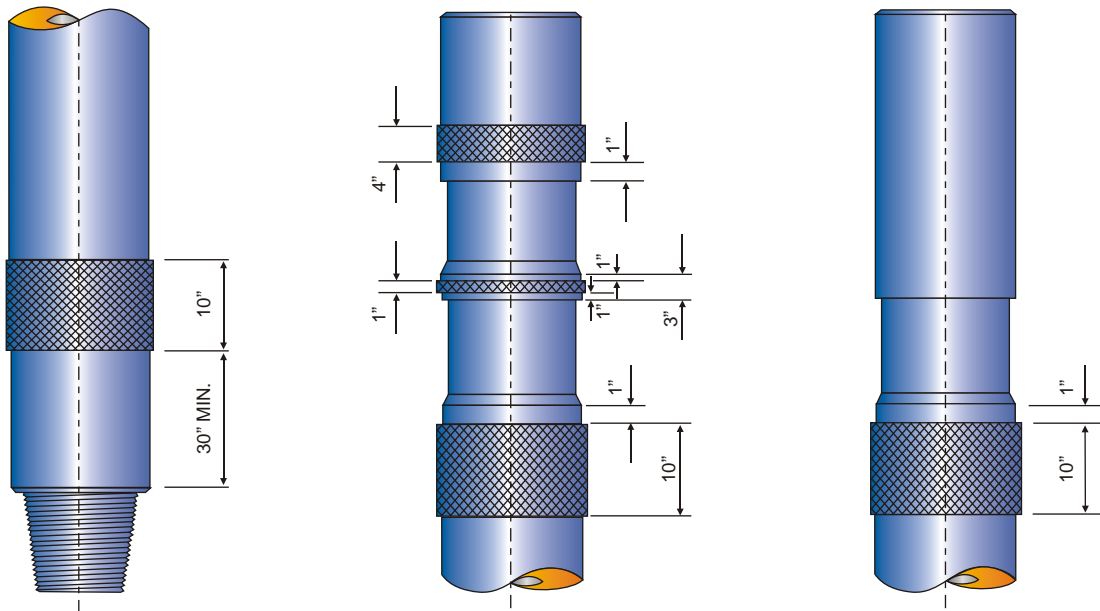
### CORROSION RESISTANCE

Austenitic stainless steel drill collars are subject to cracking due to conjoint action of tensile stress and certain specific corrodents. This is called stress corrosion cracking.

Resistance to Corrosion can be demonstrated by subjecting materials from each Drill Collar to the corrosion test as specified in ASTM A262 practice.

### ULTRASONIC TESTING

Drill collar bodies are inspected ultrasonically full length over the circumference of the body before boring. Examination Techniques are specified in ASTM E 114 (direct contact method) and ASTM E 214 and / or ASTM E 1001 (immersion method).



**Type - A**  
**Pin End**

**Type - B**  
**Box End With Zip Lift**  
**(Elevator And Slip Recess)**

**Type - C**  
**(Slip Recess Only)**

(c) Drill Collar Hard Banding

