GRUNT #2-#4 Product Specifications

GRUNT CROSS COLLAR CLAMPS ARE THE MOST UNIVERSAL CLAMP ON THE MARKET ONE CLAMP RUNS A #2 OR #4 CABLE AND BUILT WITH PREMIUM ANNEALED DUCTILE IRON AND DESIGNED FOR EVERY WELLBORE APPLICATION.

***Grunt Clamps #2 - #4 are dual ¼" and fully customizable to meet our customer's needs**

FEATURES AND BENEFITS

- 4.45" OD
- Improved design built to take a beating
- Withstands tremendous impacts without shattering
- Beveled shape deflects load
- Quick & easy installation, reducing rig time
- No loose parts to drop downhole
- Grips tubing to prevent rotation
- Secures & protects ESP cable at coupling
- Built for multiple reruns
- Replaces banding near joints
- Eliminates cleanouts for bands
- Premium annealed ductile iron
- Heavy duty cable guard with multiple capillary tube slots
- Shifts tubing string away from casing
- Captive Class 10.9 bolts (Grade 8) 40cr
- Bolts torqued to 20 ft. lb.
- No-slip grip
- Improved rotational and axial grip
- Robust

TOOL DESCRIPTION

GRUNT Cross Collar Clamps feature an improved design that can withstand tremendous impact without shattering. GRUNT CCCPs replace banding, install 4x faster than stamped-style clamps, and protects your cable in deviations and inclinations.

ID: 3.09"
OD: 4.45"

APPLICATIONS

- ESP cable protection in deviated or inclined wells
- Unconventional horizontals
  - High DLS and tangents
- Chemical treatment with cap tube Protects gauge line
- 7" Casing

Test Procedure and Results:

1. Measure the initial weight of the clamp using a calibrated scale and record the value.
2. Prepare a 15% DINEDX + 5gpt MS in a suitable container.
3. Immerse the clamp into the acid solution, ensuring full submersion, and start the timer for a duration of 4 hours
4. After 4 hours, remove the clamp from the acid solution, rinse it thoroughly with distilled water to halt the corrosion process, and dry it.
5. Measure the weight of the clamp again and record the value as the weight after the first 4-hour exposure.
6. Repeat steps 3-5 for an additional 4-hour immersion period, totaling 8 hours of exposure time.
7. Measure the final weight of the clamp and record the value.

Initial weight: 2846.235 grams
Weight after 4-hour immersion: 2845.5568 grams
Weight after 2nd 4-hour immersion: 2845.251 grams

(-0.984 difference in weight)