

Micro-Grip[®] Tong Jaws

The patented* Weatherford Micro-Grip system is used in hydraulic power tong jaws to minimize die marks on corrosion-resistant alloy (CRA) tubulars. Conventional power tong jaws are equipped with jaws and dies that penetrate the surface of the pipe when the tong jaws are engaged. These penetration points can create sites for stress corrosion cracking and sulfide stress cracking that can compromise the integrity of the tubular string. In contrast, Micro-Grip system inserts use serrated vertical gripping bars embedded in an elastomer that distribute the rotational torque equally over many small gripping elements, leaving only a shallow indentation of each gripping element in the pipe surface. Extensive testing has proved that use of the Micro-Grip system prevents corrosion in well environments with high concentrations of carbon dioxide (CO_2) and hydrogen sulfide (H₂S).



Applications

- · Handling systems for high-CRA tubulars
- Corrosive environments
- Long-term wellbore integrity applications
- Aluminum-coated riser systems
- Frequently used test strings (to minimize damage)

Features, Advantages, and Benefits

- The jaws fit standard, field-proven Weatherford power tongs without special modifications and with standard operating procedures for operational efficiency.
- The jaws preserve tubular integrity against CO₂ and H₂S corrosion damage.
- Tong-induced load distribution causes minimal marking for less damage to tubing and casing—preventing stress-corrosion-induced failures for long-term tubular integrity.
- The power tong has no hydraulic bladders to maintain, which reduces system downtime.
- Easy handling means no special power equipment is needed.

Additional Information

sales-germany@weatherford.com

*U.S. Patent No. 6332377

weatherford.com

1

© 2005–2014 Weatherford. All rights reserved. 1237.0

Weatherford products and services are subject to the Company's standard terms and conditions, available on request or at weatherford.com. For more information contact an authorized Weatherford representative. Unless noted otherwise, trademarks and service marks herein are the property of Weatherford and may be registered in the United States and/or other countries. Weatherford products named herein may be protected by one or more U.S. and/or foreign patents. Specifications are subject to change without notice. Weatherford sells its products and services in accordance with the terms and conditions set forth in the applicable contract between Weatherford and the client.