

Well Construction

Frank's Tubular Running Service (TRS) - Casing Technologies

iTONG™ - Intelligent Autonomous Connections

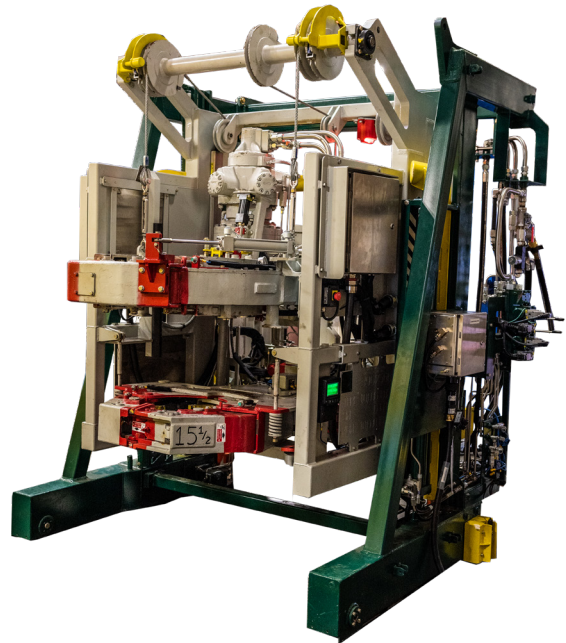
With the introduction of the iTONG™ system, Expro has achieved a step change in autonomous make-up capabilities with a single push button connection make up solution.

The iTONG™ system offers seamless integration into existing automated rig operations and marks a key step toward fully autonomous tubular running.

The iTONG™ system increases the overall acceptance rate of the make-up process, reducing backouts and rig time, and improving well integrity and safety. The one-button, remote-operated solution allows the system to control all operations of the tong make up sequence utilizing machine learning technology to consistently deliver optimal make up parameters.

Features and Benefits

- Integrates seamlessly with the iCAM® system to offer AI-powered tubular connection analysis and control to ensure connections are made up right the first time, every time
- Reduces personnel through automated tong operations while removing the need for people to enter the red zone during make-up or breakout operations
- Achieves optimal make-up parameters that ensure the lasting integrity of connections to maintain wellbore isolation and attain desired production life
- Enables consistent, uninterrupted operations and combines currently sequential operations to reduce connection times
- Consistent, repeatable results over conventional solutions



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Specifications			
Tong size		7 5/8 in	14 3/8 in
Pipe size range		2 1/8 in - 7 3/4 in	4 1/2 in - 14 3/8 in
Torque	Low gear	30,000 lb-ft	70,000 lb-ft
	High gear	8,000 lb-ft	15,000 lb-ft
Maximum operating speed	Low gear	5.2 RPM	4.5 RPM
	High gear	19.2 RPM	19 RPM
Carriage			
Overall length		104.50 in (265.4 cm)	
Overall width		101.75 in (258.4 cm)	
Overall height (minimum)		109.75 in (278.8 cm)	
Overall height (maximum)		159.75 in (405.8 cm)	

iTONG™ Miratron Radio Remote Control (MRCC)

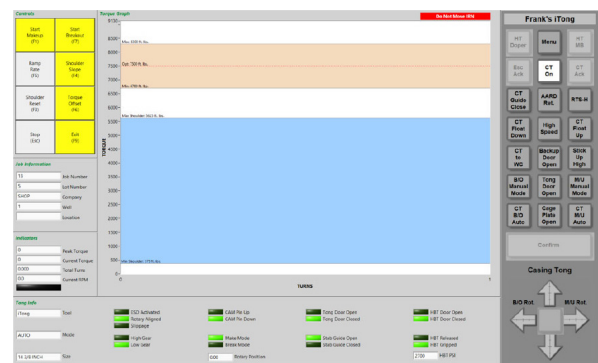
The MRRC provides remote operation of the iTONG™ from a safe distance of the tool. The maximum expected operational range is 100m.



iTONG™ Miratron Radio Remote Control (MRCC)

DataTrek Controls

In addition to the MRRC, the iTONG™ system can be controlled from within the DataTrek software. The DataTrek software runs independently from the iTONG™ program on a totally separate PLC connected to the network via an ethernet connection. On the DataTrek Run Screen, the iTONG™ controls are laid out in the style of the NOV Cyberbase keypad and operate similarly to the Cyberbase system.



iTONG™ DataTrek Controls