

Well Construction

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

FA-1® 22-inch - Top Drive Casing Running Tool

Features and Benefits

- Fills, rotates, circulates and reciprocates the casing string simultaneously, thus improving the ease with which casing strings are run to desired target depth, even with troublesome or difficult hole conditions
- Can be used for 16-in. to 30-in. casing while drilling (CwD) operations
- Patented thread compensator assists with thread / make-up integrity. Reduces potential for thread damage during make-up
- Equipped with PRAYING MANTIS® pipe pick-up arms and automated HORSESHOE® single-joint pick-up elevator
- Designed to meet or exceed API 8C requirements
- Control panel operates patented FA-1®, PRAYING MANTIS® pipe pick-up arms, HORSESHOE® single-joint pick-up elevator and spider
- Patented interlock functionality ensures that either the spider or FA-1® slips are directed to the set position at all times, reducing the risk of dropped pipe



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Specifications

Casing size range	16 inches - 30 inches (406 millimeters - 762 millimeters)
Hoisting Capacity (API 8C) (May be limited by top drive crossover sub.)	500 tons (454 tonnes)
Push down force capacity	86,000 pounds (39,000 kilograms)
Torque capacity	70,000 ft-lbs (94,907 N-m)
RPM, continuous	85
RPM, maximum	100
Thread compensation	9 inches (229 millimeters)
Overall length (UK, pick-up arms - retracted)	See diagram below
Weight	10,000 pounds (4,536 kilograms)
Through bore	2 inches (51 millimeters)
Pressure rating (may be limited by packer cup)	5,000 psi (345 bar)
PRAYING MANTIS® Pick-up arm capacity	10 tons (9.07 tonnes) for 16 inches - 26 inches 12.5 tons (11.34 tonnes) for 26 inches - 30 inches
PRAYING MANTIS® Pick-up arm length	See diagram below
Top connection	6 5/8 inches REG
Max. circulation rate (BBL/min) (with valve removed)	10 (BBL/minute with valve)

