

# Trusted performance with a low maintenance design

Engineered and manufactured for rugged reliability and reduced maintenance, we've manufactured over 2,200 coiled tubing injectors so you can rely on our field-proven designs.

Whether you are packaging a new, custom-built unit with the HR-680 model injector or just replacing an existing one, our injectors have the performance and dependability that is required in the toughest oilfield conditions around the world.

Designed to handle 1¼- to 3½-in. coiled tubing strings, this model is lighter and more compact than its 5-series predecessor, increasing flexibility for onshore and offshore deployments. The HR-680 has an 80,000-lb continuous lifting capacity and 40,000-lb continuous snubbing capacity.

The free-floating traction systems enhance performance and reliability in the field by reducing dynamic loads on the coiled tubing and injector components.

## **Options**

- Manually or hydraulically deployed tubing guides available in 60-, 72-, 100-, and 120-in. radius sizes
- Multiple options for tubing depth and speed counters available
- Fold-down walkways
- Electronic or hydraulic load cells
- Fall protection device
- · Hydraulic lift bail

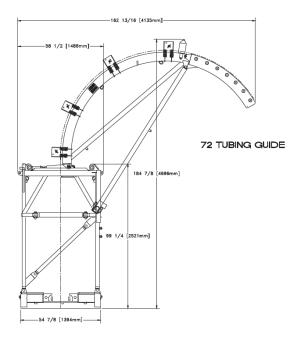
### **Upgrades and accessories**

- Remote tubing guide alignment (patent pending)
- · Condition-based monitoring (CBM) system
- Tubing guide load sense
- Transport stands with or without hydraulic tilt frame
- Injector or tilt frame-mounted stabbing winch
- Injector auto-lubrication system



# **HR-680 Coiled Tubing Injector**

Specifications	
Maximum speed (min. displacement)	200 ft/min
Maximum speed (max. displacement)	108 ft/min
Horsepower	150-hp continuous at 120° F
Lifting capacity through outer frame	95,000 lb
Lifting capacity from stripper	80,000 lb
Assembled weight: 100-in. gooseneck installed, no stripper	9,700 lb





 ${\it HR-680}\ in\ offshroe\ transport\ basket\ with\ tubing\ guide\ and\ pressure\ control\ equipment$ 

# **Drive system**

- Deep reduction, purpose-built gear drives
- Dual hydraulic motor input (variable displacement, piston motors)
- Counterbalance valves
- Dual oil seals on gear drive output shafts for long and reliable service
- Dual spring applied/pressure released brakes mounted between the hydraulic drive motors and gear drives

# **Traction system**

- Reduced remove/install time with our "quick disconnect" gripper system (1-3 seconds)
- Hardened and grooved single piece grippers
- Pocket-style elastomer gripper block suspension system
- Reduced injector chain maintenance due to sealedfor-life gripper carrier roller bearings
- Three independent sets of traction system hydraulic cylinders
- Single-strand 200-pitch heavy-duty roller chains