

8118 Coiled Tubing Motor Test Stand

The 8118 coiled tubing (CT) drilling motor test stand is a motor dynamometer test bench used to verify the performance of new coiled tubing motors as well as evaluate the performance of used motors being returned from the field.

The frame and brake system utilizes two clamps for securing the test piece, coupled with a fast and simple means to connect the motor to both the brake system and the fluid supply line. A pneumatically modulated disc brake provides accurate, repeatable load application and the precise control required to evaluate small diameter motors at low torque and slow speed.

The high pressure pump driven by an electric motor with a variable frequency drive supplies the coiled tubing motor with hydraulic fluid at pressure. The pump unit includes a fluid charge pump and lubrication pump as well as controls to ensure that the high pressure pump is being correctly operated. Within the tank, a suction strainer removes any contaminants entering the test loop to prevent damage to the pump, and a return strainer to catch anything coming out of the motor. An accumulator reduces flow pulsation created by the pump allowing for more accuracy during testing.

The control console of the 8118 motor test stand incorporates a custom designed touchscreen data acquisition system. The system compiles operator and motor information, records and stores the motor test results in a searchable database and provides the option to print the test results in both imperial and metric units.

Features and Benefits

- **Safe and easy to use** – Can be operated by one person.
- **Modular design** – Component orientation can be altered to best suit your shop space.
- **Accurate and reliable** – Return line suction strainer removes fluid contaminants and an accumulator reduces flow pulsations, producing more accurate test results.
- **Fully electronic control console** – Touchscreen system provides precise control of system flow and torque.
- **Custom designed software** – Captures test results and stores them in a searchable database for future reference.
- **Verified motor performance** – Instant test results confirm the performance of the motor.

Technical Data

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| Tool OD range | 1 ¹ / ₁₆ in. to 3 ¹ / ₂ in. |
| Torque capacity | 3,740 ft-lb |
| Tank capacity | 500 gal |
| Console dims | 18 in. x 18 in. x 48 in. |
| Frame and tank dims | 50 in. x 174 in. x 61 in. |

