



Always Striving Beyond Reaching

CHENGDU ASBR TECHNOLOGY CO., LTD.
Test Device Product Manual



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Tools research & development
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CONTENT

Product Introduction

Test Device

4.1 IntelliTorq™ Smart Hydraulic Makeup/Breakout Unit

01

4.2 Jar Tester

02

4.3 Automated Hydrostatic Tester

03

4.4 Mud Motor Dyno Tester

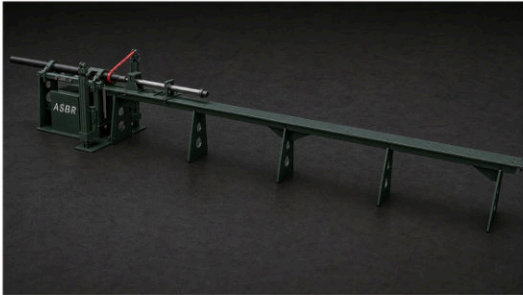
04

4.5 Multi-functional Downhole Tools Test Platform

05

PRODUCT INTRODUCTION-TESTER DEVICE

4.1 IntelliTorq™ Smart Hydraulic Makeup/Breakout Unit



IntelliTorq™ – intelligent makeup/breakout platform for downhole tools. Hydraulic + electronic control for clamping, makeup, breakout, tensile pulling, and torque recording. Easy operation, precise control, better assembly quality, less labor, higher efficiency.

PRODUCT FEATURES

- **All-Hydraulic Drive with Electronic Control:** Provides smooth, quick, and precise operation.
- **Integrated Process:** Combines clamping, making up, breaking out, and pulling functions for seamless workflow.
- **Real-Time Torque Recording:** Automatically records the actual torque value for each makeup operation.
- **No Damage to Workpiece:** The high-strength, flexible clamping structure won't damage the workpiece's outer surface.
- **Supports Various Tool Sizes:** The clamping module is adjustable to fit different diameters and lengths.
- **Safe and Simple to Operate:** Features full push-button or touchscreen control and includes a safety interlock system.

Item	Specification
Tool OD	1.5' -3.5'
Max Torque	7500 ft-lb
Max Stroke for Pull & Push	100 in
Control Method	Remote Control / PLC
Torque Recording Accuracy	±2%
Hydraulic System Pressure	0-2175 psi

Safety Device

Overpressure Protection, Emergency Stop Button, Anti-loose Clamping

*Specific parameters can be customized according to your needs.

4.2 Jar Tester



The ASBR Jar Tester is a high-efficiency testing device developed specifically for coiled tubing jars. By applying push or pull force with a hydraulic cylinder from the control panel, it can directly measure key performance parameters, such as the jar activation force and the delay time. This allows for a comprehensive evaluation of the jar's working condition.

KEY FEATURES

- **Ergonomic Design:** Optimized for operator comfort and efficiency, the work area is within natural arm's reach, reducing fatigue from frequent bending.
- **High-Strength Integrated Structure:** Uses a one-piece base for easy installation with no special site requirements. The dual-rail slide design provides stable and reliable operation.
- **Safety Protection:** The internal bottom plate on the rail protects personnel from falling objects during testing, ensuring operational safety.
- **Integrated Bidirectional Hydraulic System:** Push and pull forces are provided by the same internal hydraulic cylinder, giving the unit a simple, clean look and easy maintenance.
- **Flexible and Efficient Positioning:** Uses an equal-strength stepped pin structure with just two fixed pins to meet the testing needs of different jars. This makes adjustments easy and efficient.

Tool OD in	Stroke in	Tool Length in	Max Force lbs	Dimension in	Control Method
1.69-3.5	23.6	47.2-120	36	220x28x32	Remote

*Specific parameters can be customized according to your needs.

4.3 Automated Hydrostatic Tester



Automated Hydrostatic Tester – high-precision indoor pressure testing for downhole tools. Set parameters via software, system auto-runs pressurize/hold/depressurize. Records data, generates curves & reports – automates and standardizes testing, ensures sealing & structural integrity.

PRODUCT FEATURES

- **Highly Automated and Simple to Operate:** No manual intervention is needed. After you input the parameters, it's a one-touch start, which reduces human error and improves testing efficiency and consistency.
- **Precise Control and Stable Output:** The high-precision hydraulic pump and closed-loop control system provide fine pressure regulation with minimal fluctuation, ensuring reliable test results.
- **Full Data Collection and Recording:** The system automatically generates a pressure curve for the entire test, with functions to save, export, and print the data for later analysis and archiving.
- **Comprehensive Safety Mechanisms:** The system includes multiple safety features, such as over-pressure protection, automatic shutdown for anomalies, and pressure relief protection, ensuring a safe and reliable operation.
- **Customizable:** Specialized fixtures and test connections can be customized to meet the needs of different downhole tool sizes, interfaces, and pressure ratings.

Max Press. psi	Test Medium	Control Method	Pressure Accuracy	Holding Pressure Time	Data Record
15000	Water	Fully Automatic	±0.1 MPa	User Defined	Pressure/Time

*Specific parameters can be customized according to your needs.

4.4 Mud Motor Dyno Tester



Mud Motor Dyno Tester – simulates downhole conditions, tests RPM and torque across flow/pressure ranges. Ensures motor performance pre-run-in, reduces operational risk.

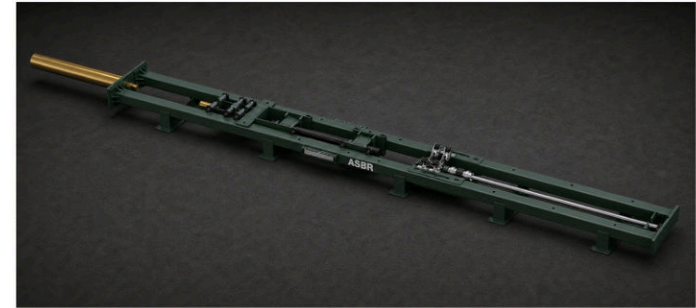
PRODUCT FEATURES

- **Full-Process Performance Confirmation:** Every motor must complete a test before being used to verify its performance within the specified input and output parameters, ensuring the equipment is in a reliable state.
- **Real-Time Data Acquisition:** It can measure and record key operating parameters (flow rate, differential pressure, RPM, torque, and power) in real time. This allows engineers to evaluate equipment status and performance trends.
- **Compatibility with Surface Testing Systems:** The dyno can be used with surface hydraulic, pneumatic, or electronic testing systems to improve testing efficiency and data accuracy, ensuring overall operational safety.
- **Increased Efficiency, Reduced Risk:** By verifying motor performance, the tool helps improve operational efficiency and reduce the costs associated with operational risks.

Motor OD in	Max Flow Rate GPM	Max RPM	Max Torque ft-lb	Maximum Output Power hp	Max Press. psi
1 1/2-3 1/2	160	1000	2213	134	2900
3 3/4-6 3/4	1600	300	22130	670	2900

*Specific parameters can be customized according to your needs.

4.5 Multi-functional Downhole Tools Test Platform



The Multi-functional Downhole Tools Test Platform is a high-end, comprehensive testing system designed for downhole tools. It features powerful compatibility, precise data acquisition, and an intuitive, visual operating experience. The platform uses a modular, integrated design with multiple high-precision sensors that can acquire, display, and record key performance parameters in real-time, including flow rate, pressure, torque, axial force, displacement, impact load, frequency, and RPM.

This platform can test individual downhole tools and perform combined tests on a complete tool string (BHA). It is a vital tool for performance verification, design validation, and quality control before tools are run into the well.

PRODUCT FEATURES

1. **High Compatibility and Modular Design:** The platform supports quick changes of fixtures and connectors to accommodate various downhole tools and BHA combinations. Its integrated structure is compact, with a small footprint, making it suitable for different testing locations.
2. **Digital Acquisition and Graphical Display:** Equipped with high-precision sensors, the platform captures multiple key technical parameters in real-time. The control console visually displays data curves and supports automatic recording, export, and historical data analysis.
3. **Industrial-Grade Control System:** The system uses an industrial-grade PLC control core with excellent anti-vibration and anti-interference performance. It also has a built-in emergency stop mechanism to ensure safe operation.
4. **User-Friendly Operation:** The control console integrates controls and data display with a clear, intuitive interface.
5. **Visual Process Monitoring:** The platform is equipped with high-resolution cameras that record key actions during the testing process. It supports video playback for failure analysis or technical archiving.

Dimension in	Flow Rate GPM	Press. psi	Tool OD in	Tool Length in	Max Force klbs
472×41×20	160-1600	2900	1.5-6.75	11.8-315	160

*Specific parameters can be customized according to your needs.