

Hydraulic & Hydrostatic Test Rigs

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Bespoke design, development, manufacture, and commissioning of fluid power rigs for production sign-off, component testing or custom requirements



HYDROTECHNIK UK
TEST ENGINEERING LTD

Hydrotechnik UK Ltd is one of the UK's leading test and measurement equipment distributors and manufacturers, servicing a wide range of industries since 1990.

We have extensive experience in the design, development, manufacture and commissioning of fluid power test rigs for end of production sign off or component testing. Our test rigs are used in demanding and 'mission critical' applications for manufacturing quality control, plant maintenance or research and development.

Users of Hydrotechnik test equipment rigorously test a huge range of components to ensure they are fit for purpose and ensures optimum productivity and quality control.

Our deep understanding of pressure, temperature, flow, RPM, vibration, cleanliness & torque test and logging gives us a great insight when it comes to designing cost effective solutions for testing & proving components and systems. Our systems can easily record at the rate of up to 10,000 readings per second if required. We can test many channels of data simultaneously and provide archiving software and graphical reports. The software can be written to give simple operator led control of the test procedures and simple green/red pass or fail warnings. The operator can add testing notes, serial numbers etc, for accurate traceability. Our engineers take a full brief from the client and tailor make a test rig and software that ensures the finished product is efficient to use and enhances productivity. Whatever your application, Hydrotechnik will deliver the right testing and measurement solution for you.

The complete turnkey solution in five steps

Hydrotechnik UK's commitment to providing clients with high performance test rigs extends beyond simply building and installing. Our rich experience of test and measurement allows us to design and build the appropriate rig for your application. Furthermore, our five-step plan guarantees you peace of mind throughout the entire process.



INITIAL CONSULTATION

From the very first conversation with you, our technical engineers will gain a broad understanding of your testing requirements. Subsequently, we aim to rapidly identify a solution for you, leading into the design phase after acceptance of proposal.



DESIGN & FULL BRIEF

We will narrow down the specification and create a full mechanical plan using our in-house 3D CAD systems, as well as designing control software and instrumentation to suit the items being tested. A comprehensive brief will be provided, ensuring complete clarity between both parties. Meanwhile, a risk assessment will be completed, so that we are prepared to progress in the safest way possible.



BUILDING & INSTALLATION

Every test rig is manufactured under ISO 9001 procedures, in line with safe engineering practices & standards. Additional site acceptance and factory acceptance tests are all included in the process along with comprehensive user operating manuals.



STAFF TRAINING

Our dedication to your solution does not end after installation and a user manual. The technical team will spend time training your users on how to operate the test equipment appropriately. After this, your staff will have the knowledge of all hardware and software procedures.



SERVICE

Test rig maintenance is crucial to maintain accuracy and life span of your product. We can provide additional service programs to ensure the system is kept running smoothly, minimising the possibility of costly downtime. Our in-house calibration department also guarantees a fast turnaround to UKAS standards, should you need equipment recalibrating.

Hydrotechnik UK supply specialist test rigs to:





State-of-the-art test rig solutions

Our in-house engineering team and test/software engineers ensures that we have complete control of the entire design, construction and implementation of a fully functioning rig that meets customer's exacting demands.

Pressure

- Variable & static pressure control, from 40 mbar to 4,200 bar
- Pressure test mediums: oil, kerosene, diesel, water, air & Nitrogen



Flow

- Variable & fixed low rates from 0.001 L/min up to 1,000 L/min.
- Flow test mediums: oil, kerosene, diesel & water.



Temperature

- Media temperature control from -20°C Up to 150°C.
- Temperature test mediums: oil, kerosene, diesel & water.



Flushing / Cleanliness

- Flushing of components, hoses, radiators and heat exchangers to ISO cleanliness requirements with simultaneous pressure, temperature or flow testing
- Flushing mediums: oil, kerosene & diesel.



Torque / Displacement / Force

and much much more...

Test & measure torque, position, compression / tensile performance and many other testing criteria on request!

FLEXIBLE USER INTERFACE

SPECIFICALLY DESIGNED CONTROLS TO SUIT EVERY APPLICATION.



IN-DEPTH REPORTING

TESTS DATA IS LOCALLY LOGGED TO PROVIDE QUALITY ASSURANCE & TRACEABILITY WITH OPTIONAL ONE CLICK REPORT CERTIFICATION & CLOUD DATA MANAGEMENT SERVICES IF REQUIRED

CUSTOM FRAME DESIGN

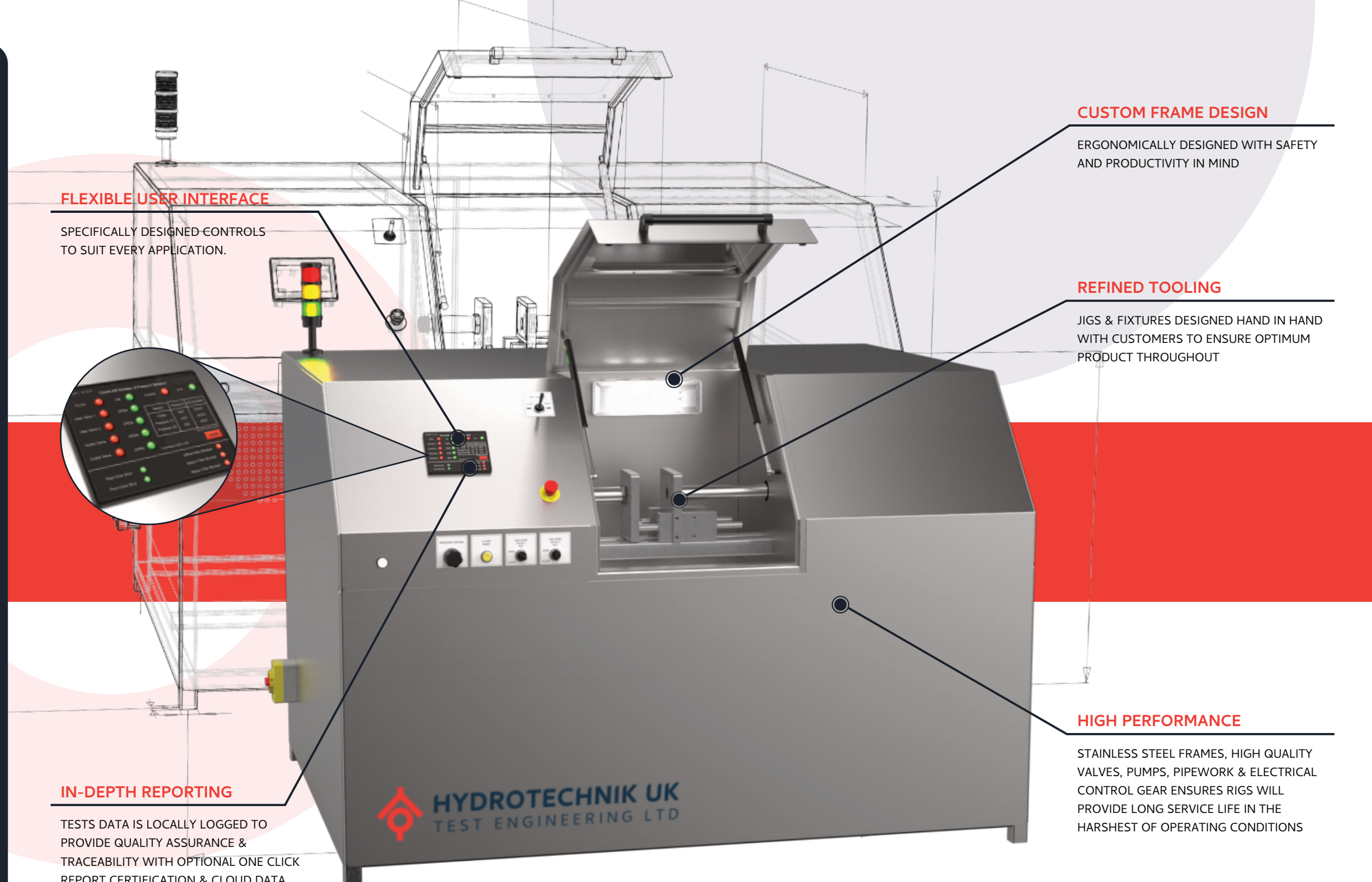
ERGONOMICALLY DESIGNED WITH SAFETY AND PRODUCTIVITY IN MIND

REFINED TOOLING

JIGS & FIXTURES DESIGNED HAND IN HAND WITH CUSTOMERS TO ENSURE OPTIMUM PRODUCT THROUGHOUT

HIGH PERFORMANCE

STAINLESS STEEL FRAMES, HIGH QUALITY VALVES, PUMPS, PIPEWORK & ELECTRICAL CONTROL GEAR ENSURES RIGS WILL PROVIDE LONG SERVICE LIFE IN THE HARSHTEST OF OPERATING CONDITIONS



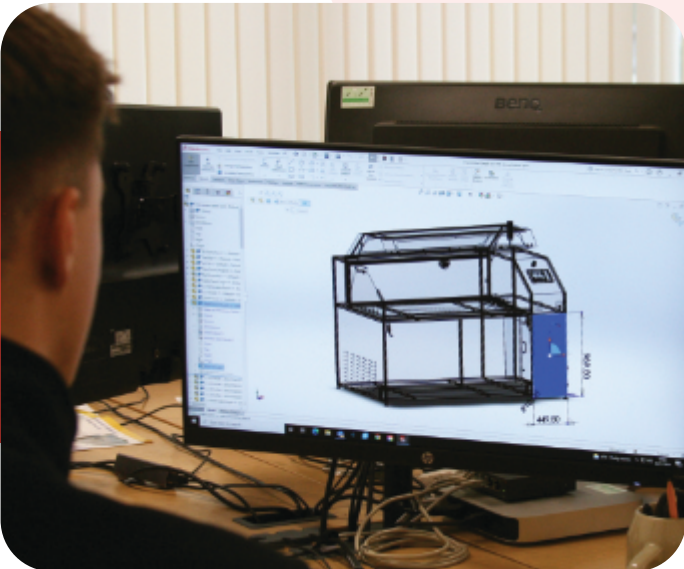
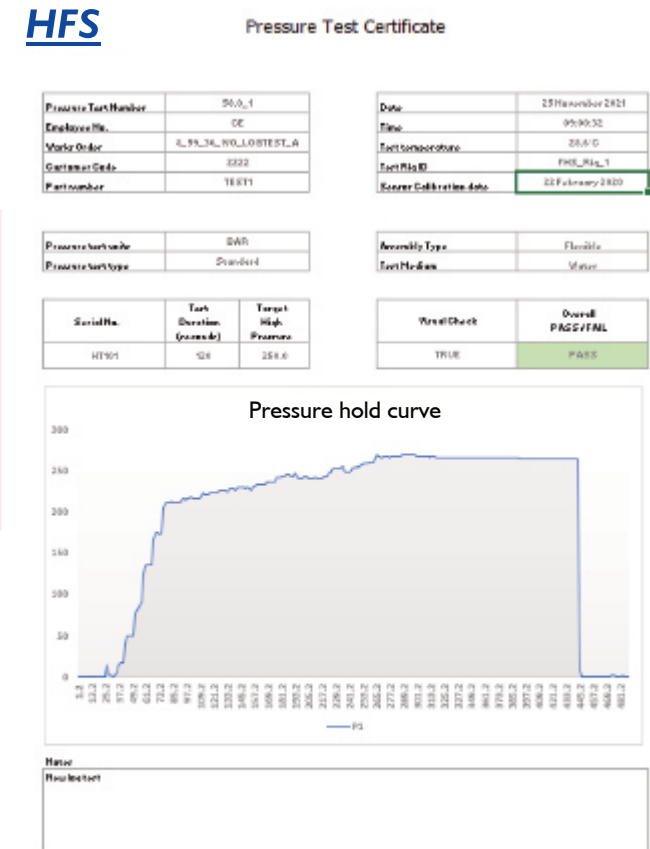
Control, Test, Datalogging & Reporting Software

All developed in-house

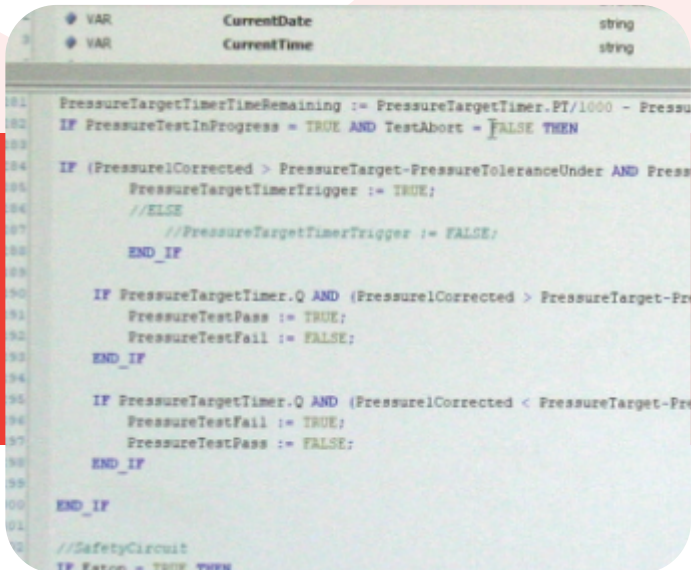
With over 30 years' experience of testing, datalogging and test rig development Hydrotechnik UK is well positioned to help create software to test components and provide reporting.

Our in-house team build software to control the test rig and export certificates or data for analysis.

We also have experience in pushing test data to cloud platforms for remote monitoring, alerting, and archiving.

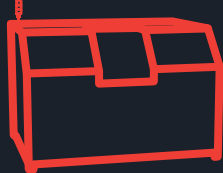


Certified that the whole of the supplies detailed hereon have been inspected and tested in accordance with the requirements of your order, and unless otherwise stated above conform in all respects with the requirements of the order.



Recently Completed Rig Examples & Case Studies

- Formula One Heat Exchanger Passivation Rig
- Brake Disc Testing
- Custom Hydrostatic Test Rig and Tooling For Plastics Manufacturer
- Dynamic Seal Testing Rig
- Flow and Temperature Hydraulic Test Bed
- Hose Test Rig For Motor Racing Component Supplier
- Hydraulic & Electrical Vehicle Testing Rigs
- Hydraulic Pump Test Rig
- Hydrotechnik UK Test Rig Helps to Develop and Promote Market Leading Faucet
- Purpose Built Test Rig for Aerospace Components
- Trailer Simulator Test System
- Valve and Hose Testing Rig
- End of Production Test Rig for Road Sweeping Manufacturer
- Hydraulic Motor Testing Rig
- Hydrostatic Testing Rig for Electrical Fuse Bodies
- Nitrogen Regular Pressure Test Rigs for Hoses
- Cylinder Pressure Testing Rig for National Auditor
- Leak Testing Rig for Aerospace Components
- Pressure Testing Rig for National Auditor
- Hydrostatic Pump Testing Rig
- Cylinder Pressure Testing Bench
- Burst Testing Bench for UK Hose Manufacturer
- Hydraulic Pump Test Rig
- Pump Leak Testing Rig
- Hydrostatic Leak Testing Rig for Fire Suppression Valves
- Hydraulic Pressure Testing Rig for Aerospace and Defence Supplier
- Pressure and Flow Testing Rig for Leak Training Heat Exchangers
- Burst Cyclic Testing Service



Servicing and Ongoing Support



We provide full on site training, servicing, and ongoing technical support to ensure test rigs perform reliably and accurately. Each test rig has a dedicated maintenance manual including part numbers for critical items.

On-site yearly calibration of sensors is performed via our dedicated calibration department to ensure accuracy and traceability to national standards.



If requirements change, or new test routines need to be added, we can update the test software and install it on-site.

We are committed to ensuring your test rig performs reliably year round.

Call us on **+44 (0) 115 900 3550**
for more information and to
obtain our other brochures:

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Discover more at hydrotechnik.co.uk/test-rigs

