EFFICIENT QUALITY ASSURANCE

THE TEST-RIG

Irreplaceable for efficient quality assurance

Get complete traceability and documentation

Simulate production setup and test your mould before use

Measure and optimise your energy efficiency

Ensure efficient troubleshooting and minimal downtime

Document and benchmark new moulds

Inspect and maintain older moulds

Easy wireless or wired connection to office network

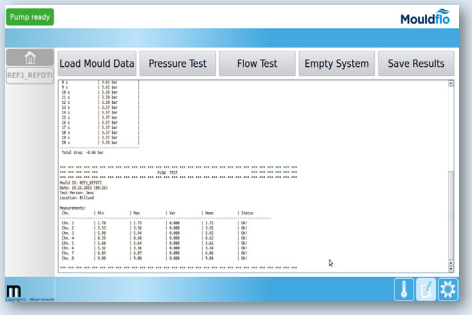
Mouldflo

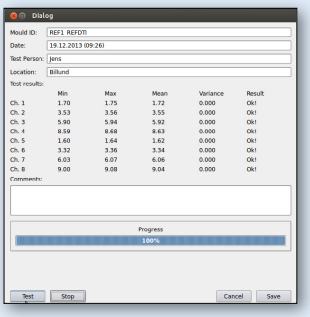
Simulate a production setup for testing

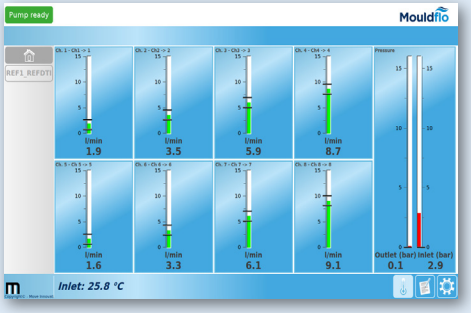
The Test-rig offers you a unique way to simulate a production setup and ensure the quality of your moulds.

Equipped with its own water tank, pump, manifold and a full software setup, it allows you to document, validate and maintain your moulds by testing them in a practical all-in-one tool.

Features







Flow, temperature and pressure test

With the Test-rig, the cooling channels can be analysed and tested.

The flow and pressure can be controlled exactly to simulate the production setup.

All details displayed on the screen:

- Flow
- Pressure inlet
- Pressure outlet

Advanced Pump Technology

The Test-rig is equipped with a high-tech pump, which allows you to control flow volume and inlet pressure and to mimic the production environment. Everything is controlled on the touch panel. The integrated water tank will provide water for flow and pressure tests.

After testing and analysing the mould, a convenient feature allows you to air purge water out of the system, simply by using the “empty” function.

Test Reports

The software is designed to give a simple and quick overview. From the monitor all functions can be controlled and reports can be saved and exported as validation for a maintenance or as documentation for a newly developed mould.

Following data can be logged and saved as reports:

- Flow volume/capacity
- Pressure loss through the mould
- Optimisation analysis

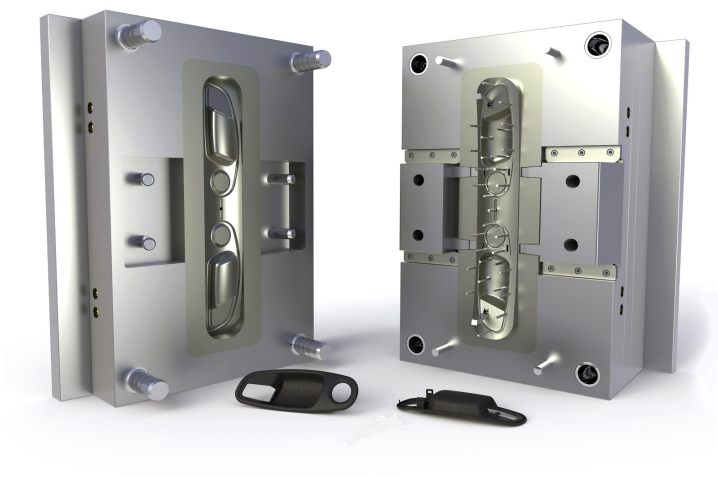
Why mould makers (also) benefit from the Test-rig

The Test-rig is an innovative solution that is both convenient, time-saving and precise. It enables mould makers to ensure that their customers' moulds are always running in top condition with optimal cycle times. It ensures efficient work processes as well as flawless injection moulded parts.

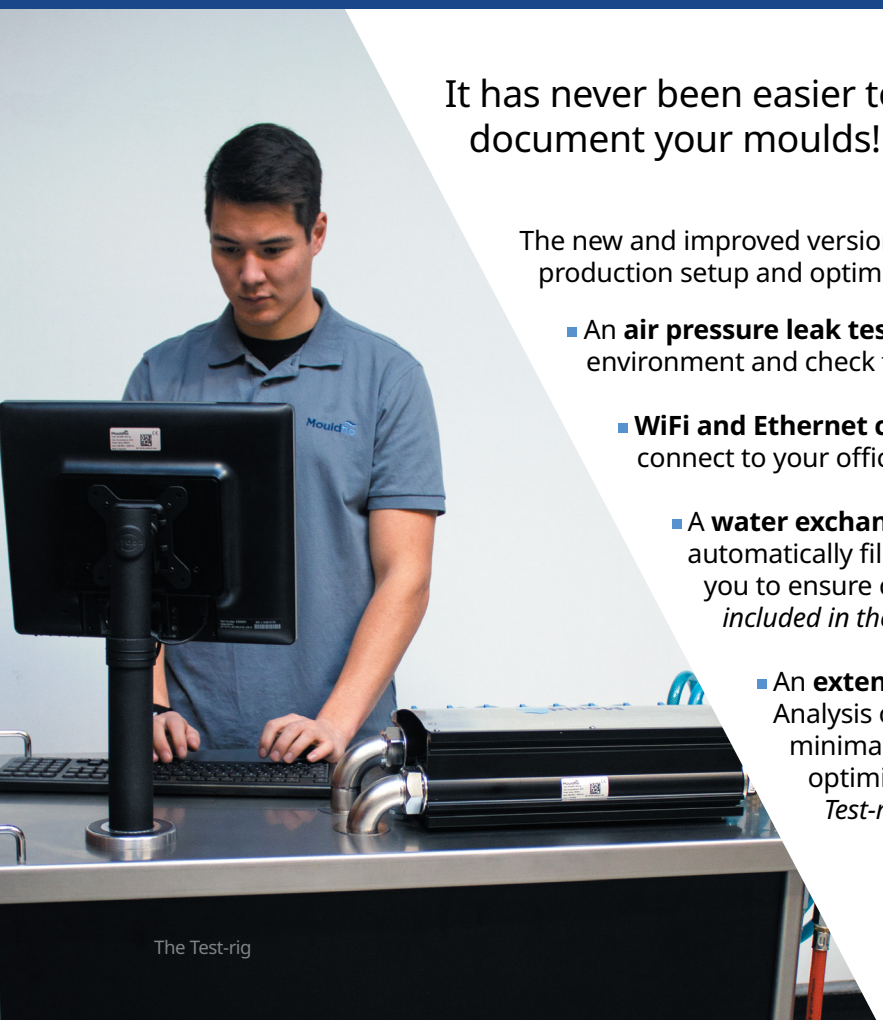
By implementing the test-rig in your work process, your team will be using the newest technology, that makes it possible for your customers to get shorter cycle times, high quality parts and complete documentation.

The Test-rig enables mould makers to:

- Test, analyse and certify a newly build mould to make sure that it is in optimal condition with documented results.
- Generate crucial data to share with their customers
- Store the data in case any issues arises later in the life of the tool. This provides a time-saving process to identify, where a problem is lurking and it minimizes the downtime for customers.



The new generation - Test-rig 2.0



The Test-rig

NEW

It has never been easier to test, maintain and document your moulds!

The new and improved version of the Test-rig, makes it even easier to simulate a production setup and optimise your production. The new features include:

- An **air pressure leak test** - a safe and easy way to ensure a clean-room environment and check for leakages without overflowing water.
- **WiFi and Ethernet connection** through the Test-rig, allowing you to easily connect to your office network and to share the test results.
- A **water exchange system**, that makes it possible for you to automatically fill and purge water through the software. This allows you to ensure clean water for the testing at all times *(NB! Only included in the Test-rig Standard & Premium Solution).*
- An **extended software solution**, that includes an Optimisation Analysis of how to get the maximum flow on a mould with the minimal pressure possible, thereby allowing you to significally optimise your energy consumption *(NB! Only included in the Test-rig Premium Solution).*

An optimisation of any injection moulding production

The Test-rig allows the user to get vital information, that they will benefit from, all through the life cycle of a mould. By validating a new mould before it is put into production, the factory gets benchmarking measurements, that they will need for all future performance analyses – replacing an unreliable estimate with exact data.

Through the years we have learned that the Test-rig data can improve practically all work processes related to a mould - saving man hours, shortening downtime and optimising troubleshooting and maintenance.

Murali Rajendran
Software Architect, Mouldflo

"The Test-rig gives us the reports and technical data required to optimise a tool's cooling efficiency.

Aalbers Tool and Mould Inc.

Specifications

Test-rig Solutions	Included Features
Basic Solution	Flow and Pressure Test, Air Pressure Leak Test, WiFi and Ethernet Connection
Standard Solution	Flow and Pressure Test, Air Pressure Leak Test, WiFi and Ethernet Connection, Water Exchange System
Premium Solution	Flow and Pressure Test, Air Pressure Leak Test, WiFi and Ethernet Connection, Water Exchange System, Extended Software Solution

NEW

Control	
Manifold type	Aluminium
Display	15" touch screen
Control	Microprocessor based / computer based
Comunication ports	Ethernet / USB
Storage (log and settings)	Internal / USB (optional)
Number of zones	8 Standard
Display units (flow)	Litres / gallons switchable
Display units (temperature)	°C / °F switchable
Warning limits	Customisable

Flow sensor	
Sensor type	Vortex Flowsensor (VFS)
Range (Flow)	1-15 litres/min or 2-40 litres/min
Accuracy (Temperature)	15 - 90°C: +/- 0,5 °C 0 - 120°C: +/- 1 °C
Accuracy (Flow	1% fs
Response time	< 1 s
Resolution (Temperature)	0.5°C

Pump and Tank	
Pump Capacity	Up to 160 litres/min
Pump Pressure	0-4 Bar
Power Supply	EU: 3-Phase (3L+N+PE), 230V/400V, 50Hz, 2.5 kW, 4.4 A US: 3-Phase (3L+PE), 3 x 480V, 60Hz, 2.5 kW, 4.4 A
Tank Capacity	60 litres

Mouldflo

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