SCITEQ | RCP small scale

function

The **SCITEQ** RCP small-scale steady-state test (S4 test) is developed for determination of arrest or propagation of a crack initiated in a thermoplastic pipe intended for the supply of gases or liquids at a specific temperature and internal pressure. Built according to ISO 13477.

highlights

- high accuracy RCP tool
- "plug in" to operate installation
- quick shift sample tooling
- high quality components
- high safety level
- control stand with touch screen
- Remote support possible

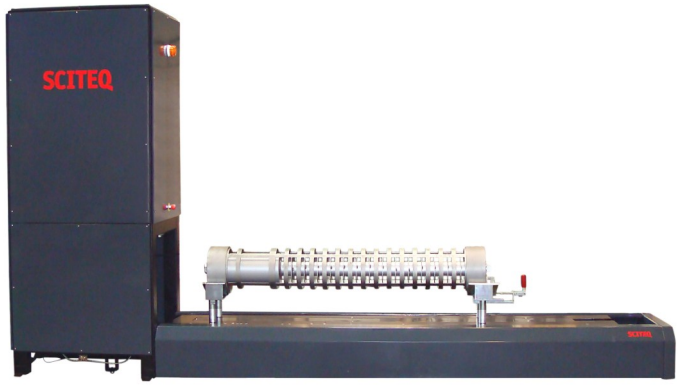
version 01/2014

features

The **SCITEQ** RCP is designed with main focus on speed of use, accuracy, sturdy solid construction, and flexibility in use.

The specified test temperature, pressure and the measured and entered crack length are shown on the **touch screen** and can be exported to Excel for further processing. Further, we offer **remote support** via our own software.

Using a stroke cylinder at **high air pressure** ensures maximum energy at impact point. **Impact speed** can be regulated by means of the pre-pressure for the stroke cylinder.



We wish to give our partners the tools to produce to the highest standard, while helping them to produce as cost effectively as possible with Q.C. tools throughout the factory.

construction

The **SCITEQ** RCP system is built up of three main parts, the RCP machine with stroke cylinder and control panel, the containment cage with end closures complete for each pipe size and a tool kit complete for each SDR (Standard Dimension Ratio). Each tool kit includes anvil, striker blade, containment cage spacers and decompression baffles. Due to the unique design of the end closures and containment cage it is **fast and easy to change** from one pipe size and/or SDR to another.

Rapid decompression ahead of the propagating crack is retarded by internal baffles and by an external cage which restricts flaring of the test pipe at the edges of the fracture. The test pipe is subsequently easily examined to determine whether arrest or propagation of the crack has occurred. Similarly, from a series of such tests at different temperatures but at constant pressure or hoop stress, the critical temperature for the RCP can be determined.

Optional is a **fully automatic conveyer** system for easy loading of pipe samples.

The system also requires a conditioning zero degree tank or conditioning chamber for conditioning the pipe sample prior to testing. Please contact SCITEQ for more information.

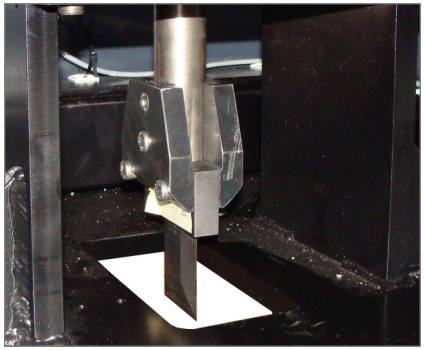
associated | equipment

|essential equipment

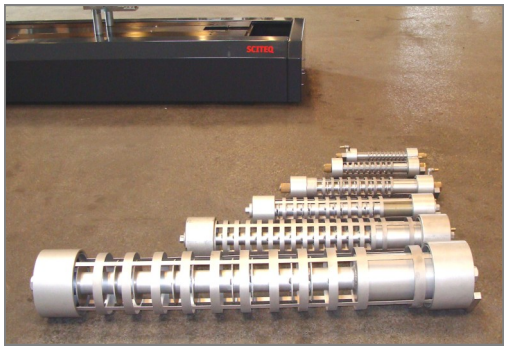
- 0° C tank
- conditioning chamber
- laboratory freezer
- laboratory saw

technical specifications | RCP small scale

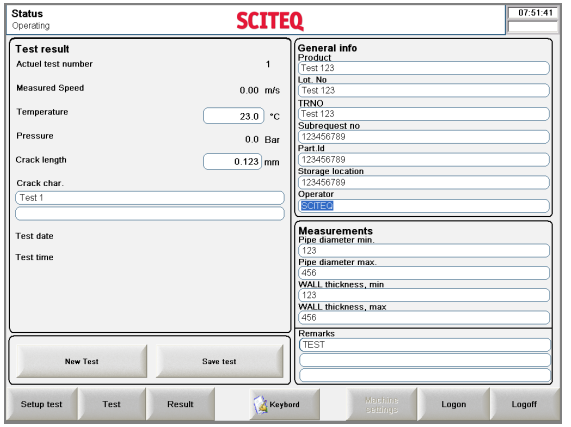
test pipe size	pipe diameter up to max. 630 mm
stroke cylinder	high air pressure cylinder
impact speed	regulation of impact speed via pre-pressure for cylinder
speed of the striker blade	15 +/-5m/s
pressure transmitter	0-25bar, class 0.3% full scale measuring accuracy
pressure accuracy	+/-1% of set pressure
air / gas pressure supply	min. 10 bar
software	logging of test data such as speed and pressure. Test data and entered data can be exported to Excel.
remote support	online support via remote access
electrical supply	220-240V AC, 50-60Hz + PE, fused supply 10amps
dimensions (L x W x H)	dependant on max. pipe diameter
option	fully automatic conveyer system (quick locking system as standard)

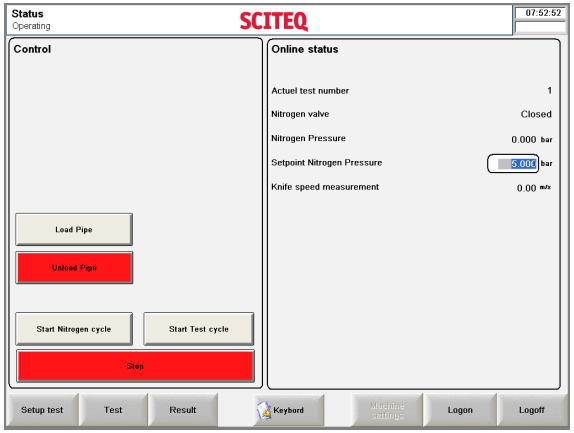


RCP knife ready to penetrate the pipe



a number of containment cages for individual pipe diameters.





SCITEQ software for documenting test results from the RCP tester.

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