

Competence creates Confidence.



• Model no. 1629

RCP-S4-TESTER

ISO 13477

The tester model 1629 is used to determine the resistance of plastic pipes to rapid crack propagation under internal overpressure and low temperatures in accordance with ISO 13477 (Rapid Crack Propagation).



Determining the critical pressure

Reliably determining the critical pressure for crack propagation

To determine the resistance to rapid crack propagation, a cooled, straight section of pipe is put under internal pressure and subjected to the impact of a striker blade at the end of the pipe, which is intended to trigger a rapidly propagating crack in the axial direction of the pipe.

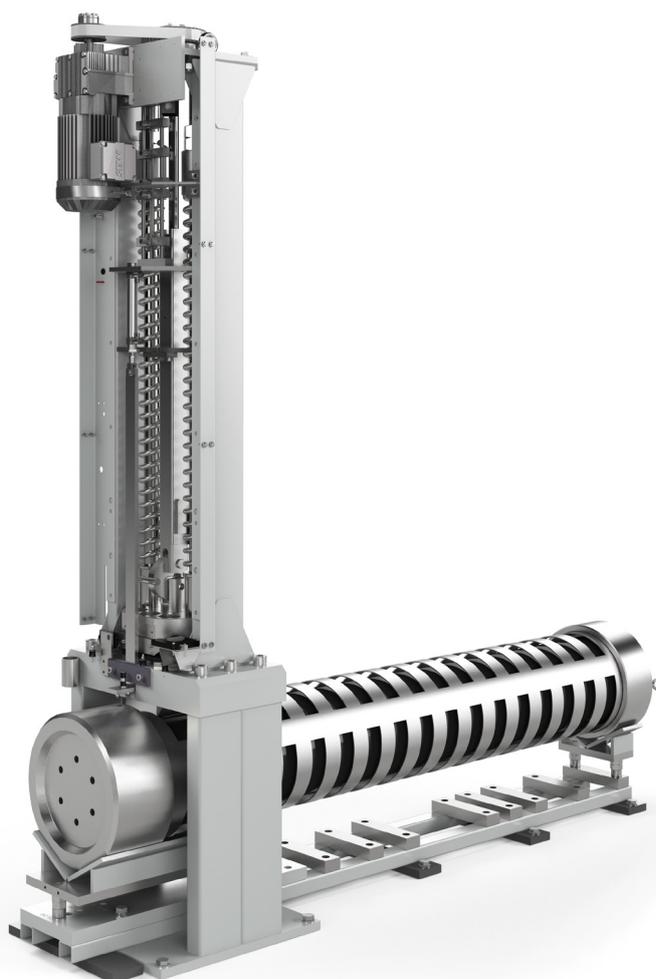
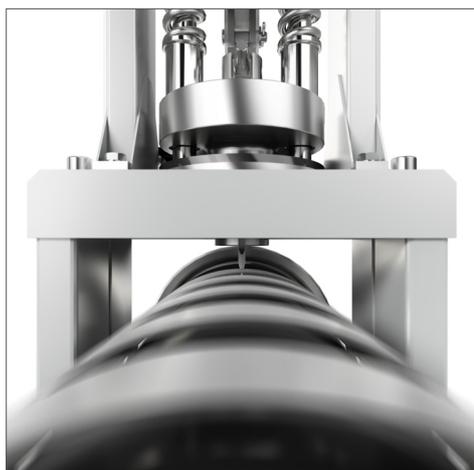
In order to prevent rapid pressure reduction in front of the propagating crack in short pipe samples, concentric damping discs are placed at defined intervals inside the specimen and a cylindrical cage is placed around the sample, which limits the bulging of the pipe at the edges of the fracture.

In a test series, the critical pressure or the critical temperature can be determined for crack propagation based on the crack lengths.

Structure

The device consists of the following main assemblies:

- Lifting column with impact device
- Sample holder
- Control panel



Standard features

- Basic unit with sample holder up to 250 mm
- Three selectable strike speeds: 10, 15 and 20 m/s
- Parameterisation via electronic controller
- Motor-operated tester
- Easy connection of the sample via quick-release coupling
- Easy-to-replace sample holders
- Automatic reduction in pressure at the end of the test
- Standard feature
- Measurement of the precise impact speed of the blade via a photoelectric barrier
- The automatic test procedure guarantees that the test is performed well within the specified testing time
- User is protected by operation of the controller outside of the hazardous area (e.g. behind a suitable protective wall at a safe distance from the tester frame) or outside the test room
- Acoustic and visual signals

Options

- Test kits and corresponding striker blades
- Test chamber/cell
- Assembly and disassembly equipment

Design of RCP-S4 TESTER

V1629-0005

Pressure transducer	bar	Max. 25
Compressed air supply		From 30-bar external compressed air supply unit (max. 40 bar), min. 750 l/min (not included in the scope of delivery)
Permissible ambient temperature	°C	+5 to +30
Noise emission	dB(A)	<70 at rest, ≥120 upon blade impact (depending on sample diameter)
Tester width x depth x height	mm	500 x 2060 x 2100
Weight of tester	kg	410
Control panel width x depth x height	mm	700 x 410 x 1100
Weight of control panel	kg	90
Voltage data		230/400 V 50/60 Hz special voltage on request

Accessories of RCP-S4 TESTER

Product	Description	Model no.
	Cooling cabinet	H3026
