

Competence creates Confidence.



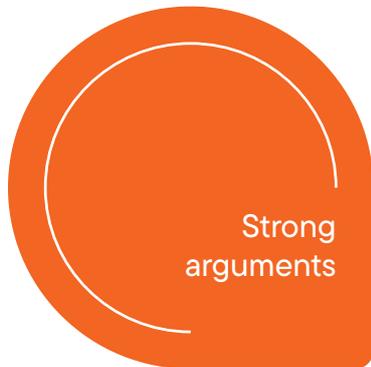
• Model no. 1713

FALLING WEIGHT TESTER

ISO 11173

ISO 3127

ASTM D 2444

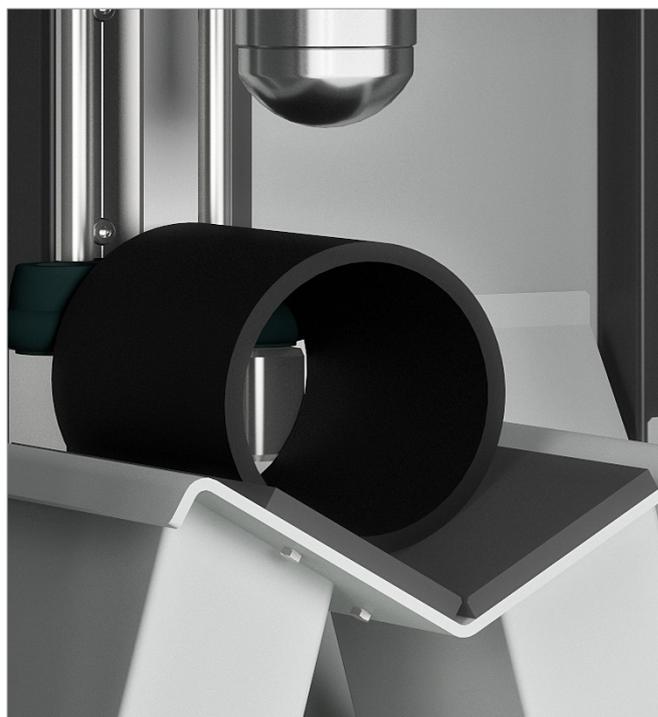
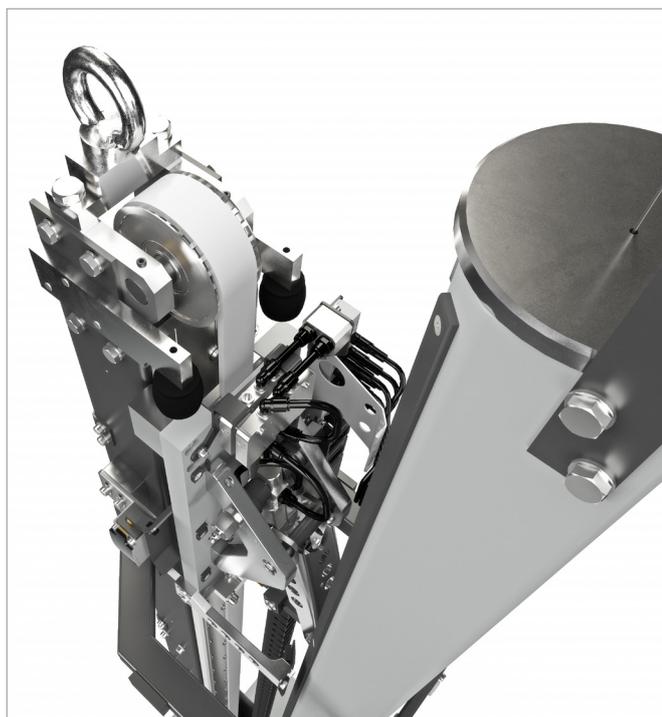


The falling weight tester is used to determine the external impact resistance of thermoplastic pipes using the staircase or round-the-clock method.

The falling weight tester is designed for automated material testing of thermoplastic sections of piping of varying circular cross sections in terms of their resistance to external impact forces. The tester has an adjustable drop height and can be used with a variety of drop weights. The testing procedure is measured and logged electronically.

A round of testing

- The drop weight is transported to the height required for the test in question (impact) by a lifter and then dropped. The lifter moves back down as the weight drops.
 - Once the drop weight has hit the sample, the catching mechanism places the weight back on the lifter. The falling weight tester is then prepared for the next test (using the same drop weight).
 - For each stroke, the drop height (offset) can be increased or decreased at the touch of a button. The value is stored centrally and can be changed at any time.
 - A screen dialogue allows an individually adjustable comment in text form to be added to each stroke.
- If a USB mass storage device is connected, it is possible to save up to 250 impacts per test cycle (data set).
 - The testing device has been developed for the following test procedures:
 - Determination of resistance to external blows using the staircase method.
 - Test method for resistance to external blows using the round-the-clock method.
 - Determination of resistance to external blows round-the-clock method.
 - Test of impact resistance of thermoplastic pipes and fittings made of plastic by means of a drop weight.



Standard features

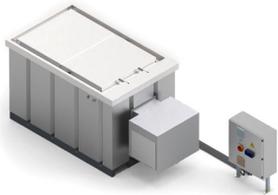
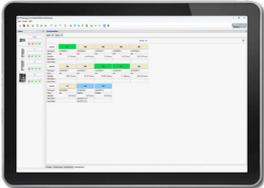
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|--|---|
| ● Drop test attachment with drop pipe | ● Sample holder |
| ● Operator terminal with control cabinet | ● Convenient operation and clear visualisation via integrated touch display |
| ● Two-hand operation when activating the test procedure to protect the operating personnel | ● Test can only be carried out when the test chamber is closed |
| ● Precise weight positioning thanks to servo motor | ● Automatic measurement and saving of falling speed on impact |
| ● Evaluation of measurement results based on H50 value or TIR | ● High impact frequency of up to 25 impacts within 60 s (at a drop height of 2 m) |
| ● State-of-the-art PLC | ● Interface to IPTDataLogging® |
| ● CE conformity | ● Swing doors |
| ● Data input and evaluation of results via user interface (PC) | |

Options

- | | |
|-----------------|---|
| ● Sliding doors | ● Data input, evaluation and archiving of testing data via IPTDataLogging software (PC) |
| ● Cooling cells | |
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| Design of FALLING WEIGHT TESTER | | V1713-0060 | V1713-0061 | V1713-0062 | V1713-0070 | V1713-0071 | V1713-0072 |
|--|-------|--|------------|------------|------------|------------|------------|
| | | Max. sample diameter | mm | 710 | 1000 | 1600 | 710 |
| Min. sample diameter | mm | 20 | | | | | |
| Permissible ambient temperature | °C | +5 to +30 | | | | | |
| Permissible relative humidity | % | Max. 70 | | | | | |
| Noise emission | dB(A) | < 70 at rest (noise generated on impact of the falling weight depending on the sample) | | | | | |
| Width of tester | mm | 1650 | 2250 | 3860 | 980 | 1280 | 2000 |
| Depth of tester | mm | 730 | 730 | 825 | 670 | 710 | 800 |
| Height of tester – drop height 2 m | mm | 4140 | 4280 | 4980 | 4140 | 4280 | 4980 |
| Height of tester – drop height 3.1 m | mm | 5240 | 5380 | 6080 | 5240 | 5380 | 6080 |
| Height of tester – drop height 4 m | mm | 6140 | 6280 | 6980 | 6140 | 6280 | 6980 |
| Width of control cabinet | mm | 640 | | | | | |
| Depth of control cabinet | mm | 460 | | | | | |
| Height of control cabinet | mm | 1030 | | | | | |
| Voltage data | | 230/400 V 50/60 Hz special voltage on request | | | | | |
| Design of FALLING WEIGHT ATTACHMENT | | V1713-0080 | V1713-0081 | | V1713-0082 | | |
| | | Max. drop height | m | 2 | 3.1 | 4 | |
| Max. impact frequency (dependent on operator) | 1/min | 25 | 19 | 16 | | | |
| Accuracy of drop height adjustment | mm | ±10 | | | | | |
| Drop weights | kg | max. 16 | | | | | |
| Nose design | | Depending on the applicable standard | | | | | |
| Lowest drop height without double impact (typical) | m | 0.5 (dependent on sample) | | | | | |
| Speed error margin (typical) | | < 5% of the theoretical falling speed | | | | | |

Accessories for FALLING WEIGHT TESTER

| Product | Description | Model no. |
|---|---|---------------|
|  | Zero Degree Tank/cooling cabinet | 1763 H3026 |
|  | Testing data management software IPTDataLogging® | 1780 |
