

## Ductilometer 1500 mm digital

EN 13398 - EN 13589 - EN 13703 - ASTM D113 - AASHTO T 51 - GOST 11505-75 for the determination of load ductility and elastic recovery of bitumen.

Stainless steel housing with an insulated water bath, hinged lid with glass cut-out as well as stepper motor-driven traction device with constant feed speed and digital displacement measuring device. The included software allows user-oriented sequence programming and controls the test sequence with an online output of force and displacement and test evaluation with a calculation of planimetry.

- ▶ Simultaneous testing of up to four samples
- ▶ Electronic version for PC operation with software under Windows 10 and higher
- ▶ To determine the force ductility, one measuring point is equipped with a force transducer 500 N, resolution 0.1 N (special version 100 N, resolution 0.01 N). Three additional force transducers can be retrofitted
- ▶ Storage of the tests in a database in dBase format

(A PC with screen and keyboard is required for operation. Without moulds, without bath temperature control unit and without PC).

### Technical data

Dimensions	2300x500x380 mm
Weight	95 kg
Electrical data	230 V, 50/60 Hz, 0,5 kW
Feed rate	1 bis 50 mm/min.

20-2356

### Advantages:

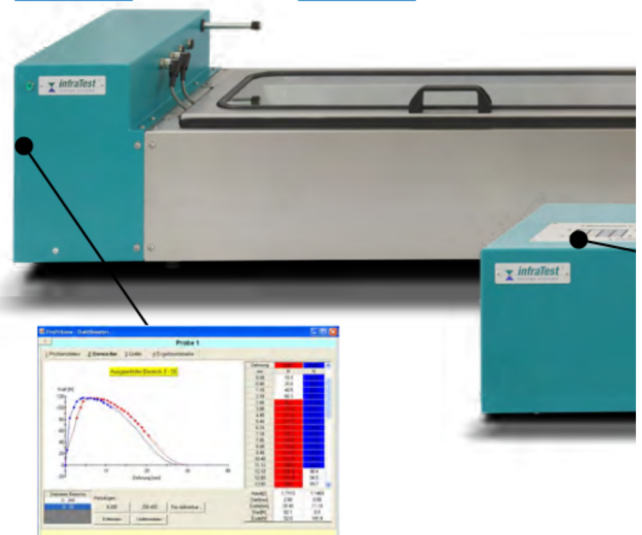
- ▶ Display of the test graph and current test data in real time
- ▶ Automatic test execution with windows based software
- ▶ Quick calibration option
- ▶ Up to 4 measuring stations that can be equipped
- ▶ Test protocol

### Ductilometer 1000 mm digital

20-2346

### Ductilometer 400 mm digital

20-2336



## ACCESSOIRES



### Load Cell

resolution 0.1 N (optional 100 x 0.01 N)  
 additionally installed in 20-2336/46/56.

20-2357 500 N

20-2358 100 N



### Ductilometer Water Bath Heating Thermostat

ready installed in the water bath of 20-2331... with circulation pump for tests above ambient temperature up to +95°C of together with 20-2377 from +5 up to +95°C. Digital version with over temperature limiter. 230 V, 50/60 Hz.

20-2370

### Temperature Sensor

for ductilometer bath of 20-2336/46/56. Two sensors, one of which is installed inside the water bath and one more fixed to the movable crosshead.

20-2359

**Advantages:**

- ▶ Self-explanatory display
- ▶ Userfriendly operation
- ▶ Short-term memory for current measurements
- ▶ Up to 4 test results measurable

**Ductilometer  
1000 mm**

20-2341

**Ductilometer  
400 mm**

20-2331

**Ductilometer 1500 mm**

EN 13398 - ASTM D113 - AASHTO T 51 for the determination of ductility of bitumen.

Stainless steel housing with an insulated water bath and stepper motor-driven pulling device with constant feed speed and digital displacement measuring device. Thermometers are installed in the water bath to check the bath temperature.

- ▶ Simultaneous testing of up to four samples
- ▶ Complete with an integrated operating unit on the left side of the unit
- ▶ With additional test option elastic reset

(Without moulds, without bath temperature control unit and without hinged lid for the bath)

**Technical data**

Dimensions	2400x500x380 mm
Weight	100 kg
Electrical data	90-260 V, 50/60 Hz, 0,5 kW
Feed rate	1 bis 50 mm/min.

20-2351

**Brass Ductility Mould**

(complete with stainless steel base plate).

20-2361 EN 13398

20-2362 EN 13589 (10 x 10 mm)

**Brass Ductility  
Mould**

ASTM D113 + AASHTO T 51

20-2360

**Brass Ductility  
Mould**

ASTM D 6084-04

20-2364

**Cooling unit to  
Ductilometer 400 /  
1000 / 1500 mm**

for 20-2331 to 20-2356 suitable for tests from +5° up to +95°C together with 20-2370.

**Technical Data**

Dimension	230 x 580 x 380 mm
Weight	18.0 kg
Electrical data	230V, 50Hz

Complete with all connecting parts. 20-2370 additionally required!

20-2377