Test Equipment for Lab and Production

Product Catalog

Mineral oil/ Bitumen/ Lubricants

Polymer Materials

Surface/ Paint/ Coating

Pipes

Other Materials/ Service Strength

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Mineral oil/ Bitumen/ Lubricants

Penetration
Flammability
Fuel
Bitumen
Lubricants
Other

Polymer Materials

Specimen Preparation
HDT-Heat Distortion/ VICAT-Softening Temperature
Dynamic Test
Static Test
Impact Strength
Abrasion/ Friction
Raw Material
Other

Surface/ Paint/ Coating

Pipes – DIN 30 670

Other Materials and Service Strength
Mineral oil/ Bitumen/ Lubricants

Penetration

**Digital automated Penetrometer**

Digital, automatic penetrometer with microcontroller and surface detection for determination of ductility/ stiffness of ductile and elastic masses (lubricating grease, salves, creams, pastes, bitumen) via penetration.


**Digital Penetrometer**

Digital penetrometer with microcontroller for determination of ductility/ stiffness of ductile and elastic masses (lubricating grease, salves, creams, pastes, bitumen) via penetration.


**Analog semi-automatic Penetrometer**

Analog, semi-automatic penetrometer with microcontroller for determination of ductility/ stiffness of ductile and elastic masses (lubricating grease, salves, creams, pastes, bitumen) via penetration.


**Analog Penetrometer**

Analog, manual penetrometer with microcontroller for determination of ductility/ stiffness of ductile and elastic masses (lubricating grease, salves, creams, pastes, bitumen) via penetration.


**Digital semi-automatic Penetrometer**

Digital, semi-automatic Penetrometer with microcontroller for determination of ductility/ stiffness of ductile and elastic masses (lubricating grease, salves, creams, pastes, bitumen) via penetration.


**Penetration accessories**

A comprehensive range of accessories for all instruments for the needle penetration, cone penetration and other test methods are available. Please contact us.
Flammability

Pensky Martens Flashpoint, automatic

Fully-Automatic determination of the flash point of petro-chemical products corresponding to the Pensky Martens method with closed cup.

Standard: ASTM D93 (A+B), ASTM D6751, AASHTO T73, AASHTO T172, ISO 15267, IP 34 (A+B), ISO 2719 (A+B), NF M 07-019, EN 22719 (A+B), JIS K 2265

Pensky Martens Flashpoint, semi-automatic

Semi-Automatic determination of the flash point of petro-chemical products corresponding to the Pensky Martens method with closed cup.

Standard: ASTM D93 (A+B), ASTM D6751, AASHTO T73, AASHTO T172, ISO 15267, IP 34 (A+B), ISO 2719 (A+B), NF M 07-019, EN 22719 (A+B), JIS K 2265

Abel Flashpoint, automatic

Fully-automatic determination of the flash point of petro-chemical and other easily inflammable products corresponding to the Abel method with closed cup.

Standard: ISO 1516, ISO 1523, ISO 13736, EN 924, IP 170, IP 491, IP 492, NF T66-009

Abel Flashpoint, semi-automatic

Semi-automatic determination of the flash point of petro-chemical and other easily inflammable products corresponding to the Abel method with closed cup.

Standard: ISO 1516, ISO 1523, ISO 13736, EN 924, IP 170, IP 491, IP 492, NF T66-009

Abel Flashpoint, manual

Manual determination of the flash point of petro-chemical and other easily inflammable products corresponding to the Abel method with closed cup.

Standard: ISO 1516, ISO 1523, ISO 13736, EN 924, IP 170, IP 491, IP 492, NF T66-009

Cleveland Flashpoint, automatic

Fully-automatic determination of the flash- and firepoint of petrochemical products corresponding to the Cleveland Open Cup (COC) method.

Standard: ASTM D92, FTM 791-1103, IP 36, ISO 2592, JIS K2265-4, AASHTO T48
### Cleveland Flashpoint, semi-automatic

Semi-automatic determination of the flash- and firepoint of petrochemical products corresponding to the Cleveland Open Cup (COC) method.

Standard: ASTM D92, FTM 791-1103, IP 36, ISO 2592, JIS K2265-4, AASHTO T48

### Setaflash-Tester, Serie 8, automatic, 300 °C

Determination of the flash-point and classification of mineral oil, bio-diesel, color, glue, resolvent or other flammable substances.


### Setaflash-Tester, Serie 3, semi-automatic, closed cup

Determination of the flash-point and classification of mineral oil, bio-diesel, color, glue, resolvent or other flammable substances.


### Setaflash-Tester, Serie 3, semi-automatic, open cup

Determination of the fire-point of mineral oil, color and resolvent.

Standard: ASTM D4206, ISO 9038, BS 3900-A11, UN Class 3 L.3, CFR 49-173.120

### Ignition Temperature, semi-automatic

Determination of the ignition temperature or original and liquid substances.

Standard: EN 14522, DIN 51794, CEI 79-4, NF T20-037, NF T20-036, 79/831/EWG, IEC 79-4

### BAM friction apparatus

The Friction Tester is used to determine the sensitivity to friction of solid, liquid or pasty substances according to the BAM method.

Standard: BAM Methode
**Fuel**

**OBA, Oxidation Stability of Fuel**

Determination of the oxidation stability of fuel under influence of oxygen (Induction-Method.)


**OBA, Oxidation Vessel**

An oxidation pressure vessel with a safety burst disc assembly and discharge tube.

Standard: ASTM D525, D873, IP 40, IP 38

**Corrosion Tester for Non-Freeze Liquid**

Test of corrosion of non-freeze liquids in the presence of metals.

Standard: ASTM D1384

**Copper-Corrosion Test**

Test of corrosion of copper through aviation fuel, combustibles and lubricants.

Standard: ASTM D130, ASTM D4048, EN ISO 2160, IP 154, DIN 51811, ASTM D4048, IP 112

**Freezing Point Apparatus, automatic, -80°C**

Determining the freezing point of aviation fuels and motor benzoils.


**Freezing Point Cryostat, manual**

Determination of the freezing point.

Standard: DIN 51 421, ASTM D2386-7, IP 16/68
### Non-freezing Liquid Freezing Point Apparatus, manual

Determining the freezing point of non-freezing liquids.

**Standard:** ASTM D1177, NF T78-102

![Image of Non-freezing Liquid Freezing Point Apparatus](image1.png)

### Solidification Point of Benzene, manuell

Determining the freezing point of benzol.

**Standard:** ASTM D852

### Cloud-Point Apparatus, automatic

Determination of Cloud-Point of mineral oils and fuels.

**Standard:** ASTM D2 500, ASTM D5771, ASTM D5772, ASTM D5773, DIN 51597, IP219, IP 444, IP445, IP 446, ISO 3015

![Image of Cloud-Point Apparatus](image2.png)

### Pour-Point Apparatus, automatic

Pour-Point of petroleum products, crude oils, motor and engine oils, additives, lubricating oils, ...

**Standard:** ASTM D97, ASTM D5853, ASTM D5950, IP 15, IP 441, ISO 3016

![Image of Pour-Point Apparatus](image3.png)

### Cloud- and Pour-Point Apparatus, automatic

Cloud-Point of petroleum products and biodiesel fuels. Pour-Point of petroleum products, crude oils, motor and engine oils, additives, lubricating oils, ...


![Image of Cloud- and Pour-Point Apparatus](image4.png)

### Compakt-Cryostat (CAPP), manual

Determination of Cloud- and Pour-Point of mineral oil and fuels with 4 separately controlled test baths.


![Image of Compakt-Cryostat (CAPP)](image5.png)
Cold-Filter-Plugging Point (CFPP) Apparatus, automatic

Measurement of the cold filter plugging point for diesel, bio-diesel and fuel oil.

Standard: ASTM D6371, ASTM D4539, BS 2000 Part 309, BS 6188, EN 116, IP 309

Cold-Filter-Plugging Point (CFPP) Apparatus, manual

Measurement of the cold filter plugging point for diesel, bio-diesel and fuel oil.

Standard: ASTM D6371, ASTM D4539, BS 2000 Part 309, BS 6188, EN 116, IP 309

Digital Conductivity Test, portable

Measurement of the electrical conductivity of fuels, lubricants or similar fluids with low conductivity.

Standard: ASTM D2624, IP 274

Smoke Point Apparatus

Determination of the smoke point of aviation fuels in terms of maximum flame height.

Standard: ASTM D1322, IP 57, ISO 3014

Vapour Pressure Test, automatic

Determination of the vapour pressure characteristics of fuel, fuel-oxygen-blends, crude oil, resovents and other chemicals.


Carbon Residue Apparatus, Micro-Method, semi-automatic

Measurement of coke remainder to determine carbonisation tendencies of mineral oil.

Standard: ASTM D4530, IP398, ISO 10370

Carbon Residue Apparatus, Conradsen, manual

Measurement of coke remainder to determine carbonisation tendencies of mineral oil.

### Carbon Residue Apparatus, Ramsbottom method

Determination of carbon residue after flashing and pyrolysis of an oil sample.

**Standard:** ASTM D524, IP 14, ISO 4262

### SSAFCON Sampler

SSAFCON is a monitoring system for portable line sampling of aviation turbine fuel to determine particulate contamination and colour ratings.

**Standard:** ASTM D2276, IP 216, FTM 791 3008

### H2S Analyser

Determination of Hydrogen Sulfide in Fuel Oil.

**Standard:** ASTM D7621, IP 570/12A, ISO 8217, Rapid Liquid Phase Extraction Method

### Apparatus for FIA Analysis

Determines volume % of saturates, olefins and aromatics in petroleum fractions.

**Standard:** ASTM D1319, IP 156, ISO 3837
Bitumen

**Softeningpoint, automatic**

Automatic determination of softening point of bitumen, bitumen-blends, resin and thermoplastic glues.

Standard: ASTM D36, ASTM D28, EN 1238, EN 1427, EN 13179-1, ISO 4625-1AASHTO T 53

**Softeningpoint, manual**

Manual determination of softening point of bitumen, bitumen-blends, resin and thermoplastic glues.

Standard: ASTM D36, ASTM D28, EN 1238, EN 1427, EN 13179-1, ISO 4625-1AASHTO T 53

**Ductility Test, automatic, 1500 mm**

Measurement of deformation of bitumen and elastomere and plastmere modified bitumen.

Standard: ASTM D1113, AASHTO T 51, ASTM D5892, ASTM D6084, AASHTO T 301, EN 13398, AASHTO T 300, EN 13589, EN 13703, IP 515 IP 516, IP 520

**Ductility Test, automatic, 1000 mm**

Measurement of deformation of bitumen and elastomere and plastmere modified bitumen.

Standard: ASTM D1113, AASHTO T 51, ASTM D5892, ASTM D6084, AASHTO T 301, EN 13398, AASHTO T 300, EN 13589, EN 13703, IP 515 IP 516, IP 520

**Fraas Tester, automatic**

Automatic determination of the deformation limits of bitumen at low temperatures.

Standard: EN 12593, IP 80, DIN 52012

**Fraas Tester, manual**

Manual determination of the deformation limits of bitumen at low temperatures.

Standard: EN 12593, IP 80, DIN 52012

**Thin Film Rolltest, RTFOT**

Determination of the ageing of adhesive agents in road building under influence of heat and air.

Standard: ASTM D2872, EN 12607-1
PAV, Pressure Aging Vessel

Simulation of the long-term ageing of bitumen adhesive agents.

Standard: EN 14769

Bending-Beam-Rheometer, CBBR

Test system for determination of flexural creep stiffness of asphalt binder at low temperatures.

Standard: DIN EN 14771, ASTM D6648, NF T66-062, AASHTO TP1, AASHTO T313, SHRP 1002, SHRP B-002

Dynamic Shear Rheometer

Measurement of linear rheological behaviour of adhesive agents under sinusoidal fatigue at different temperatures.

Standard: ASTM P 246, AASHTO TP5, EN 12591, NF T65-001, SHRP B-003, SHRP 1007

Road Tar Viscosimeter, manual

Viscosity measurement of bitumen.

Standard: DIN EN 12846, EN 13357, IP 72 - IP 502
# Lubricants

## Grease Worker, electrical

Conditioning of lubricating grease for the determination of Walk penetration.

Standard: ASTM D217, IP 50, ISO 2137, NF T60-132; FTM 791 311, JIS K2220, ASTM D7342

## Grease Worker, manual

Conditioning of lubricating grease for the determination of Walk penetration.

Standard: ASTM D217, IP 50, ISO 2137, NF T60-132; FTM 791 311, JIS K2220, ASTM D7342

## Micro-Grease Worker, manual

Conditioning of lubricating grease for the determination of Walk penetration.

Standard: ASTM D1403, IP 310, ISO 2137

## Roll Stability Tester

Conditioning of lubricating grease similar to a ball or roller bearing.

Standard: ASTM D1831 / MIL-G-10924

## EMCOR Tester

Determination of the anticorrosiveness of lubricants in presence of water.

Standard: ASTM D6138, DIN 51802, IP 220, ISO 11007

## BRUGGER-Test

Determination of resilience of lubricants at mixed and dry friction.

Standard: DIN 51 347-1+2

## High-Temperature Dropping Point Apparatus, manual

Determination of dripping point of lubricant grease in a wide range of temperatures.

Standard: ASTM D2265, ISO 6299
<table>
<thead>
<tr>
<th>Instrument</th>
<th>Description</th>
<th>Standard</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dropping Point Apparatus, manual</td>
<td>Determination of the temperature where the transition of a lubricant grease from semi-solid to fluid.</td>
<td>ASTM D566, IP 132, DIN 51 801, FTM 791 1421, ISO 2176, JIS K2220, NF T60-102</td>
</tr>
<tr>
<td>Noack Vaporisation Tester VP 4000</td>
<td>Determination of evaporation loss of lubrication oil at high temperatures.</td>
<td>ASTM D5800-A, CEC l-40-A-A93, IP 421-B</td>
</tr>
<tr>
<td>Existent GUM Soli Block Bath, manual</td>
<td>Determination of the lubricant oil content in fuel via Jet Evaporation method.</td>
<td>ASTM D381-IP 131, BS 2000 Part 131, BS 4348 (obs), DIN 51 784, FTM 791 3302, IP 540, ISO 6246, JIS K2261, NF M07-004</td>
</tr>
<tr>
<td>Grease Separation Apparatus</td>
<td>Determination of grease separation at static conditions.</td>
<td>DIN 51 817, IP 121 BS 2000 Part 121</td>
</tr>
<tr>
<td>Foam Tester</td>
<td>Determination of foam building characteristics of lubricating oils.</td>
<td>ASTM D892, ASTM D6082, IP 146, ISO 6247, FTM 791 3211</td>
</tr>
<tr>
<td>Herschel De-Emulsification, semi-automatic</td>
<td>Test of the de-emulsification of mineral oil and synthetic oil. Herschel-test determines the pace of separation of oil from water.</td>
<td>ASTM D1401, DIN 51599, ISO 6614</td>
</tr>
<tr>
<td>Impinger Prüfapparatur, Air Release Value Apparatus, semi-automatic</td>
<td>Determination of air release value apparatus of lubricating oils and hydraulic fluids.</td>
<td>ASTM D3427, BS 2000 Part 313, DIN 51 381, IP 313, ISO 9120, NF T60-149</td>
</tr>
</tbody>
</table>
**Oxidation/Ageing - TOST Apparatus**

Determination of ageing-behaviour of steam turbine and hydraulic oils.

Standard: ASTM D943, ASTM D2274, ASTM D4310, IP 388, ISO 4263

**Anticorrosive Tester - TOR**

Test of the characteristics of anticorrosives for steam turbine, hydraulic and gear oils.


**Norma Hoffmann Oxidation Bomb**

Determination of the oxidationstability of lubricating oils under static conditions.

Standard: ASTM D942, BS 2000 Part 142, IP 142

**Cold-Cranking-Simulator, CCS 2100**

**Mini-Rotary Viscometer, CMRV 4500F**

Standard: ASTM D3829, ASTM D4684

**Mini-Rotary Viscometer, CMRV 5000F**

Standard: ASTM D3829, ASTM D4684
Canon HTHS Capillary-Viscometer

Standard: ASTM D5481, ASTM D4741

HTHS Viscosimeter

Standard: ASTM D4741, IP 370

Low Temperature Viscometer Bath, -50°C

Determination of the eddy viscosity of gear oil at low temperatures with a Brookfield viscosimeter.

Standard: ASTM D 2983, DIN 51368, IP 267-B

Water Washout Tester

Determination of water washout characteristics of lubricating greases.

Standard: ASTM D1264, IP 215, ISO 11009, DIN 51807

Water Spray Apparatus

Resistance of lubricating greases to water spray.

Standard: ASTM D4049

Tester for Total Sediment Content in Residual Fuel Oils

Standard: ASTM D4870, ISO 10307-1, ISO 10307-2, IP 375, IP 390-A

Extraction Apparatus

Standard: ASTM D437, IP 53, ISO 3735, FTM 791-3002
<table>
<thead>
<tr>
<th>Equipment</th>
<th>Standard</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rotating Bomb Oxidation Tester</td>
<td>ASTM D2112, ASTM D2272, ASTM D4742, IP 229</td>
</tr>
<tr>
<td>Freezing Point Apparatus</td>
<td>ASTM D938, IP 76, ISO 2207</td>
</tr>
<tr>
<td>Four-Ball machine</td>
<td>ASTM D2266, ASTM D2596, ASTM D2783, CEC L-45--T-93, DIN 51359, EN ISO 20623, FTM79 1-6503</td>
</tr>
<tr>
<td>Drop Point Apparatus according to Ubbelohde</td>
<td>DIN 51801-Teil 2</td>
</tr>
</tbody>
</table>
Other

**Color Measurement, automatic**

Measurement according to Saybolt, ASTM, Pt-Co, Hazen, APHA, CIE and Gardner color index.


**Apparatus to determine Oil Content**

Determination of oil content of mineral oil paraffines.

Standard: ASTM D3235, ASTM D721-IP 158, FTM 791 5431, DIN 51531, NF T60-120

**Viscotester**

Rotational viscometer controlled revolution and deformation.

Standard: DIN 53 018, DIN 53 019, ISO 3219, GOST 26 581

**Falling Ball and Capillary Viscometer**

Baths for tempering of capillary viscometer, areometer and pycnometern.

**Viscometer and Tempering baths**

Baths for tempering of capillary viscometer, areometer and pycnometern.

**Density Measurement**
Karl-Fischer Titrator, Coulometric

For Coulometric determination of water in petroleum products.

Standard: ASTM D1533, ASTM D4377, ASTM D 4928, ASTM D6304, EN 61 000-3-2, EN 61 000-3-3, IP 356, ISO 10 337, ISO 12 937

Karl-Fischer Titrator, Volumetrisch

For Volumetric determination of water in petroleum products.

Standard: ASTM D1533, ASTM D4377, ASTM D 4928, ASTM D6304, EN 61 000-3-2, EN 61 000-3-3, IP 356, ISO 10 337, ISO 12 937

TAN Titrator

TAN_TBN Titrator

PCB Check

Provides a fast test for PCB (max. 50 ppm).

Freeze Valve Methode

Determination of the moisture of propan or similar liquids after Freeze Valve method.

Standard: ASTM D2713, IP 395, ISO 13758

Sampling Devices

Sampling of fluids and semi-solids.

Standard: ASTM D923, ASTM D4057, ASTM D4177, DIN 51750, EN 58, ISO 3170
Hand Refractometer

Automatic Refractometer

Reference material (e.g. flash point, CAPP, viscosity)

Metal specimen

Measurement Accessories

Cold-, Heat-, Conditioning Cabinet-, Incineration Furnace

Electronic Mixer
**Brookfield Viskosimeter, LVDV-II+ Pro**

**Vacuum-pump with mini-compressor**

The vacuum pump is intended for the extraction of gases and steam.

Standard: DIN EN 61010-1, DIN EN 61000-3-2/3, DIN EN 55014-1/2
## Polymer Materials

### Specimen Preparation

#### Automatic Notch Milling Machine

The automatic notch milling machine is used to cut norm conform notches in polymer specimen.

**Standard:** ISO 179, ISO 180, ISO 8256, ASTM D256, ASTM D6110

![Automatic Notch Milling Machine](image)

#### CNC-specimen cutter

The CNC specimen cutter mills norm conform specimen fully automated for Charpy-, Izod-Tests and more.

**Standard:** ASTM D256, ASTM D6110, EN ISO 179, EN ISO 180, EN ISO 8256

![CNC-specimen cutter](image)

#### Manual Toggle Press

The manual toggle press allows an exact and effort-saving cutting-out of specimen with forces up to 25 kN.

![Manual Toggle Press](image)

#### Pneumatic Toggle Press

The pneumatic toggle press allows an exact and effort-saving cutting-out of specimen with forces up to 60 kN.

![Pneumatic Toggle Press](image)

#### Tempering chambers

The heating and cooling chambers can be used for tempering in-between -40°C and +250°C.

![Tempering chambers](image)

#### Drying Chambers

The drying chambers dry the specimen via active dehydration.
Glas Dehydrator

The glas dehydrator dries the specimen via absorption.

Aching Furnace

The furnace allows drying, pre-heating and furning-off with a temperature up to 1100°C.

Rapid Incinerator

The rapid incinerator allows drying, pre-heating and furning-off with a temperature up to 950°C.

Sandbaths

Electical sandbaths with variable temperature control with or without a thermostatic regulator.
# HDT-Heat Distortion/ VICAT-Softening Temperature

**Eco-Vicat (oilfree)**

The ECO enables to measure the vicat-softening temperature clean and oilfree.

Standard: DIN EN ISO 306, (DIN 53460)

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**HDT/ Vicat Basic Series**

Basic is a manual starter series for measurement of the vicat-softening temperature and the HDT heat deflection temperature.


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**HDT/ Vicat Compact Series**

Compact is a semi-automatic series for measurement of the vicat-softening temperature and the HDT heat deflection temperature.


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**HDT/ Vicat IC (Integrated Cooling)**

IC is a series with integrated cooling automatically measuring the vicat-softening temperature and the HDT heat deflection temperature.


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**HDT Automat**

The HDT automat allows a fully automated 24/7 measurement of the HDT heat deflection temperature.

Standard: DIN EN ISO 75, ASTM D648, (DIN 53461)

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**External Oil Cooling Unit**

The external oil cooling unit reaches for systems of Basic and Compact series back to start temperature in short time after measurement.
## Dynamic Test

### DeMattia Test stand 32

Test stand to dynamic fatigue tests on DeMattia specimen with 32 measuring stations with and without temperature control.

**Standard:** DIN ISO 132

### Coesfeld Tear Analyser (Hydraulic)

The hydraulic Tear Analyser measures fatigue and crack propagation on 1x10 elastomers with the system BAYER.

### Coesfeld Tear Analyser (Electro)

The electromotoric Tear Analyser measures fatigue and crack propagation on 2x5 elastomer specimen with the system BAYER.

### Coesfeld Tear Analyser (Fitting)

The Tear Analyser can be fitted to on any dynamic measuring test stand for 1x1 elastomer specimen.

### Biaxial Test stand

The biaxial test stand measures fatigue and crack propagation via four synchronised electromotoric direct drives.

### Fatigue Tester (force and travel)

The test stand allows to measure force as well as travel controlled long time loading for fatigue to failure measurements via one or more electro drives.
Fatigue Tester (travel)

Test stand for dynamic long time loading with tensile, pressure, bending and shearing under influence of temperature.

Static Test

Creep Tester (mechanical)

Mechanical creep test rig for manual tests.

Standard: DIN EN ISO 899-1/-2

Creep Tester (electro drive)

Electromotrical driven creep test rig for fully automated tests.

Standard: DIN EN ISO 899-1/-2

Universal Testing Machine (UTM)

Universal test machine for tensile, compression and bending tests with 3kN, 5kN, 10kN and 10kN test force, different travel and clear width with diverse accessories.

Tensiontest

Manual tension tester for 6 S2 bars.

Standard: DIN ISO 2285

Compressiontest

Manual compression tester for 4 samples form I and II.

Standard: DIN ISO 815 (former DIN 53 517), DIN EN ISO 1856

Shorehardness Tester

Durometer for measuring hardness of elastomers, plastics and non-metallic materials.

<table>
<thead>
<tr>
<th><strong>Digital Universal Hardness Tester</strong></th>
<th><img src="image" alt="Digital Universal Hardness Tester" /></th>
</tr>
</thead>
<tbody>
<tr>
<td>Digital universal hardness tester according to Vickers, Brinell, Rockwell, Knoop and ball indentation.</td>
<td></td>
</tr>
<tr>
<td><strong>Standard:</strong> DIN EN ISO 6507 (Vickers), DIN EIN ISO (Brinell), DIN EN ISO 6508 (Rockwell), HK1 (Knoop), DIN ISO 2039 (Kugeldruckhärte)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Ball Indentation Test</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Manual ball indentation test apparatus.</td>
</tr>
<tr>
<td><strong>Standard:</strong> DIN ISO 2039 T1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Thickness Gauge</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Thickness gauge according to ISO 23529 for materials with a hardness of ≥35 IRHD.</td>
</tr>
<tr>
<td><strong>Standard:</strong> ISO 23529</td>
</tr>
</tbody>
</table>
Impact Strength

**Impact Tester Primus (up to 333J)**

Impact tester with 1 or 1.7 meters drop height for manual, automatic as well as non-instrumented and instrumented drop tests.


**Impact Tester Magnus (up to 785J)**

Robust, automated and fully instrumented impact tester built in a stellframe with drop heights of 1 and 2 meters with optional tempering chamber, anit-rebound system, acceleration unit and more.


**High Speed Impact Tester (up to 50m/s)**

High speed impact tester with drop speed up to 50m/s.

**Pendulums (5-50J)**

Pendulum for plastics with analog or digital display.

Standard: DIN 51 222, ISO 442 and EN ISO 179, DIN 50 115, DIN 53 453, DIN 53 448 (Charpy)
## Abrasion/ Friction

### Abrasion-Tester

System to determination of the resistance of elastomers with regard to the loss of abrasion.

**Standard:** DIN 53 516, ISO 4649

![Abrasion-Tester Image](image)

### Friction and Peel Tester

Tester to measure the static and kinetic coefficient of friction, seal strength, and peel properties of plastic film, paper, paperboard, adhesives, labels and packaging materials.

**Standard:** ASTM D1894, D4521, D3330, TAPPI T816, ISO 8295

![Friction and Peel Tester Image](image)

### Friction tester UTM

Friction tester based on UPM with precise heating.

![Friction tester UTM Image](image)

### Dynamic friction tester

Dynamic friction tester for tribological examination of rubber samples on exchangeable friction partners.

![Dynamic friction tester Image](image)
## Raw Material

### Pourability
Measuring system for determination of pourability plastics in form powder or granulate.

**Standard:** DIN EN ISO 6186, ASTM D1895

### Flotation and Apparent Density
Measuring system for simultaneous measurement of flotation and apparent density of plastic granules.

**Standard:** DIN EN ISO 6186, ASTM D1895

### Apparent Density
Measuring system for determination of apparent density of flowing materials in form of powder or granulate.

**Standard:** DIN EN ISO 60, ASTM D1895

### Density Precision Scale
Analytical scale with accessories for density determination of liquids and solids.

### Density Pycnometer
Fully automated, micro-controller based pycnometer for determination of the envelope density of original substances.

### Density Gradient Column
Density measuring system after three-column principle.

**Standard:** DIN 1306, DIN 53 479, DIN 55 990, DIN 53 243
Melt-Mass-Flow-Rate (MFR)

This compact instrument is designed for measuring the flow properties of plastics to Method A.

Standard: ISO 1133, ASTM D1238/ Method A, DIN 30 670

Melt-Mass-Flow-Rate (MFR) and Melt-Volume-Rate (MVR)

Instrument designed to measure mass and volume flow rates.

Standard: ISO 1133, ASTM D1238/ Method A, B, C and D, DIN 30 670

MPM Meltingpoint

For measuring the melting point of powdery substances in glass capillaries.

Kofler Heatbench

For melting point determination/ Observation of decomposition processes/ observation of volatility/ Determination of softening point of synthetic resin.
Other

FiVer Fibre Analysis

Determination of fiber length distribution with FiVer

Quartz-Tube-Dilatometer

Quartz tube dilatometer to determine the thermal expansion coefficient of plastics with 1 or 3 measuring stations.

Standard: DIN 53 752

Dry-Sieving

Digital dry-sieving machine for test sieves with 200 or 203 mm diameter.


Moisture Analyzer

Measuring the absolute value of the water content in solid samples.

Moisture/ Dry Weight

Analytical moisture analyzer for fully automatic determination of the moisture content or dry weight of samples.

Fogging Test

The ‘fogging test’ is designed to determine the out-gassing rate of certain material from soft PVC, Textilien oder Leder.

Gas Permeability Tester

For automatic gas permeability measurements of plastic foils and coated papers with dry and damp gas, such as oxygen, nitrogen, carbon dioxide, noble gas or mixtures of such gases, in the temperature range –20 °C to +60 °C according to the manometric method.

Standard: ISO/DIS 15105-1, ASTM D1434-M, DIN 53536

Water Vapour Permeability

For determination of the water vapour permeability of various packing materials, e.g. plastic foils, combination foils and wax, hotmelt or plastic coated papers, temperature range –20...+60 °C.

Standard: ISO 15106-3

Chamfer

Automized chamfer.
Surface/ Paint/ Coating

**Cathodic Disbonding**

Test the adhesion of plastic coating on steel.


**Resistance Measurement TO**

Tera ohm meter for measurement of volume, surface, bleeder resistance, small currents and cable resistance.

**Tracking Current CT**

Determination of the proof (PTI) and the comparative (CTI) tracking indices of solid insulating materials.

Standard: DIN EN 60112

**Coating Continuity**

Instrument for confidential measurement of continuity of coatings via pulsating high-voltage.


**Coating Thickness Meter**

To measure all non-magnetic coatings on steel and non-conductive layer on non-ferrous metals and non-magnetic steel.

Standard: ISO 2178, ISO 2360

**Gel Time Measurement GT16/20**

Instruments for determination of gel time and hardening characteristics of powder coating and resing.

### Gel Time Measurement GA1/ GA2

Instruments for the determination of the gel time of reaction resins.

**Standard:** DIN 16 945, DIN 16 916

### Film Formation with Temperature Gradient Plate

Temperature gradient plate for measuring the Minimum Film Forming Temperature, MFFT of polymer dispersion.

**Standard:** ISO 2115, ASTM D2354

### Film Applicator

Driven film applicator for the application of coatings of an even and defined thickness onto different plane surfaces.

### Degreasing Baths

Degreasing Baths are used to remove anticorrosion agents on testing metal sheets.

**Standard:** EN 10 130, EN 10 152, EN 10 142

### Gauge tester

Test appliance for determining the scratch resistance of coated specimen.

### Gauge Tester

All-purpose cutter for automatic scratching in surfaces with high precision and reproducibility.

**Standard:** DIN EN ISO 7253, EN ISO 2409, EN ISO 17872, ISO 1518, ASTM D3359, GME 60 280, VW PV 3952, VDA 621

### Wear Resistance Tester

Test appliance for determining the wear resistance of plastic coatings.
Pipes – DIN 30 670

Penetrometer for Pipes

Penetrometer to measure the indentation hardness of polymeric coated pipes and formed parts under influence of weight and temperature.


Coating Thickness Meter

To measure all non-magnetic coatings on steel and non-conductive layer on non-ferrous metals and non-magnetic steel.

Standard: ISO 2178, ISO 2360

Coating Continuity

Instrument for confidential measurement of continuity of coatings via pulsating high-voltage.


Mobile Tension Tester MTT

Mobile Tension Tester for measurement of the peeling resistance of polymer coatings on steel pipes.

Standard: DIN 30 670, DIN 30 672, DIN 30 674, DIN 30 678, EN 10 285, EN 10 329, prEN ISO 21 809-1, CAN/CSA Z245.21

Mobile Impact Tester for Pipes

Mobile impact test for pipes and pipe segments.

Standard: DIN 30 670, DIN 53 373, ASTM G14

Cathodic Disbonding

Test the adhesion of plastic coating on steel.

Gauge tester

Test appliance for determining the scratch resistance of coated specimen.
Other Materials and Service Strength

We provide customized solutions in all of our fields of application. Depending on the material or product to be tested more or less individual approaches are required. In order to fulfill your individual demands at its best we make use of our decades lasting experiences. Our test engineering is a combination of machine construction, control technique, automatization, software development and finally linking our systems to your data base.

Contact us. We will be happy to discuss your application.
Coesfeld Materialtest

the more intelligent solution ...

Force, temperature, velocity, acceleration, travel, energy - if it has to do with the accurate generation and precise measurement of physical quantities on material, it is our core expertise.

Since our establishment in 1968 as a technical service organisation we have successively expanded our activities to order related production and consequently to small batch series. Today our machines are successfully installed all over the world. This is an indication for our continuity and reliability on the one hand; on the other hand it is a proof of our aims to always find the optimal solution for our customers.

At Coesfeld, we have managed to optimize the relation of supplier network, vertical integration, core competences, costs of production and process reliability.

Goal oriented and pragmatic processes form our organisation. This approach is formulated in our ISO 9001 certified Quality Management System covering our production, service and calibration services, which are performed by our ISO/IEC 17025:2005 accredited calibration laboratory CaLab.

That is why we are confident to claim that we will provide you the more intelligent solution. We will be happy to demonstrate this to you.