

UL PERFORMANCE MATERIALS



UL Thermoplastics Testing Center (UL TTC)

**TECHNOLOGY
AND
EXPERTISE**

FOR SPEED TO MARKET

ADVANCED TECHNOLOGY. EXTENSIVE CAPABILITIES.

OPTIMISING YOUR COMPETITIVENESS

The UL Thermoplastics Testing Center (UL TTC) is one of the leading global providers for the extrusion of polymer compounds, the production of test specimens via either injection moulding or test pieces cut out of semi-finished products and components and the testing and certification of numerous plastics.

With UL TTC as a reliable partner, you benefit from both the 70 years of experience of the UL TTC and the 120 years of global expertise of Underwriters Laboratories (UL).

With more than 10,000 staff and over 160 laboratory and certification facilities worldwide, UL is among the market leaders in product testing, certification and validation. As the author of over 1,400 Safety Standards, UL is evolving the future of safety to meet the expanding needs of customers and the global public.

ALWAYS ONE STEP AHEAD

The ISO 17025 accredited test center at Chempark in Krefeld-Uerdingen offers a unique "all-inclusive service" and is characterised by high service quality, extensive capacity, short processing times and an attractive price-performance ratio.

Thanks to our highly-experienced team of experts and the long history of expertise, UL TTC is able to cater to your needs for fast market access. So that you stay one step ahead of your competitors.

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AUTOMATED SYSTEMS FOR HIGH CAPACITY

ONE-STOP SERVICE

COMPOUNDING
PRODUCTION OF TEST SPECIMENS
STANDARD AND SPECIALISED TESTS
TEST ENGINEERING CONSULTANCY
CERTIFICATION
FOLLOW-UP SERVICE

500

DIFFERENT PLASTICS TESTS

100

DIFFERENT TEST SPECIMEN MOULDS

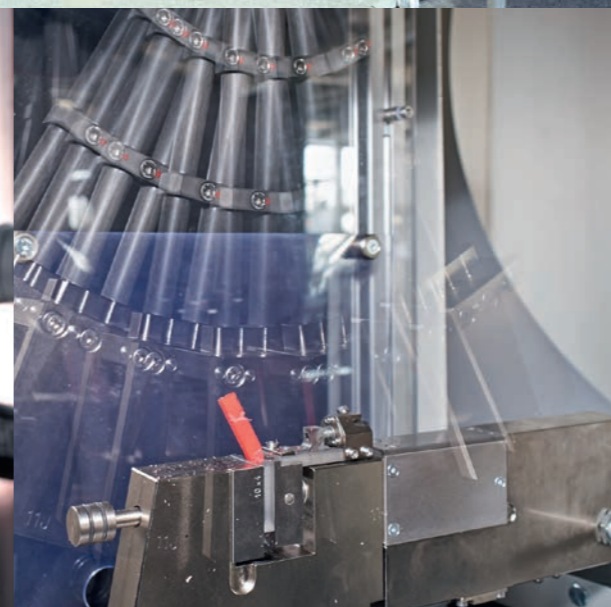
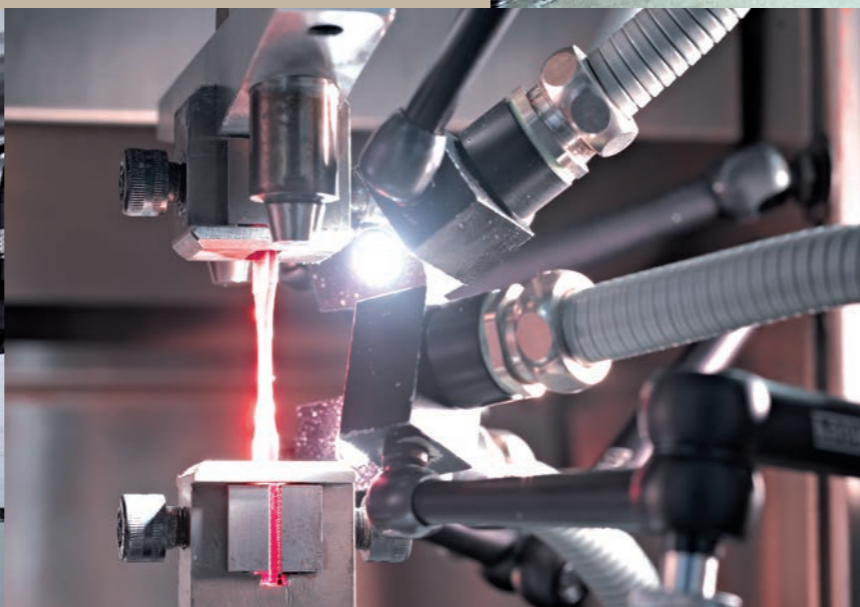
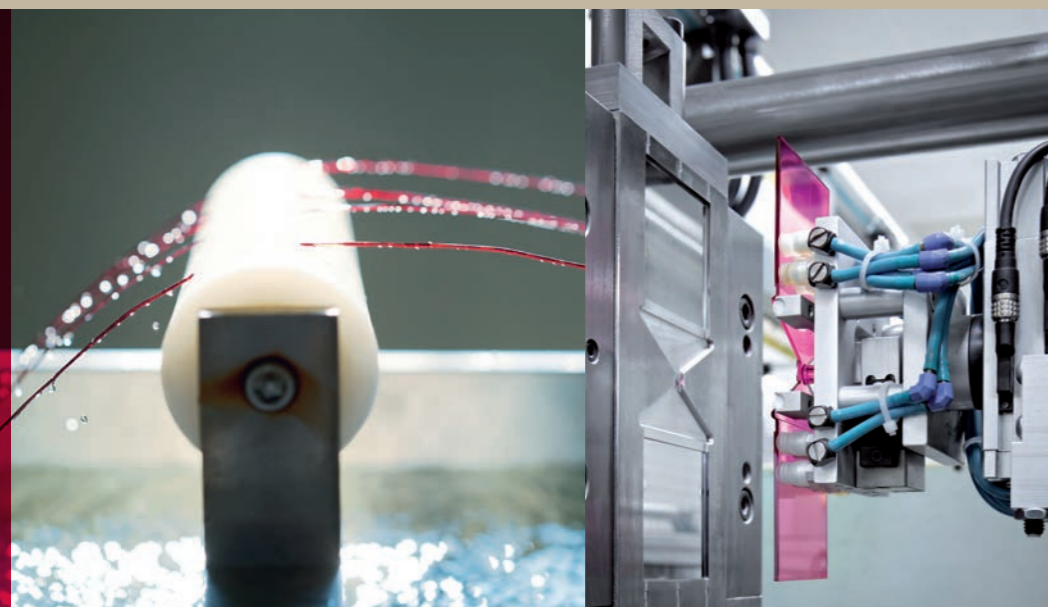
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YEARS OF EXPERIENCE

DIN EN ISO/IEC
17025
ACCREDITATION

5.000
SQUARE METERS WITH THE MOST MODERN TESTING FACILITIES

HIGH-END TECHNOLOGY AND CUSTOMISED SERVICE RANGE. FOR AN EFFICIENT PROCESS CHAIN.



FASTER, MORE EFFICIENT
MARKET LAUNCH THANKS TO:

- **Advanced production systems**
- **Electronic processing from receipt of order to delivery of results**
- **„One-stop“ service ensures speedy processing of complex orders and consistently high quality**

COMPOUNDING

The twin-screw extrusion systems in use at UL TTC allow us to produce polymer compounds with the most diverse compositions in quantities ranging from 1 to 200 kg. Through the use of variable dosing/feeding devices and optimised screw configurations, a variety of additives and fillers can be incorporated.

Our wealth of expertise extends from the compounding of biopolymers, to the production of nano compounds and the processing of highly-filled, fibre-reinforced thermoplastics.

TEST SPECIMEN PRODUCTION

With upwards of 20 injection moulding systems, over 100 different test specimen geometries are available for almost all ISO, UL, ASTM and CAMPUS® tests. In addition, a wide variety of specimen geometries can be produced from plaques, semi-finished products or components by sawing, die cutting or high-speed milling.

DIVERSITY OF TESTS

The range offered at UL TTC is highly diverse and includes the entire spectrum of common standard tests for all the major plastics applications. The programme also features special tests for chemical resistance and comparative trading index (CTI), high-speed tensile tests and specialised tests for the automobile industry.

The group of mechanical and rheological tests alone encompasses over 30 different tests. These are complimented by electrical testing, optical testing and thermo-analysis and tests of fire behavior and environmental influences as well as tests for thermal aging, heat distortion resistance and surface engineering.

STATE OF THE ART TECHNOLOGY

At UL TTC, we constantly adapt our technical systems to customer-specific testing objectives and requirements. For example, we developed a fully-automated injection-moulding system for producing plastic plaques, in optical quality, with no surface contact during de-moulding, individually packaged and contamination-free.

By using some of the most advanced testing technology, such as Mircoscale Combustion Calorimetry (MCC), a quantitative method of analysis for characterising the burning behavior of flammable materials or a laboratory washing system for testing the resistance of plastic surfaces to damage caused by brushes in car washes, we ensure that constantly-expanding customer requirements continue to be met.

OUTSTANDING CAPACITY

Numerous automated systems enable UL TTC to accelerate and optimise processes. As a result, multiple extensive projects can be handled at once. Thanks to the automation, tests are conducted accurately and can be replicated, ensuring that uniform quality and a high level or reliability are achieved.

The entire process chain, from entering your order to receiving test results, is executed electronically using a patented LIMS software – thus guaranteeing fast and efficient processing of complex project assignments.

A woman wearing safety glasses and a light blue shirt is holding a red plastic test specimen. The specimen is a long, thin, rectangular piece with a central notch and a wider section at the end. She is looking at the specimen with a focused expression.

RELIABLE TEST DATA.

ISO 17025 ACCREDITATION

With the DIN EN ISO/IEC 17025 certificate, the Deutsche Akkreditierungsstelle GmbH (DAKKS) confirms UL TTC's competence to conduct selected physical and technical tests on plastics. (Accreditation certificate: D-PL-11318-01-00)

DEDICATED TO QUALITY

Quality is the key to success – for customers, for UL TTC and, not least, for the consumer using UL TTC-tested products and components on a day-to-day basis. UL TTC therefore ensures that plastic components, e.g. in electronic appliances or motor vehicles, function robustly and reliably.

THE ADDED VALUE OF EXPERIENCE.

UL TTC STAFF MAKE THE DIFFERENCE

Constant „learning by doing“ and a wealth of experience are the basis for the expertise of the specialists at UL TTC. Staff at UL TTC constantly advance their professional skills with regular training sessions conducted both externally and on site.

UL KNOW-HOW WORLDWIDE

UL TTC is the „Center of Excellence“ for plastics testing within UL. By supporting the development of new laboratories and the further on-site training of colleagues in the regions, UL TTC contributes to UL's ability to offer incomparable service quality and reliability to its customers around the world.

KNOW-HOW.

QUALITY.

DEDICATION.

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