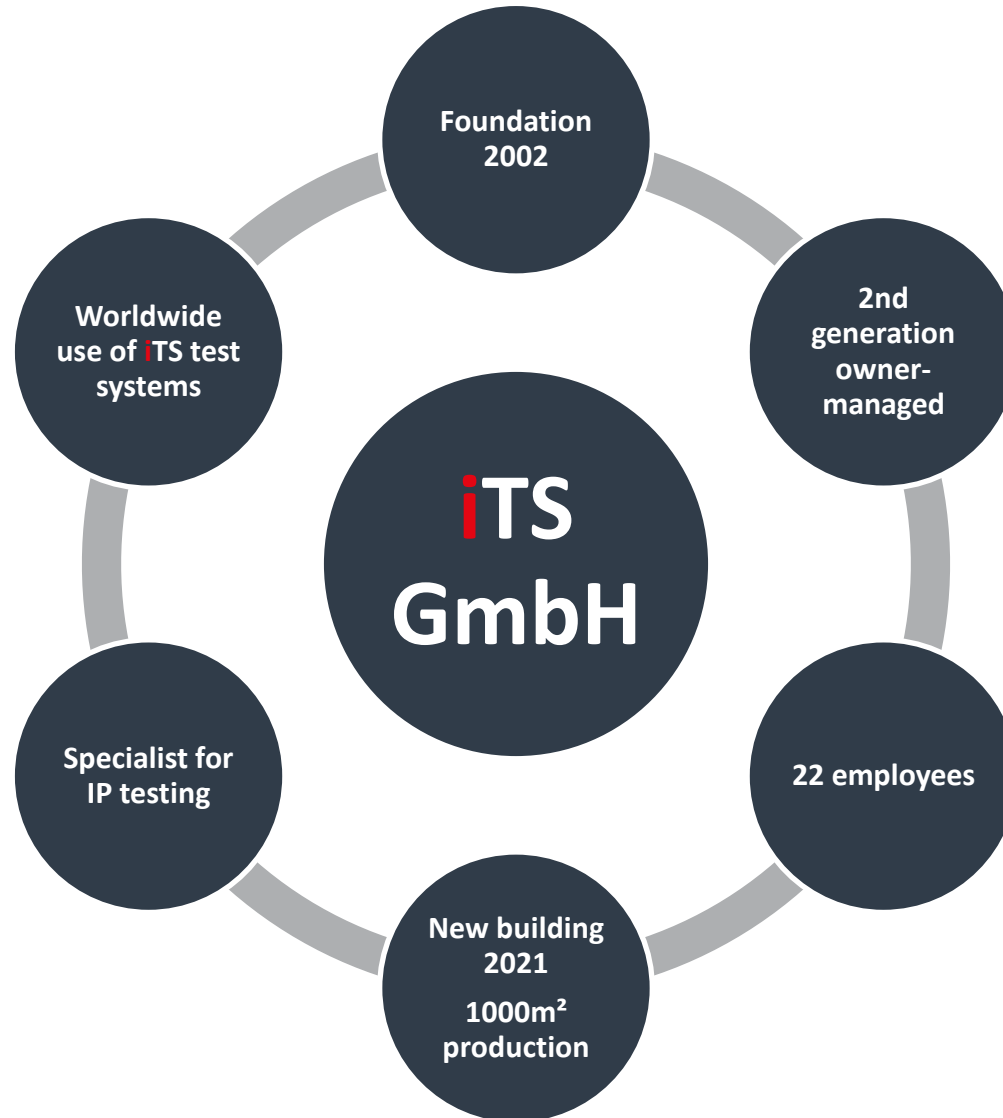
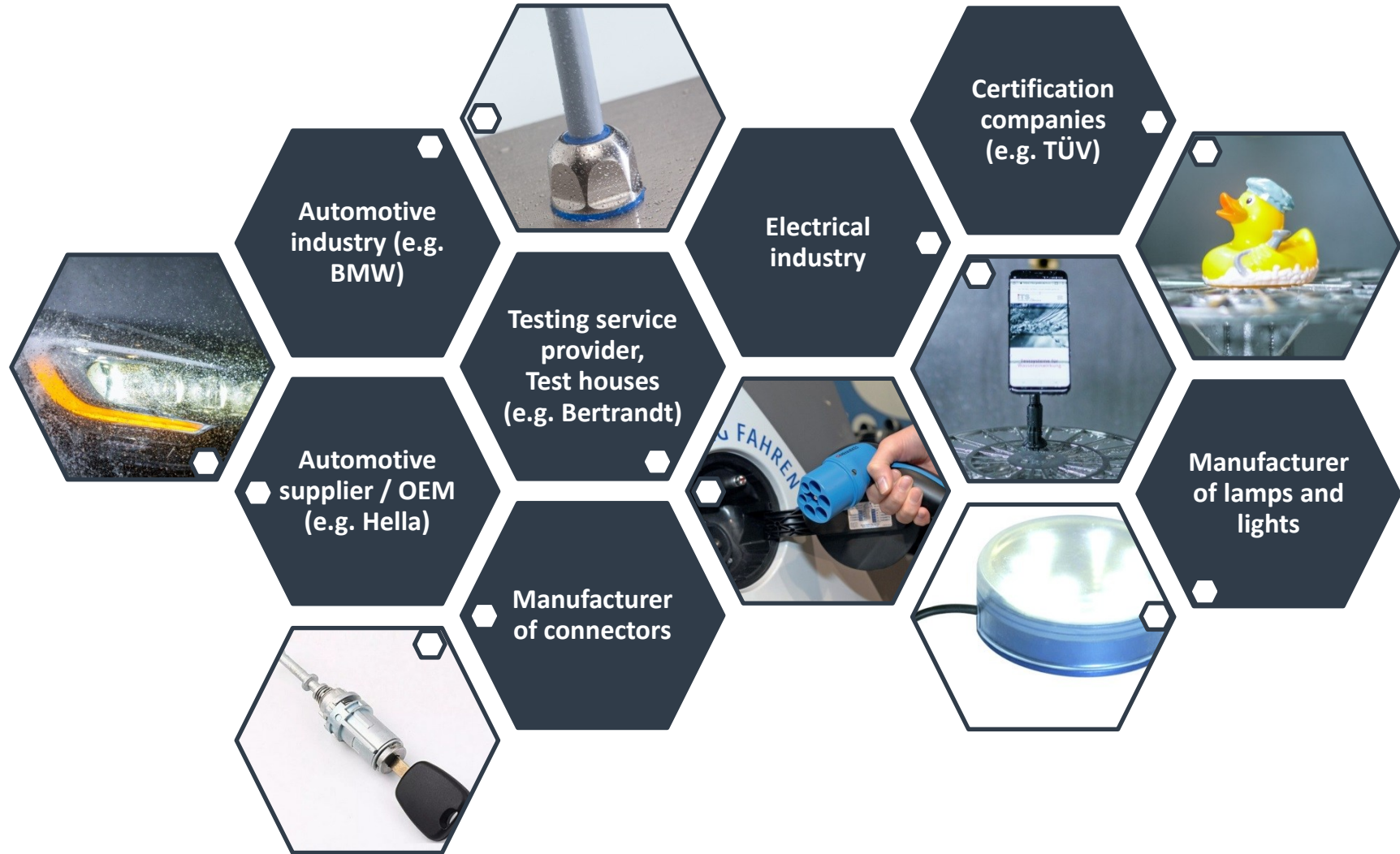


iTS Test Systems Dust & Water





iTS CUSTOMER GROUPS



iITS CUSTOMERS

MANUFACTURER – SERVICE PROVIDER



DENSO



SIEMENS

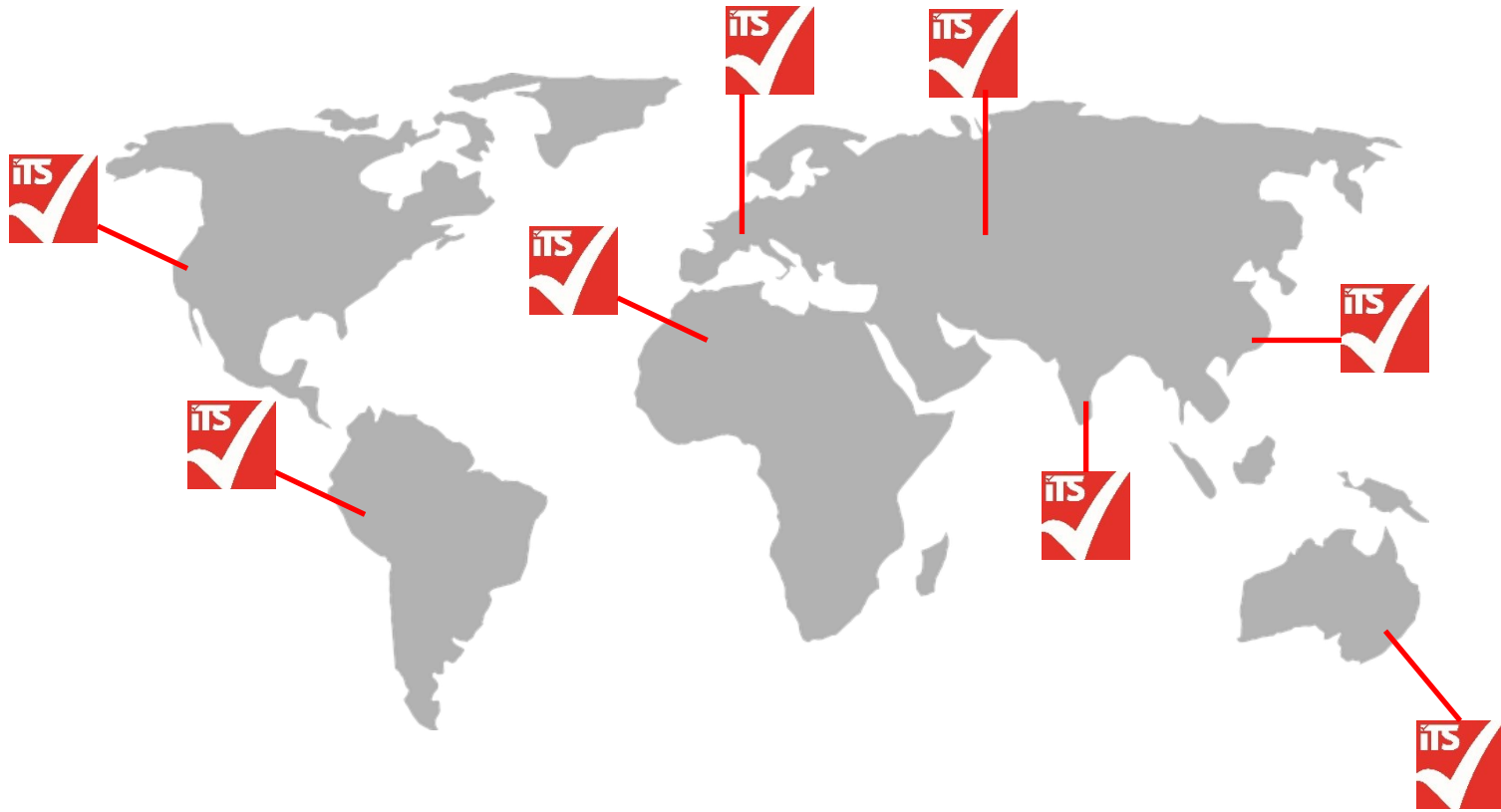


bertrandt

KOSTAL

iTS CUSTOMER SYSTEMS WORLDWIDE

iTS INNOVATIVE
TEST &
MEASUREMENT
SYSTEMS



IP CODES

TYPICAL IP PROTECTION TYPES



IP tests in accordance with DIN EN 60529 and ISO 20653:

Degree of protection of electrical devices against the ingress of solid foreign bodies and liquids

IP TESTING AND ENVIRONMENTAL SIMULATION: WHY?

Longevity
For longer function

Reliability
For less downtime

Security
Before dangerous situations

Versatility
For a wider range of applications

Cost savings
Rare replacement or repair

Regulatory requirements
Minimum IP protection type

User-friendliness
More convenience in use

Quality
Competitive advantage

Brand reliability
Trust in the "brand"

IP 5X / 6X

iTS - DUST TESTING SYSTEM



Test room



Dust and
Vacuum blower



Measuring equipment



iTS dust chamber
SK 500



SK 1000



SK 2000

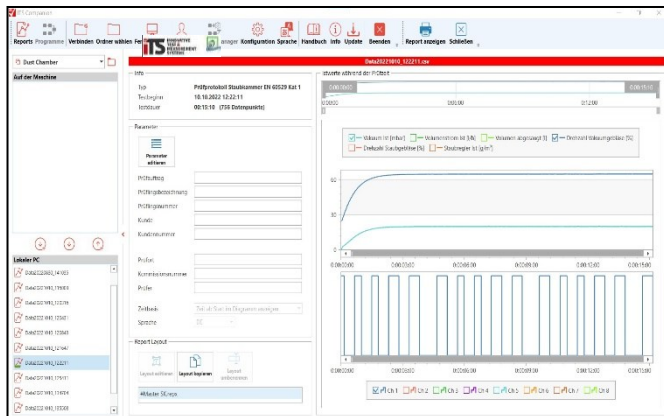


SK XL

IP 5X / 6X

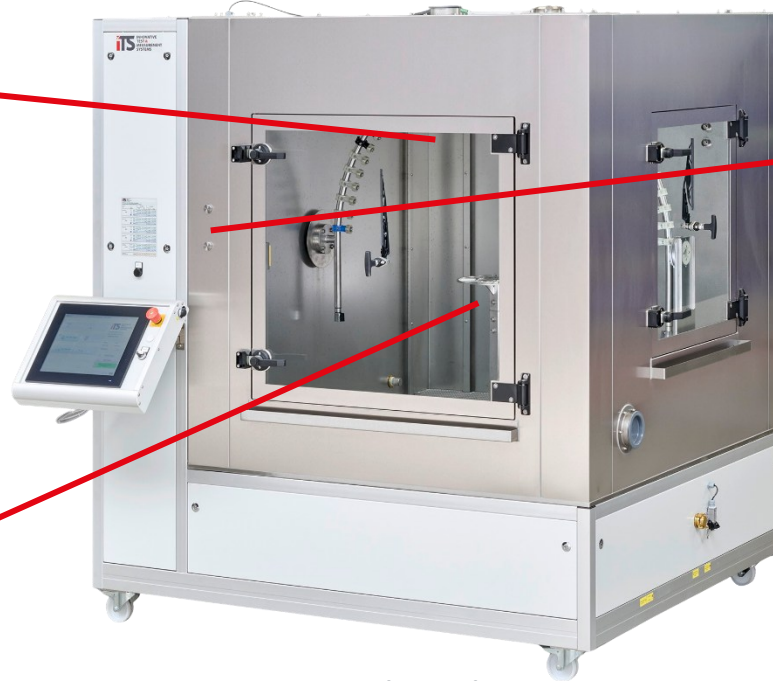
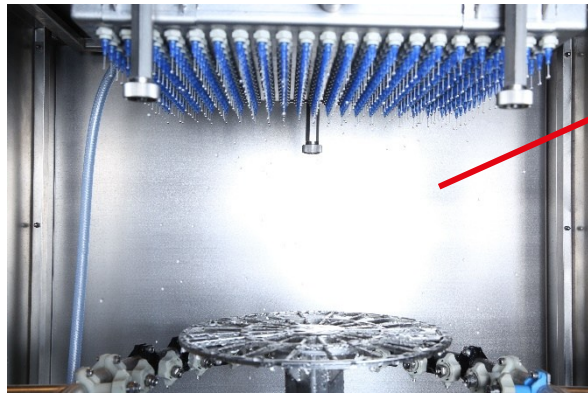
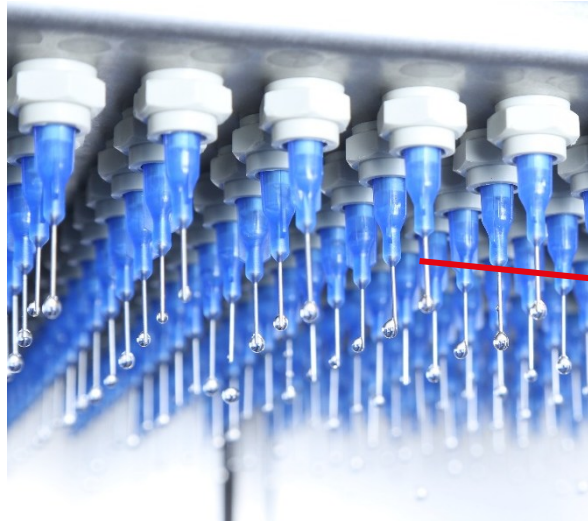
ITS - FEATURES

- Electronic flow and vacuum sensors
 - Fully automatic control - so the system can also run overnight
 - Display of the test progress on the control panel
- Negative pressure for category 1 enclosures:
 - The vacuum device and the test duration are automatically set and regulated in accordance with the standard after the test specimen volume has been entered.
- Depending on the SK model, there are
 - Stand-alone test chambers in the sizes SK 500 Triple / SK 500/1000/2000, but
 - also test chambers with 2 test chambers that can be used individually (one after the other) or as one large test chamber (without partition wall) or
 - as walk-in chamber SK-XL in individual size.



IP X1 / X2

iTS – WATER TEST SYSTEM



iTS water test chamber

SPK R600

Available in 4 chamber sizes

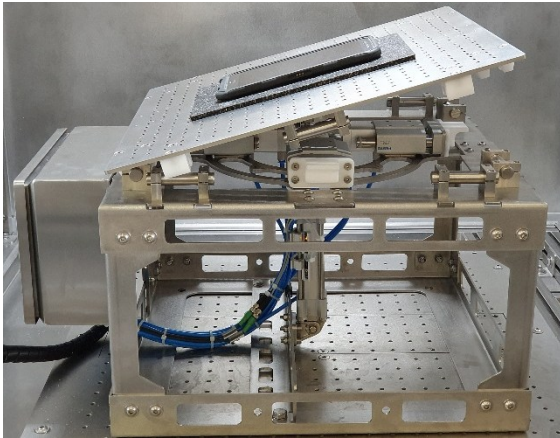
Several test procedures in 1 chamber



IP X1 / X2

iTS - FEATURES

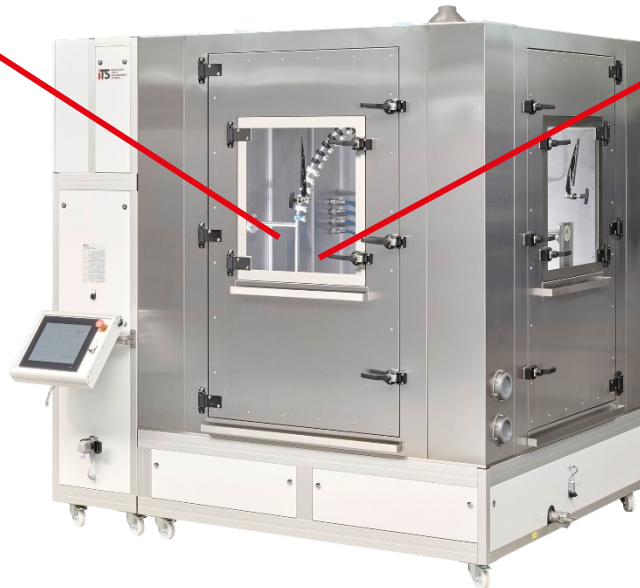
- Drip rate adjustable via flow meter
- Automatic tilting table available for IPX2 tests
- Dripping water boxes in various sizes can be integrated into the Water Test Chamber SPK, but are also available as a stand-alone tiled Room Solution
- Drip nozzles can be replaced individually at any time using a bayonet lock (e.g. in the event of calcification)
- Emptying position of the dripping water box in the SPK



IP X3 / X4 / X4K

iTS – WATER TEST SYSTEM

iTS INNOVATIVE
TEST &
MEASUREMENT
SYSTEMS



iTS Water Test Chamber SPK R800
All swivel tubes from R200 to R800 can be
integrated

IP X3 / X4 / X4K

iTS - FEATURES

- Various swivel tube sizes R200/400/600/800 can be used in the SPK
- Room Solutions SRA for large DUTs up to R1600 possible
- Expansion stages can be retrofitted at any time
- Automatic water regulation according to flow rate or water pressure
- Swivel tubes can be converted $\varnothing 0.4\text{mm} \leftrightarrow \varnothing 0.8\text{mm}$
- Nozzle holes that are not required can be closed (IP X3 \leftrightarrow IP X4)
- Jet direction of each nozzle can be aligned via ball joint
- Flushing function using compressed air for swivel tubes



IP X5 / X6 / X6K

iTS – WATER TEST SYTEM

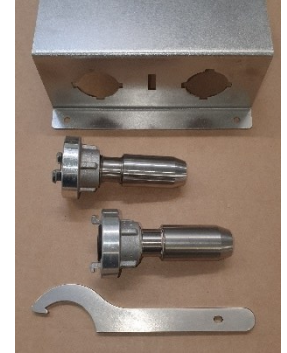


iTS Water Test Chamber SPK R600
With additional tunnel for IP X5/X6/X6K and
UL tests

IP X5 / X6 / X6K

iTS - FEATURES

- Additional tunnel can be flanged to the side window, water supply and control via the iTS Water Test Chamber SPK
- Automatic water regulation according to flow rate or water pressure
- Nozzles easy to replace
- Also available as a tiled Room Solution
- Expansion stages can be retrofitted at any time



IP X7 / X8

iTS – DIP TANK

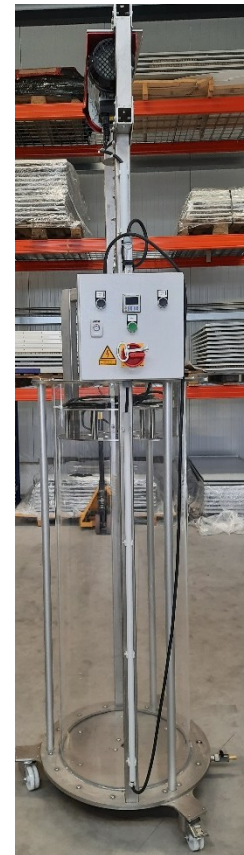
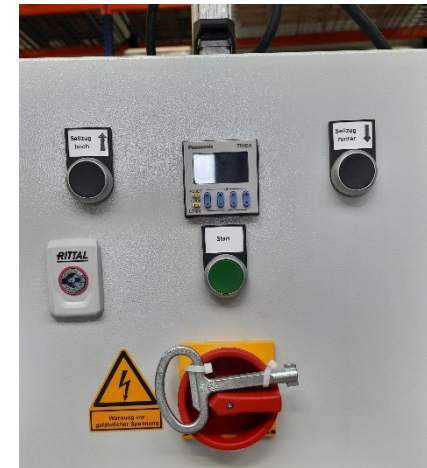


iTS Dip tank



iTS Dip Tank
up to Ø500mm

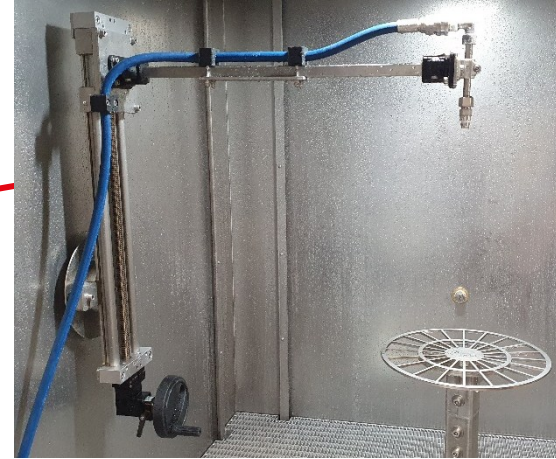
- Dip tanks (up to Ø500mm) for small DUTs – Rectangular tanks for larger DUTs
- Dip tank: Manual adjustment or motorised lowering possible
- Dip tank: Motorised lowering - particularly necessary for heavy DUTs
- Rectangular dip tank with water filter and UV lamp
- Drain tap at the bottom of the container



IP X9 / X9K

iTS – WATER TEST SYSTEM

iTS INNOVATIVE
TEST &
MEASUREMENT
SYSTEMS



Swivelling lance or
4 fixed lances 0°/30°/60°/90°



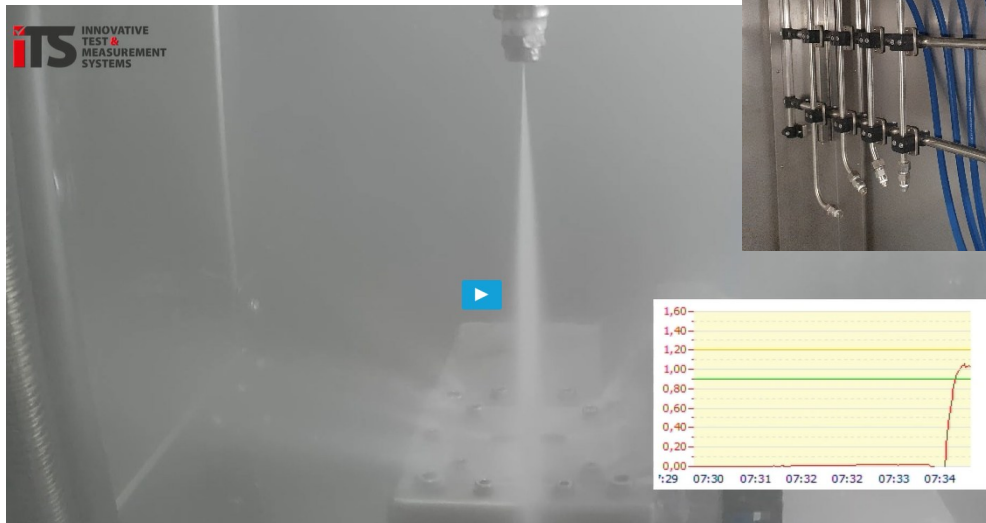
iTS IP X9/X9K

Can be integrated in the Water Test Chamber SPK

IP X9 / X9K

iTS - FEATURES

- Fixed lance system can be aligned via rails, swivel lance is mounted on swivel tube drive - short set-up times
- Integrated water temperature, flow and water pressure sensors - automatic control
- Hot water generation and pump system in the extension to the SPK
- Expansion stages can be retrofitted at any time
- Also available as a tiled Room Solution
- Nozzle measurement with force course



iTS SPLASH WATER CHAMBER SWK ACCORDING TO ISO 16750-4



iTS SWK Splash water chamber

Simulation with 4°C cold water
in a 160°C hot test room for the
automotive industry

→ Drive through a puddle

SPLASH WATER CHAMBER SWK

iTS - FEATURES

- Integration of 2 standard-compliant splash water nozzles possible
- Nozzles permanently installed in the side wall or in flexibly adjustable devices
- Water cooling of the nozzles possible
- Single-walled container for surge medium in pull-out drawer
- Cooling by means of cooling coil via air-cooled refrigeration system
- Surge function via controlled water pump
- Automatic flush function at the end of the test
- Automatic control of test cycles, temperature, surge duration and volume



iTS WATER JET TESTER DWT ACCORDING TO DIN EN ISO 16925



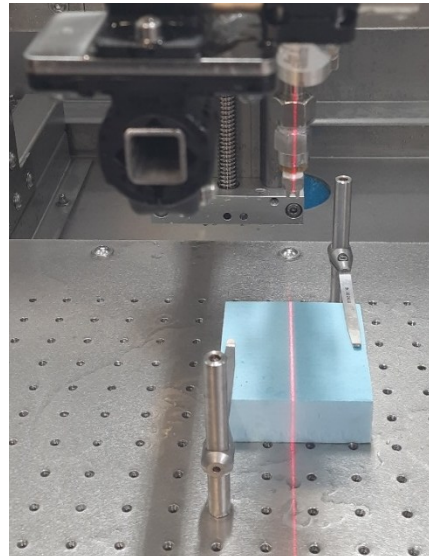
iTS DWT Water jet tester

Enables standard-compliant resistance testing of coated test specimens using a defined pressurised water jet

WATER JET TESTER DWT

iTS - FEATURES

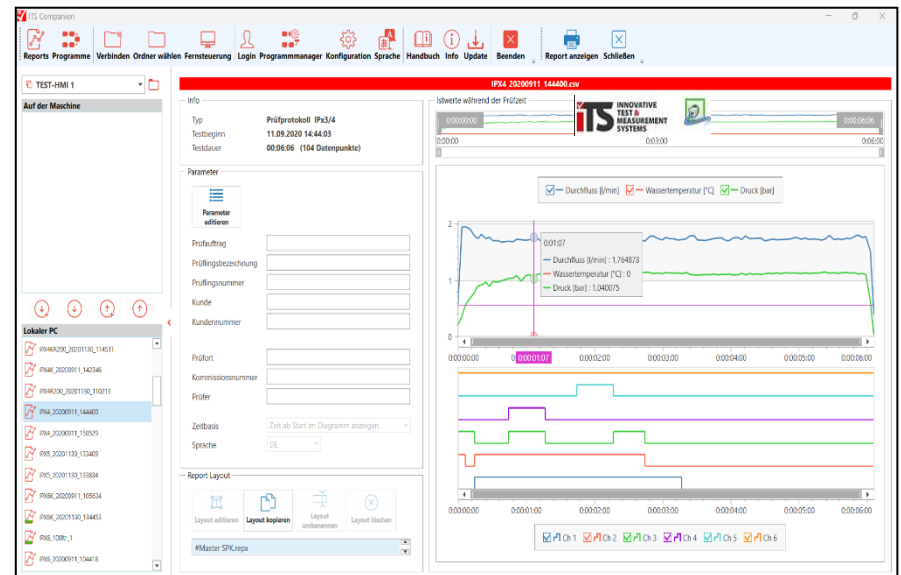
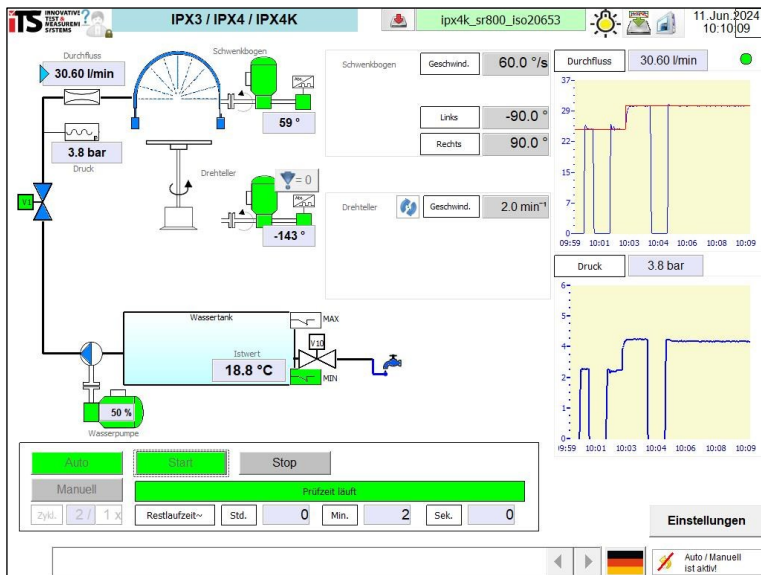
- Adjustable test lance: Height adjustment by handwheel, swivelling $\pm 60^\circ$ with locking mechanism
- Optimum alignment of the nozzle via line laser
- Clamping table with perforated grid for sample mounting via quick-release clamps
- Test nozzle with measurement protocol of the jet force
- Exhaust fan for steam suction in the test chamber roof
- Integrated hot water generator and high-pressure pump
- Automatic control of pressure, temperature and flow rate



IP TEST SYSTEMS

iTS – GENERAL FEATURES

- High degree of automation for iTS test systems - fully automated test runs, even overnight (e.g. for 8-hour dust tests)
- Electronic sensors ↔ Automatic control (pressure, flow rate, temperature)
 - Operating software enables setting options / corrections
- Adjustment and calibration options for reliable test results
 - Sensors with DAkkS calibration (German Accreditation Body)
 - Sensors with factory calibration
- Data recording, evaluation and logging - using the iTS Companion app



- **What do you check?**
- **How do you want to check?**

**We are your innovative
Partner for dust & water
test systems.
Talk to us.**



www.its-gmbh.de