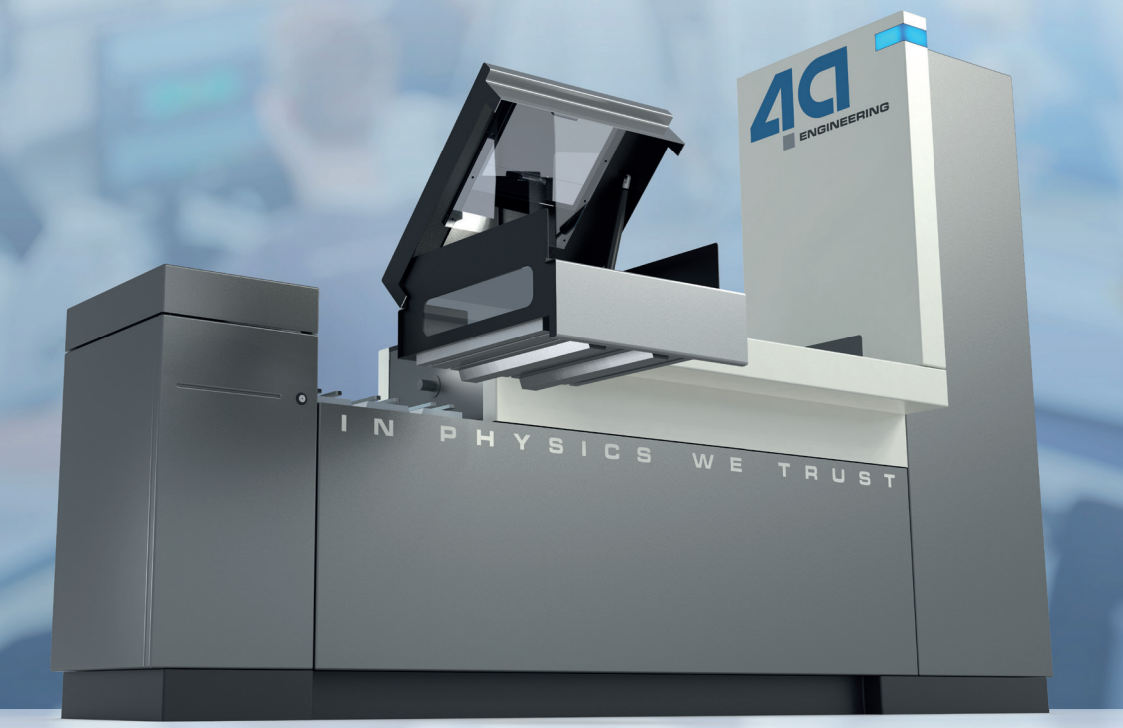
LINOVIS

high performance modular testing



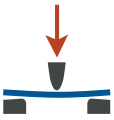
Just another electro-dynamic testing machine?

The brand-new LINOVIS® testing system is the most comprehensive electro-dynamic testing machine up to date. With its 3 modes of use (static, dynamic, cyclic), its various test setups, which are switched in minutes, as well as a maximum force of 25kN even in static mode and the option of 2 integrated DIC cameras we can assure you no wishes stay unfullfilled. The oil-free precision linear drive and the extra stiff frame design ensure similiar testing conditions for every test from ductile plastics to high strength steel alloys. The applications seem endless: high fidelity material characterization, mechanical characterization of battery cells and cell stacks, impact testing on component level, combined complex loading scenarios for all driving modes...

- up to 4 industry-standard machines in one
- modular test chamber design for maximum flexibility
  - fast exchange of test setups
  - thermal chamber
  - battery test chamber
- highest force and speed range of all available electro-dynamic machines
- remote control and automated test data upload
- prepared for automated test execution and change of test setups
- seamless 3D DIC integration
- precision control with 16kHz frequency
- low operation and maintenance costs due to linear drive technology
- high precision extra stiff frame design
- high performance DAQ system with 500kHz sampling rate
- fully detachable and movable user interface

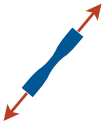
bending tests

e.g.
ISO 178
ISO 7438



tensile tests

e.g.
ISO 6892-1
ISO 527
ISO 26203-2
ISO 18872

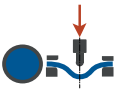


compression tests

e.g.
ISO 844

puncture / impact tests

e.g.
ISO 6603



component tests

e.g.
crash box

special setups

e.g.
KIc based an ASTM E399

fully compatible with IMPETUS test setups

plastics

light metals

steel

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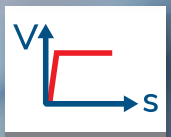
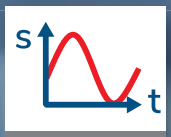
static



dynamic



cyclic

key specs	
max force	25kN
max speed	3.2m/s
max stroke	200mm
energy	600J
frequency	~30Hz

dimensions	
weight	1500kg
x / y / z	320cm / 70cm / 205cm
power	3 phases

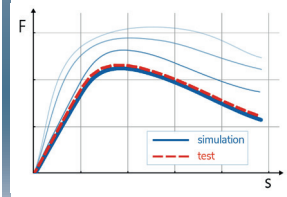
VALIMAT

1 test data management

- full VALIMAT® integration
- all data in one place

2 optimization

- automated FE-model generation
- automated parameter identification
- customizable work-flows



3 validation

- ... of deformation and failure behavior
  - load cases
  - mesh sizes
- one click material card generation

from test to validated material card in one software

Our stand-alone software VALIMAT® combines test- and model data into an efficient database format for material characterization. All testing devices are supported and data can be used to optimize a huge variety of complex material models in LS-Dyna, Pam-Crash, Abaqus with our fully automated AutoFit process. The material model can then be validated on simple FEM coupon tests or even custom built-up geometries and load-cases.

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