

# Hydraulic testing presses of LabTest 6.2000-5000 H.4.00 series

Our H.4 series testing presses up to 5 MN are ideal for performing mechanical compression and bending tests of concrete, stoneware samples, blocks, beams and other products. Depending on the needs, these machines can be used not only for the tests in question, but also for multi-axis tests or other specific tests. In addition, we also offer combined solutions or machines designed for pressing or tamping tests. Our devices have a wide range of control options, from simple to sophisticated software-controlled interfaces, depending on the application and degree of automation. Part of the basic equipment of the test press is a central, quiet and economical hydraulic unit of the HAS series. Each machine is equipped with a protective safety cover according to European Union standards (EN ISO 14120:2015), which ensures safe testing.

With our range of test presses,  
you can try everything...

## Key features

- Robust vertical rack four-column design with integrated single-acting or double-acting hydraulic cylinder.
- Measurement accuracy: accuracy class 1 in accordance with ČSN EN ISO 7500-1. ASTM E4
- Possibility of independent control and control of the test press from the integrated LCD display directly in the electronics.
- The accurate and reliable measuring and control electronics of the EDCi series have 2.5 kHz sampling. The safety functions are in accordance with the new ČSN EN ISO 13850-SIL 1/PL standards, providing a high level of security.
- Integrated safety guard with electric monitoring of the working area of the machine.
- By connecting the machine to a PC via 10/100 Mbit Ethernet with integrated Test and Motion software, it enables precise setup, execution and evaluation of the test.
- Quiet and precise hydraulic unit with low noise and condition monitoring by the HALT 18 system - PLC SIEMENS.
- Compliance with standards and European directives for the H.4 series is documented by the EC and EU declarations of conformity.

## Industry

- construction, woodworking, engineering, automotive, research institutions and schools, etc.

## Type of exams

- universal compression and bending tests

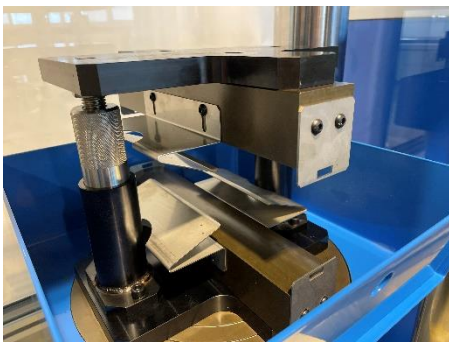


## What can be tested...

- concrete cylinders, drilled cores, concrete blocks, paving concrete blocks
- cement prisms and mortar prisms
- mortar for floor screeds and flooring materials
- fireproof materials
- masonry bodies, bricks, aerated concrete blocks, hollow blocks
- stones and elements made of unreinforced concrete or lightweight concrete
- calcareous sandstones and elements
- ceramic clinkers
- Testing according to standards: EN 993-5, EN 1402-6, EN 1094-5, ISO 8895, ISO 10059-1, ISO 10059-2, etc.
- Testing according to EN 12504-1 and measurement of E-module as well as compressive strength on cement and mortar according to EN 196/EN 1015

## Related products

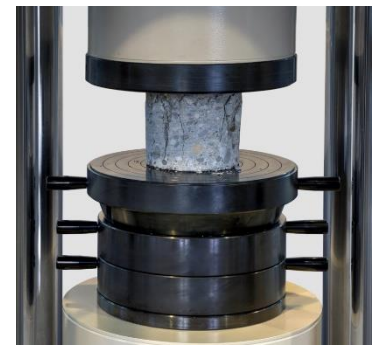
### Special test fixtures according to



- special pressure agents for testing palisades according to ČSN EN 12390x
- crimping dies for curbs according to EN 1340
- 3-point load fixture
- 4-point load fixture
- strength splitting device
- tensile according to EN 1338, etc.

### Accessories on the machine

- single-acting or double-acting cylinders
- distance measurement including position loop control
- measuring probes for measuring the E module
- supplementation of HA with a system for long-term tests



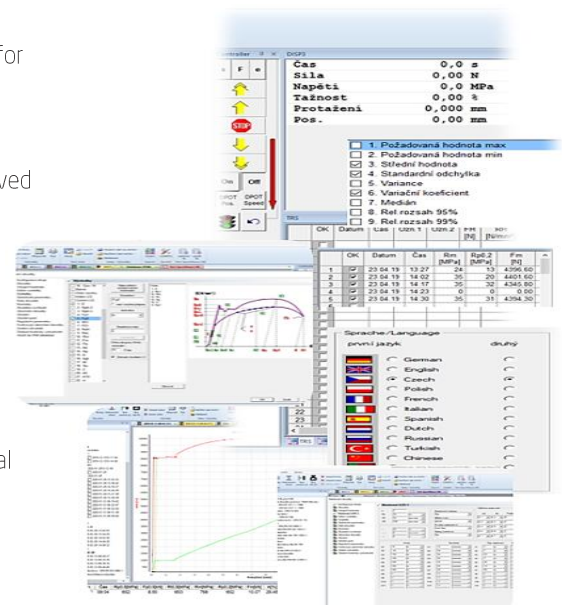
### Standard pressure fixtures

- Hardened ground add-on plates with shoulders for placement on a base plate with the following dimensions: 210 x 210 x 110 mm, 170 x 170 x 50 mm, 120 x 120 x 50 mm
- Non-hardened spacer blocks, ground for placement between the pressure plate and the piston, fixed with a dowel with dimensions: Ø 300 x 60 mm a Ø 300 x 50 mm
- Centering device for pressure plates and auxiliary plate
- Larger dimensions of pressure plates: 320 x 320 x 75 mm, 320 x 420 x 75 mm, 320 x 520 x 75 mm etc.

## Software Test&Motion+

### Intuitive and reliable software

- Unlimited number of test methods, modular system of libraries designed for standardized tests, easy orientation in pre-selected definitions with visualization of fixtures – mandrel, clamps, settling frames, etc.
- Evaluation of optional parameters: maximum force, strength, elongation, elongation, tension, 5 different reference points depending on the approved test module etc.
- Real-time graph, possibility of individual processing after the test, mass graphs, zoom, serial testing...
- Receiving sample dimensions from peripheral devices – accidental, micrometer
- Editable sample types and test standards including modification
- Digital display of all current values
- Storage of measured data in a database with the possibility of filtering
- Statistical evaluation of data and graphs, extensive selection of statistical methods
- Accurate information about machine status and error messages
- Multilingual version (CZ, EN, POL, RU, ESP etc.)
- Print the report in PDF format
- Export data to CSV – BASIS, or to MY SQL and MS SQL
- Setting user rights, operator login etc.



## Specification

Ratings	Units	LabTest 6.2000 H.4	LabTest 6.3000 H.4	LabTest 6.4000 H.4	LabTest 6.5000 H.4
Product code		1.08044220	1.08044320	1.08044420	1.08044520
Compressive force	kN	2000	3000	4000	5000
Number of columns		4	4	4	4
Cylinder stroke	mm	100 - standard (possibility to increase the stroke up to 300 mm)			
Measuring range	kN	10 až 2000	15 až 3000	20 až 4000	25 až 5000
Working hydraulic pressure	bar	350			
Min. rigidity of the machine	kN/mm	3820 $\geq$			
Hardness of pushers	HRC	53 až 55			
Machine weight	kg	2710	2895	3120	4050
Dimension - A x B	mm	1950x980	2050x980	2260x1080	2360x1180
Dimension - C x D	mm	660x500	660x500	860x500	960x500

### Environmental conditions

Temperature of the working environment	°C	+10 ... +35			
Storage temperature	°C	-25 ... +55			
Humidity of the working environment	%	<90			

### Electrical connection

Supply voltage/frequency	V / Hz	3x400V/50-60			
Number of phases		3			
Machine power consumption	kVA	4	4	4	8,5

### Other parameters

Color combination	RAL	1015, 5015			
Interface to PC		USB, Ethernet			
Speed of data communication with PC	kHz	10			
Standard effective tensile/compressive resolution	dílku	$\pm 250000$			
E-Stop by		EN ISO 13850 - SIL 1 / PL c with monitoring			

