

IGT Vertical Tensile Testers



The IGT Vertical Tensile Testers TT3xxx / TT5xxx are CPU controlled single column devices for tension, compression and bending tests up to 3kN and 5kN maximum force and with a movement range of 500 or 1200 mm.

Due to the solid construction, made of aluminum and stainless steel and the completely enclosed spindles, the devices can be used in testing laboratories as well as in rough production environment.

A wide range of clamps together with our WINDOWS software allow the realization of standard tests and nearly all customer specific tests.

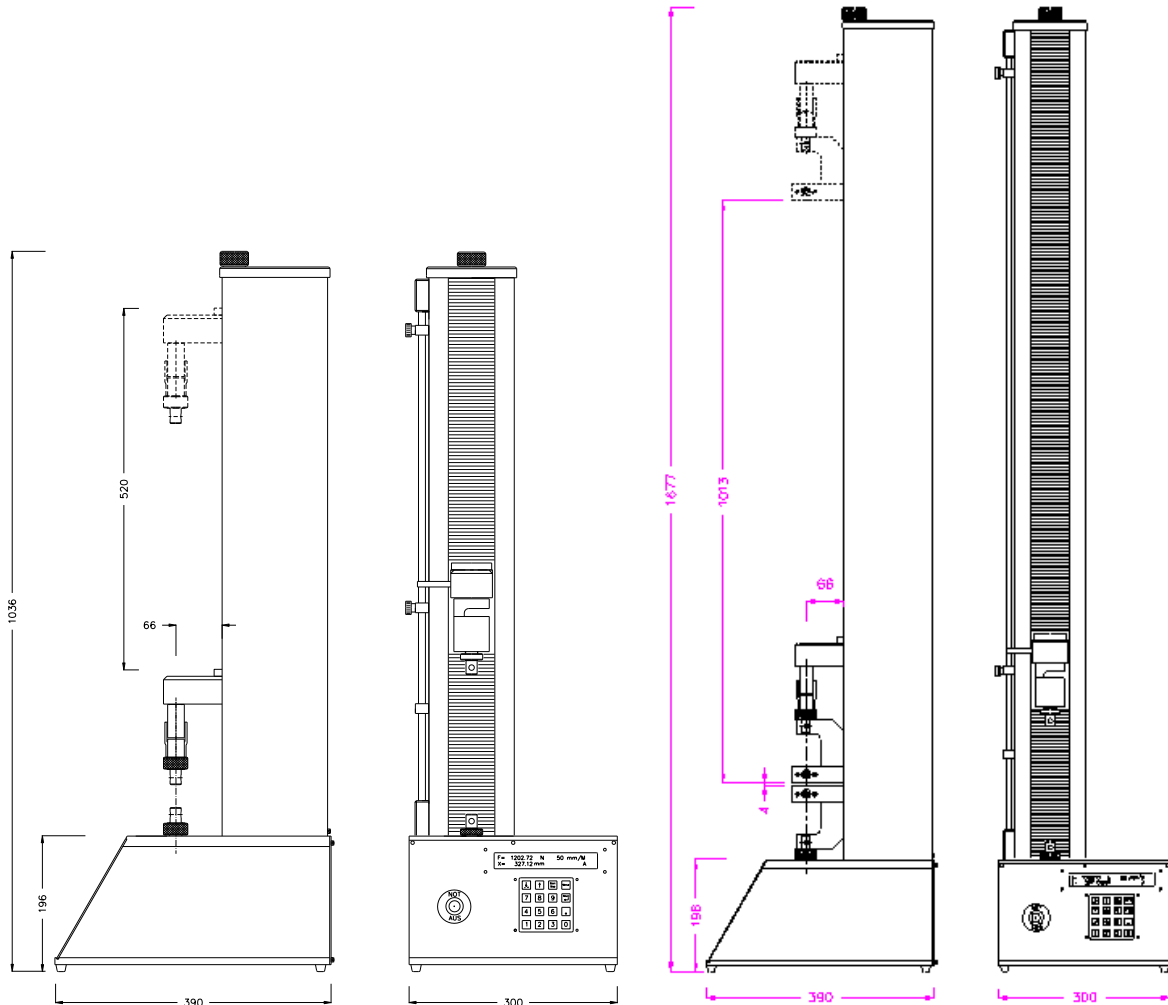
Manual tests are simply possible without PC software. The test parameters can be entered via a keyboard. The stored parameters are shown on the LCD display together with the actual force and displacement values. After a test the display shows automatically the maximum force and the breaking force of the current trial.

The PC software controls the test procedure and shows an on-line graph and the characteristic values, as for instance force and displacement.

All devices obtain the accuracy class 0.5 according ISO 7500-1 and can optionally be delivered with calibration certificates.

Technical Specifications

Vertical Tensile Tester 3kN / 5kN with 500 and 1200 mm Movement



Type	VT3050	VT5050	VT3120	VT5120
Maximum load	3kN	5kN	3kN	5kN
Movement	520 mm		1200	
Space to Column	66 mm			
Speed	1-500 mm/min (Returning Speed 700mm/min)			
Force Resolution	200000 digit			
Displacement Resolution	0,01 mm			
Measuring Rate	50 measurements per second			
Display	2 lines LCD-display			
Test Results	force regulation, brake load, maximum load			
Interface	USB 2.0			
Dimensions	1036 mm x 300 mm x 390 mm		1677mm x 300mm x 390mm	
Weight	36 kg	55 kg	56 kg	59 kg
Power Supply	230V / 50 Hz			

For lower force measuring applications are also load cells with lower nominal values available to guaranty a higher accuracy.

Optionally deliverable load cells: 5kN, 3kN, 1kN, 500N, 200N, 100N and 50N. Linearity error 0,03% full scale.

Options and accessories MS56-1,2kN+Ko

Pneumatic grip MS56-1,2kN+Ko

Pneumatic piston Ø 50 mm
Manually adjustable counter-jaw
Weight: 0,53 kg per grip

Pneumatic grip MS56-1,2kN+2Ko

Dual sided pneumatic pistons Ø 50 mm
Weight: 0,71 kg per grip

- Clamping force: 1.2 kN / 7 bar
 - Temperature range: 0 - +70°C (depending on jaws)
 - Additional temperature ranges available on request
 - Body: Aluminum, anodized
 - Pneumatic connection: M5
- Also available as vise grip (see data sheet MS56-1kN)



MS56-1,2kN+Ko



MS56-1kN



MS56-1,2kN+2Ko

Ordering information

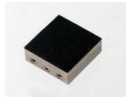
Item No. MS56-1,2kN+Ko

Item No. MS56-1,2kN +2Ko

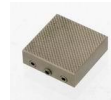
Scope of delivery: 1 pair without jaws, which must be ordered separate.



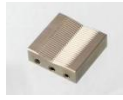
Blank (smooth) jaws
- Suitable for own further treatments
- Steel-blanks without coating



Rubber coated jaws
- 1mm rubber coating (NBR)
- Nickel-plated



Pyramid jaws (serrated, cross cut)
- Pyramids 1.2x45°
- Hardened steel 58HRC
- Nickel-plated



V-jaws
- For all kinds of round samples
- Tooth pitch 1.2 mm
- Hardened steel 58HRC
- Nickel-plated



Wave jaws (corrugated)
- For flexible materials
- Wave 5 mm
- Hardened steel 58HRC
- Nickel-plated

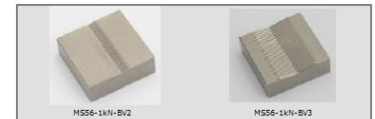


Diamond coated jaws
- Clamping surface coated with synthetic diamonds D91 (170/200 mesh)
- Nickel-plated

Jaws for MS56-1kN and 1,2kN+Ko / +2Ko: 1 Set = 4 jaws

Item no.	Surface	Clamping surface H x W	Opening	Weight per pair
MS56-1kN-B	Blank jaws	30 x 30mm	0-10mm	0,13kg
MS56-1kN-BG	Rubber coated jaws	30 x 30mm	0-8mm	0,13kg
MS56-1kN-BP	Pyramid jaws	30 x 30mm	0-10mm	0,12kg
MS56-1kN-BV2	V-jaws	30 x 30mm	2-10mm Ø	0,12kg
MS56-1kN-BV3	V-jaws	30 x 30mm	3-10mm Ø	0,13kg
MS56-1kN-BW	Wave jaws	30 x 30mm	0-10mm	0,12kg
MS56-1kN-BD	Diamond coated jaws	30 x 30mm	0-10mm	0,13kg

Jaws with other dimensions and surface coatings on request



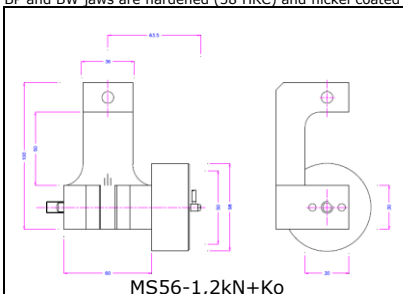
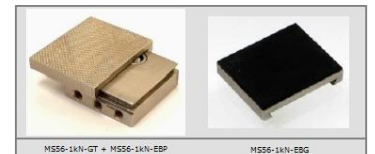
Inset jaws for MS56-1kN and 1,2kN+Ko / +2Ko: 1 Set = 4 jaws

Quick change system, Inset jaws require carriers ((MS56-1kN-GT).

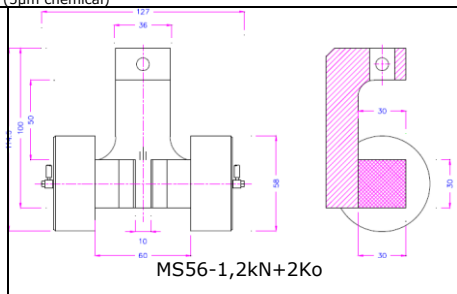
Item no.	Surface	Clamping surface H x W	Opening	Weight per pair
MS56-1kN-GT	Carrier	-	-	0,12kg
MS56-1kN-EB	Blank jaws	30 x 36mm	0-4mm	0,05kg
MS56-1kN-EBG	Rubber coated jaws	30 x 36mm	0-2mm	0,06kg
MS56-1kN-EBP	Pyramid jaws	30 x 36mm	0-4mm	0,05kg
MS56-1kN-EBD	Diamond coated jaws	30 x 36mm	0-4mm	0,05kg

Jaws with other dimensions and surface coatings on request

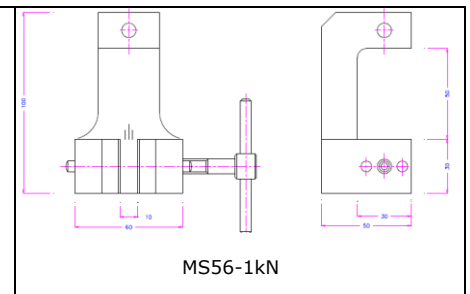
BP and BW jaws are hardened (58 HRC) and nickel coated (5µm chemical)



MS56-1,2kN+Ko



MS56-1,2kN+2Ko



MS56-1kN