

Load Frame Configuration:

4 or 6 column

Capacity:

200kN, 300kN, 500kN, 600kN, 1000kN, 2000kN

Test Space:

Dual zone (tension on top, compression on bottom)

Typical specimens:

Fasteners, rebar, chain, welds, castings

Frame

1. Lead screw driven crosshead to adjust the test space
2. High-Stiffness 6-column load frame design incorporates 3-position crosshead, adjustable specimen positioning, precision guide columns, thick crosshead and base beam minimizes load frame stored energy while producing reliable, stable, accurate load, strain and modulus values.
3. Ergonomically designed load frames ensure safety, reduce operator fatigue, and provide the highest level of flexibility.
4. Standard Dual Zone Test Space for reducing setup time
5. "Quick Return" hydraulic valve for higher throughput
6. Automatic limit checking for crosshead position, overload, over temperature, over voltage, etc.
7. The system can return automatically, the oil cylinder can return the original position via manual or automatically after finishing testing
8. Positive specimen holding is ensured by the wedge action of hydraulic operated grips
9. Imported encoder mounted on the seat is for position measurement of crosshead with high accuracy
10. Imported servo valve provides high stability and reliability



Load cell

1. Use strain gauge load cell technology to measure the force being applied to specimen. The load cell is located in the lower grip and is used to directly measure tensile force.
2. High precise load cell measures and captures sensitively tension and compression force, high accuracy load measurement resolution reaches 1/500000 with no steps.
3. Famous brand load cell ensures high precision and repeatability.

TruForce

Hydraulic Universal Testing Machine | TF-HUT-A

Various frames to satisfy your test needs from low force to high force



Full complement of test accessories

Extensive range of accessories to meet test requirements in almost any application or industry: rebar, fasteners, chain, welds, castings, concrete and other building materials

- Tension grip
- Compression fixture
- Flexure fixture
- Rock shear fixture
- Concrete split fixture
- Fastener tension grip
- Extensometer
- Automatic extensometer
- others

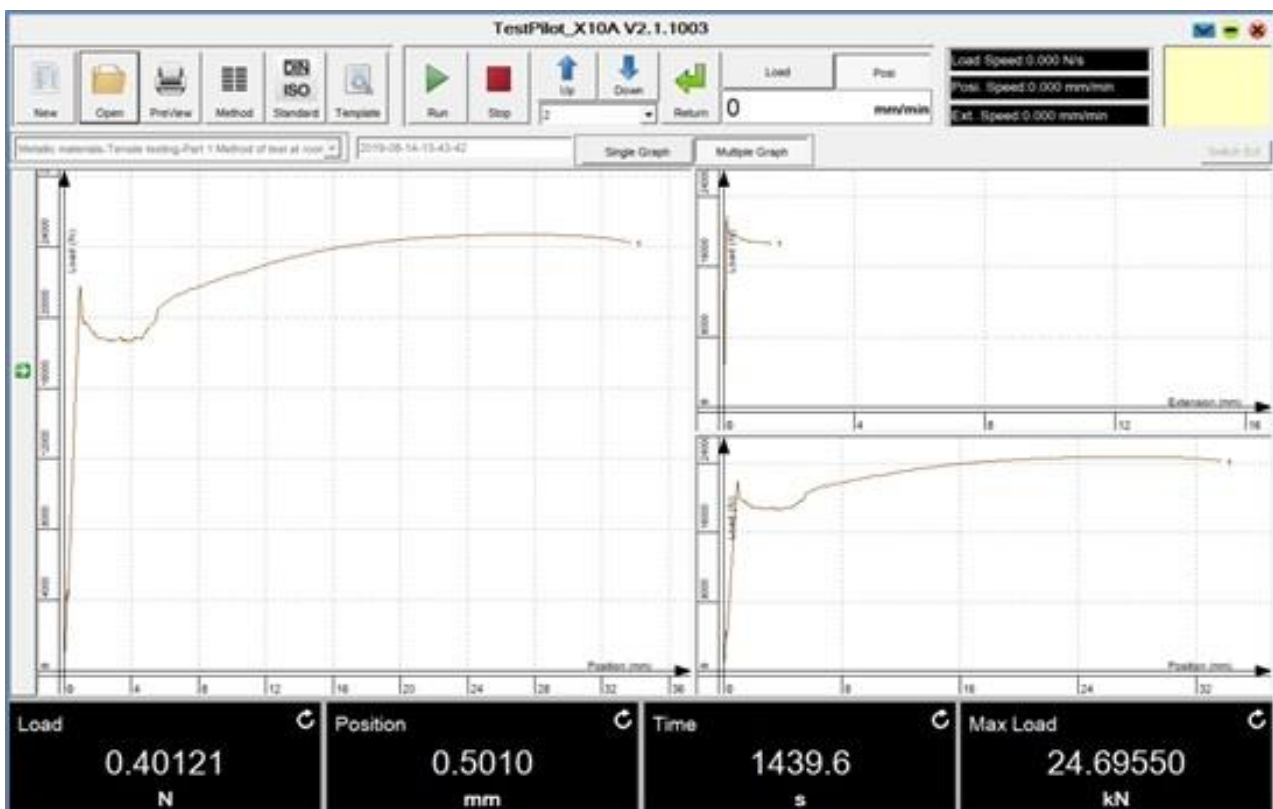


Powerful test software - TruTest

-Two steps to start testing: select a project, press start

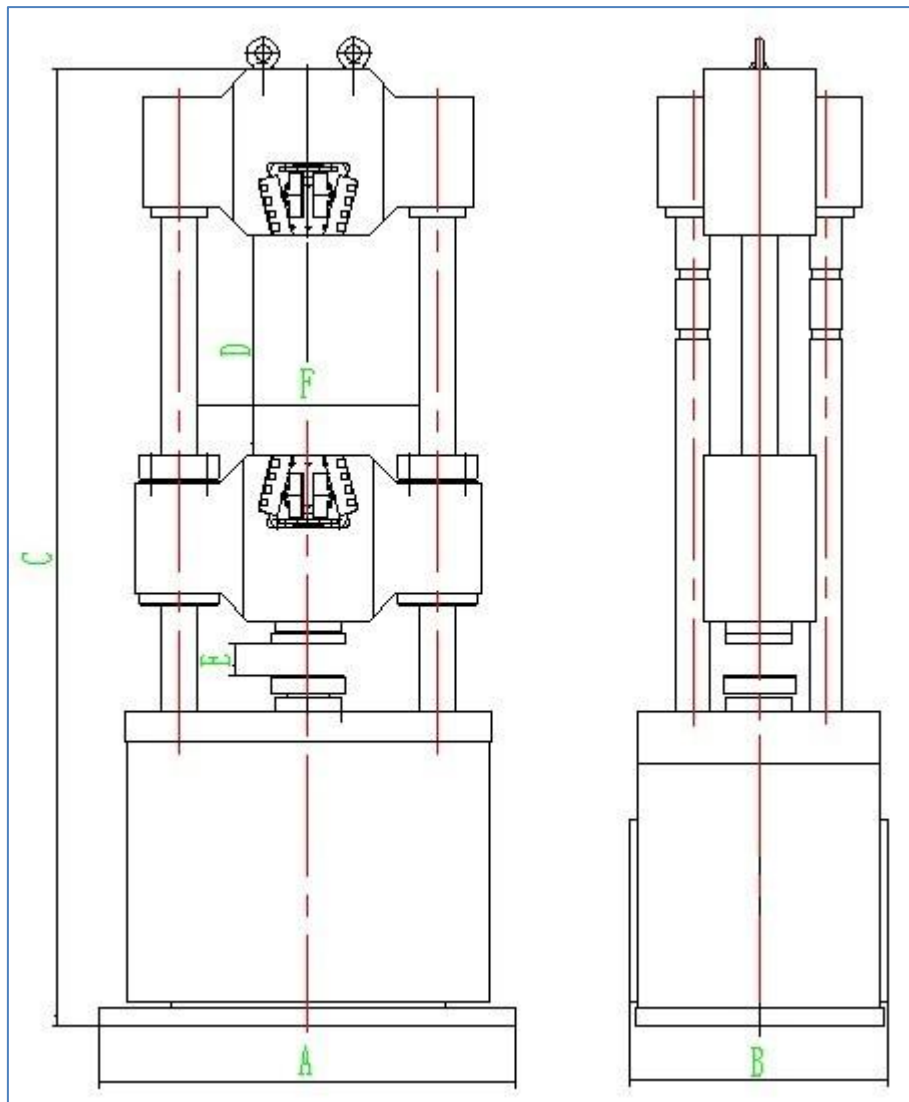
This software features a large, growing host of pre-packaged test methods to help you quickly and efficiently meet the requirements of global test standards such as ASTM, ISO, DIN, EN, BS, and more. Selected by an operator at runtime, these methods are crafted to meet the specific test flow, analysis and reporting requirements of industry standards across a range of specimen and test types. Pre-packaged test methods are available in a wide selection of bundled sets, including: Polymers & Plastics, Metals, Construction Materials, Biomedical Products, Paper Products, Adhesives, foam, textiles and more.

- Versatile, easy-to-use TruTest software with a large and growing library of standards-compliant test methods (ASTM, ISO, DIN, EN, BS, and more)
- Modular design permits easy upgrading
- Plenty of test standards are built in the library of the software for routine tests.
- User configured report: user can preset report template and include necessary information, like company information, statistics, and etc. Test report can export to Excel or Word.
- Powerful graphic function: real time display curves, like displacement-load, stress-strain, displacement-time, load-times, and others
- Powerful analysis function can calculate typical value and display on the curve, like Fm, ReL, ReH, Rp.
- Measurement unit: Users can select SI, or others, like N, kN, kgf, lbf, MPa, and so on, user can define the unit by themselves using formula.



Frame dimensions

Model	Outside dimension A×B×C (mm)	Tensile space D (mm)	Compression space E (mm)	Test width F (mm)	Piston travel (mm)
TF-HUT305A	820×570×1955	520	520	405	150
TF-HUT605A	940×650×2400	710	700	430	250
TF-HUT106A	1020×670×2600	760	630	430	250
TF-HUT206A	1370×820×3300	920	750	640	250



TruForce

Hydraulic Universal Testing Machine | TF-HUT-A

Specifications:

Model	TF-HUT205 TF-HUT305	TF-HUT505 TF-HUT605	TF-HUT106	TF-HUT206
Type	Type A			
Capacity (kN)	200 300	500 600	1000	2000
Calibration accuracy	Class 1 / Class 0.5			
Force accuracy	Better than $\pm 1\%/\pm 0.5\%$			
Force range	1% ~ 100%FS			
Resolution	1/500000FS			
Extension range	1% ~ 100%FS			
Extension accuracy	Better than $\pm 1\%/\pm 0.5\%$			
Extension resolution	1/500000 of max extension			
Actuator (piston) speed (mm/min)	0 ~ 180	0 ~ 140	0 ~ 90	0 ~ 70
Force loading speed	0.02% ~ 2% FS /s			
Column number	4	6	6	6
Column spacing (test space width) (mm)	405	430	430	640
Maximum tension space (mm)	520	710	760	920
Maximum compression space (mm)	520	700	630	750
Diameter of round specimens (mm)	$\Phi 10 \sim \Phi 32$	$\Phi 10 \sim \Phi 40$	$\Phi 10 \sim \Phi 55$	$\Phi 10 \sim \Phi 70$
Diameter of threaded steel (mm)	$\Phi 10 \sim \Phi 32$	$\Phi 10 \sim \Phi 36$	$\Phi 10 \sim \Phi 50$	$\Phi 10 \sim \Phi 50$
Thickness of flat specimens (mm)	2 ~ 25	2 ~ 30	2 ~ 40	10 ~ 70
Compression platens (mm)	$\Phi 120$	$\Phi 150$	200x200	$\Phi 240$
Actuator (piston) stroke (mm)	150	250	250	250
Frame dimension (length × width × height) (mm)	820x570x1955	940x650x2400	1020x670x2600	1370x820x3300
Hydraulic Power Unit dimension (length × width × height) (mm)	1150x600x900			
HPU flow rate (L/min)	3.5	5	7.5	8
Power consumption (kw)	5	6	8	
Power supply	3-phase, 5-line, AC380V, 50Hz			
Frame weight (kg)	1500	2500	3500	8000
Optional bending fixture	Support span (mm)	30 ~ 350	30 ~ 400	60 ~ 500
	Bending nose diameter (Φ , mm)	3 ~ 65	3 ~ 200	3 ~ 300

Standard configurations:

Name		Description	Quantity
Main machine	Load frame	Dual space, class 1	1 set
	Load cell	built-in the load frame	1 set
	Displacement encoder		1 set
	Motor and speed reducer		1 set
HPU	Oil tank		1 set
	Pump		1 set
	Servo Valve		1 set
	Valve manifold		1 set
	Cooling fan		1 set
	High pressure oil hoses		4 sets
Grips & Fixtures	Compression fixture		1 pair
	Hydraulic wedge action tensile grip		1 pair
Controller		Model: DTC-500	1 set
Software		TruTest	1 set
Accessories	Maintenance tools	inner hexagon spanner 1 set Phillips screwdriver 1 set Open spanner 1 set	1 set
	Operation & Maintenance manual		1 set
	Software manual		1 set
	Warranty card		1 set
	Quality Certificate		1 set

Prepared by customer:

- The anti-wear hydraulic oil (N46, 75L) shall be purchased by customer at local market.
- The foundation work needs to be finished 14 days prior to UTM delivery.
- Computer and printer should be prepared by customer

Shipping information

Model	Crated dimension (mm)	Crated weight (kg)
AC2012-HUT205/HUT305	2230X1000X940	1500
AC2012-HUT505/HUT605	2610X1110X1040	2800
AC2012-HUT106	2900X1240X1130	3700
AC2012-HUT206	3400X1490X1270	7500
HPU (hydraulic power unit)	1430X850X1180	380