Hydrostatic and Burst Testing Machine | HTM Type A

Introduction

HTM series type A hydrostatic and burst testing machine features compact structure design and simple to use. It is specifically used for time-to-failure test of plastic pipe under constant internal pressure, and for test of resistance to short-time hydraulic pressure of plastic pipe, tubing, and fittings.

Max pressure: 10Mpa, 16Mpa, 20Mpa

Standards

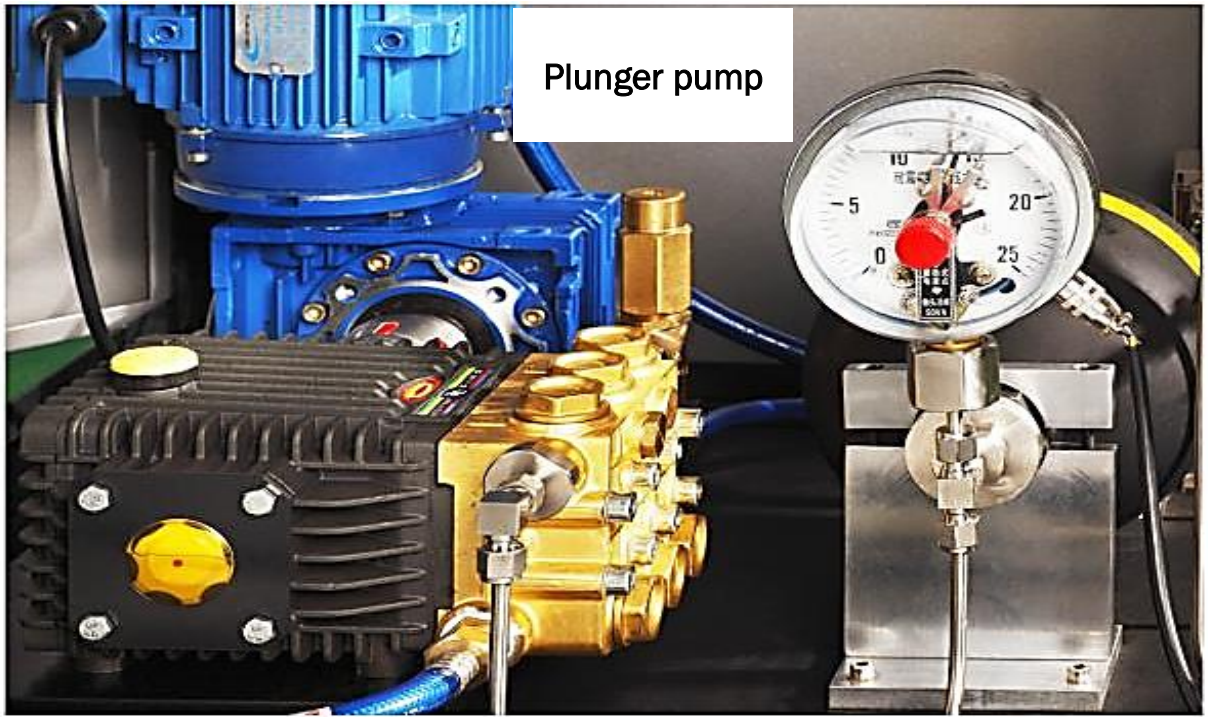
GB/T 6111, GB/T 15560, GB/T 18997.1, GB/T 18997.2, ISO1167, EN921, ASTM F1335, ASTM D1598

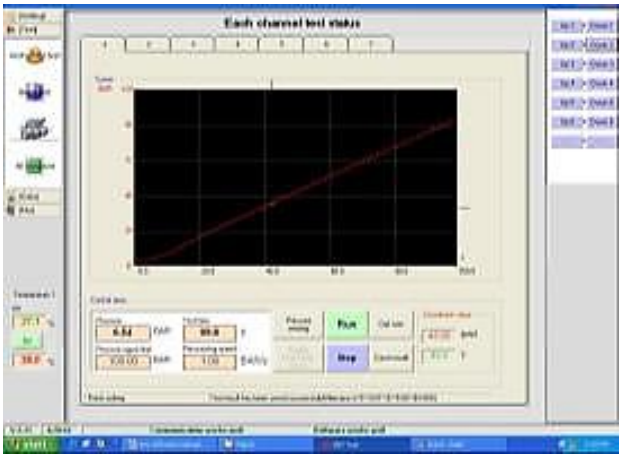
New feature

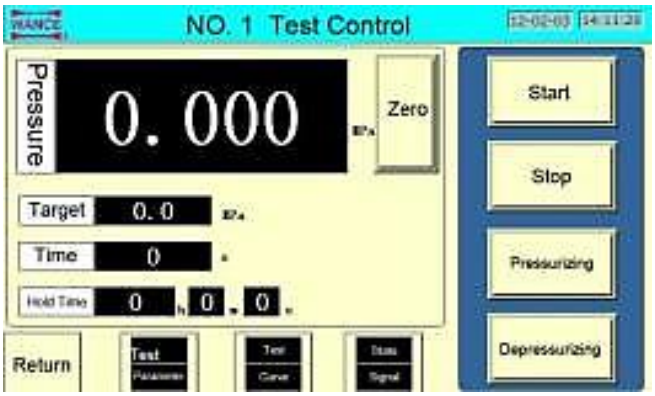
- Leakage judge
- Rupture identification
- Overpressure protection
- No-water protection
- Automatic test saving when power off
- Continuous test after power recovery
- Test curve explore
- Calibration function

Reliability & Durability

- Advance imported PLC specially designed for industrial use offers closed loop control of working pressure and pressure compensation with high reliability and stability, allowing 10000 hours continuous test without failure
- Learnt from Denmark technology, accumulator is used for general pressure output, reducing frequent start of motor and pump ,prolonging services life and improving pressure control accuracy
- Imported components ensure high reliability and precision, such as pressure transducer, electromagnetic valve, electromagnetic valve, and electric pump
- Accumulator for pressure compensation reduces working time of motor and pressurizing system, improves pressurizing system life and ensures pressure accuracy
- Imported electric pump ensures high stability and reliability, and improves accuracy of pressurizing speed and control
- Water filter provides high precision filtering with big flow rate and stainless mesh
- Stainless SS316 piping system features high reliability and durability.







Usability

- Wide view full color touch screen is simple for operation without PC
- Professional test software is powerful and simple to use. Real-time display of pressure-time graphics of each stations; real-time display data, and print test report; test data and report complies with OFFICE and test report is programmable according to user's requirements

- Automatically sample and analyze test data, generate test curve, save test data, and build test report.
- Modular design: user authorization management, test process setup, test curve analysis, test data review and calibration.
- Real-time display of time-pressure curve and time-temperature curve.
- Powerful test parameter setup allows hydrostatic test, burst test and graduation pressuring test.
- Continuous test function: under conditions of sudden power off or no water supply, the test can be continued with saved database after recovery.
- Curve explore: zoom in or out to view the curve, also compare multiple curves in one window.
- Report can be export to Excel, both test data and test curve.
- Additional function can be added: LAN connection and report template design

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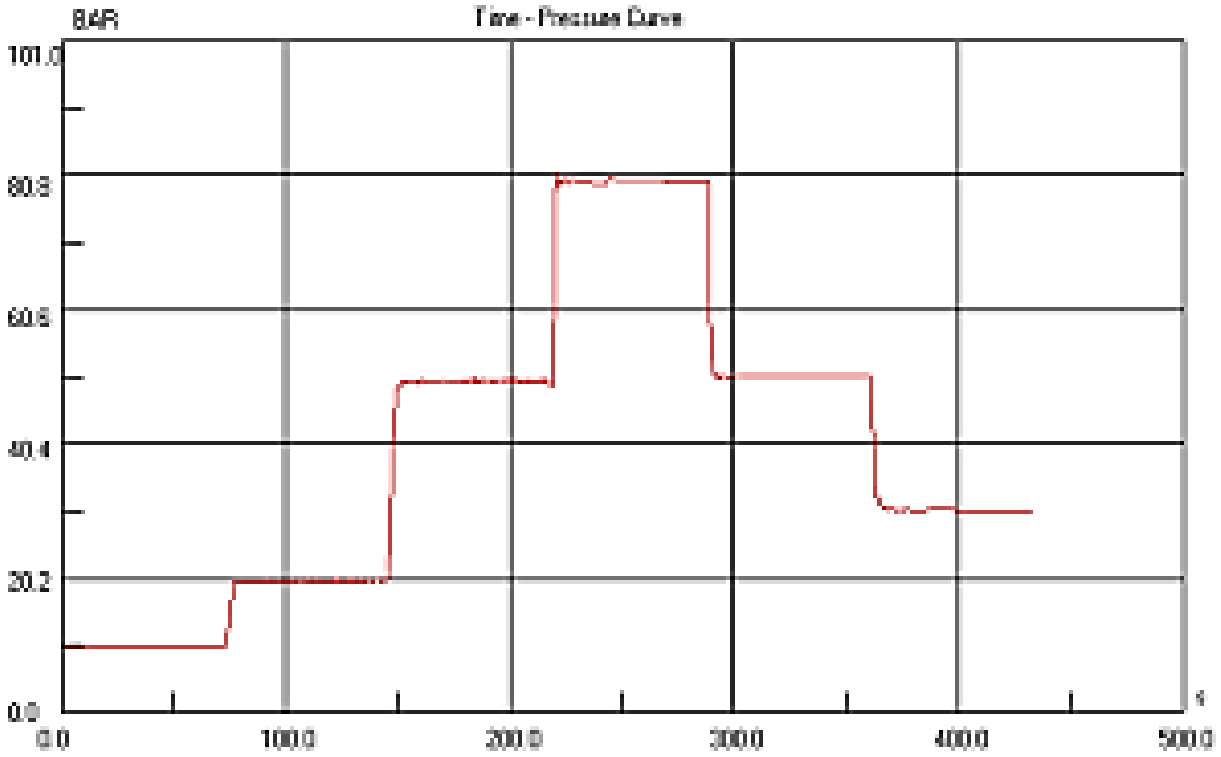


- 1~64 test stations are available to accommodate multiple tests separately without interference on each other
- Continuous test after power reset saves time for test
- 6 types of standard size water tank are selectable for various sizes of test specimens. Specimen can either be horizontally positioned, or vertically. Water tank can be customized for non-standard shape or size of specimen. Water tank is made of stainless steel with perfect heat preservation; auto water compensating ensures test reliability
- Optional low temperature cooling system permits non-ambient test with temperature ranging 20℃~95℃
- The end closures use German technology. Various types are available to satisfy different requirements. It's simple to prepare samples with perfect sealing

Parameters

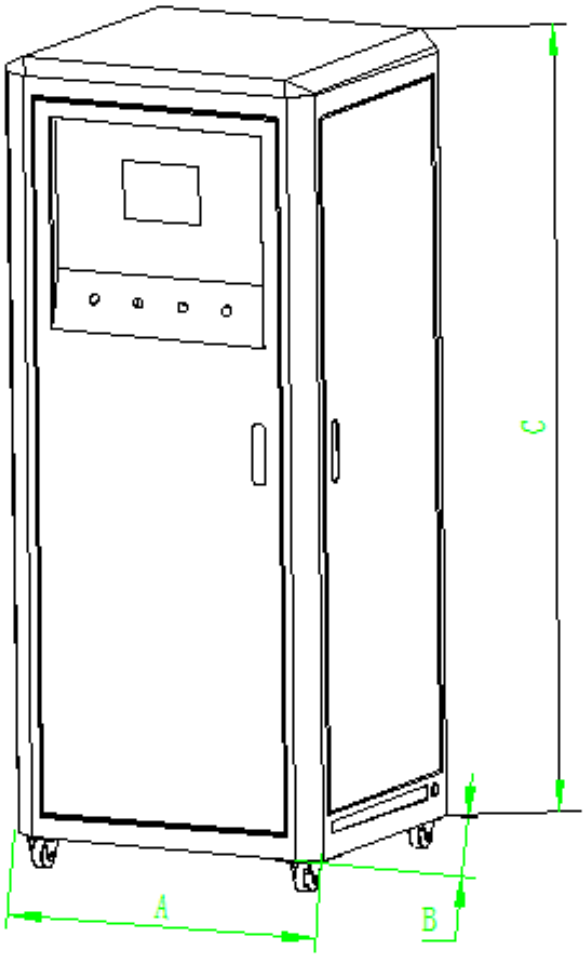
Model	HTM107	HTM167	HTM207
Type	Type A		
Max pressure	10MPa	16MPa	20MPa
Test stations	1~20		
Constant pressure display accuracy	0.01MPa (touch screen); 0.001MPa (software)		
Constant pressure accuracy	-1%~+2%		
Constant pressure range	5%~100%		
Timing range	0~10000h		
Timing accuracy	≤±0.1%		
Power requirements	3-phase, AC 380V, 50Hz; 1.5kW (1~6 stations); 5kW (7~20 stations)		
Control cabinet dimension (A x B x C)	700mm×600mm×1800mm (1~6 stations) 1050mm×900mm×1840mmmm (7~20 stations)		
Control cabinet weight	150kg (1~6 stations); 200kg (7~20 stations)		

Optional water tank (including heating system temperature up to 95℃)

Type	A	B	C	D	E
ID dimension (mm)	1100×700×700	1700×700X700	2000x1100x1100	1100x700x1100	1100×900×1500
OD dimension (mm)	1500×1000×1020	2100x1000x1020	2400×1400×1420	1500×1000×1420	1500×1200×1820
Specimen diameter (mm)	<Φ250	≤Φ400	≤Φ630	≤Φ110	≤Φ250
Water tank type	Horizontal			Vertical	
Temperature range	Ambient~95℃ 15~95℃ (optional cooling system)				
Temperature accuracy	≤±1℃ (water tank)				
Temperature uniformity	≤±1℃ (water tank)				
Test stations	One station can be divided to 1~5 branches, to connect 1~5 samples. Standard is one station and one branch				
High pressure hose	Quantity: test station number N+1 Length: A, B, D: 1 meter, C, E, F: 1.5 meter				
Quick coupling	Station number N+1				
Input connecter	M14×1.5-6g (Φ5×1.8 O-ring face seal)				
Power supply	3-phase 5-line, AC380V±10%, 50Hz				
Heating power	12kW	12kW	24kW	12kW	12kW
Weight	220 kg	310 kg	380 kg	260 kg	380 kg

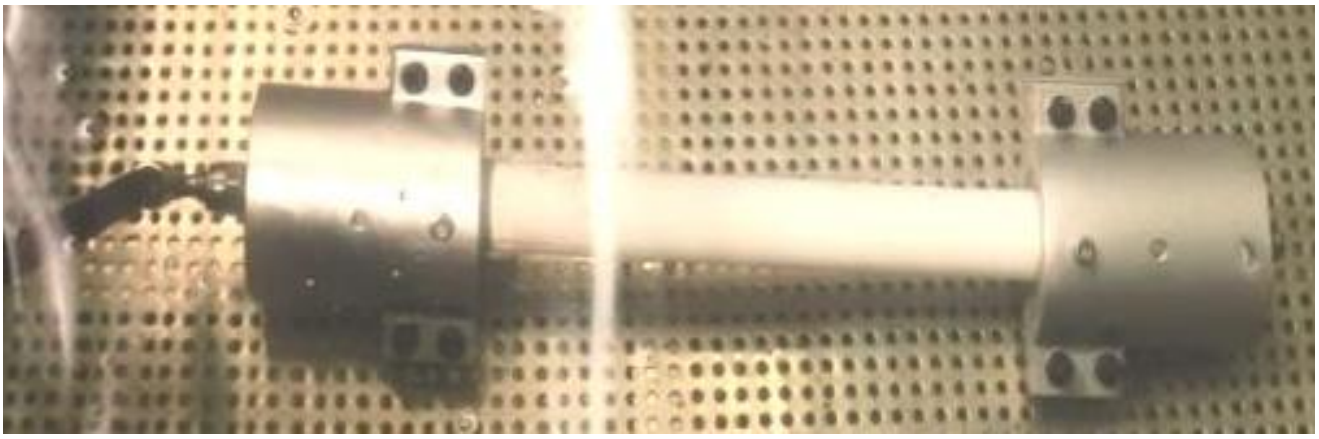
- Both inside and outside are made of stainless steel 304
- Optional heating system permits tests under temperature from ambient to 95℃
- Equipped with circulation pump to ensure good temperature uniformity.
- Automatic detection of water level and automatic water compensation
- Quick couplings are stainless steel with pressure up to 34.5Mpa
- Teflon hoses are durable with temperature range -73~+232℃

Water tank (type A, B, C)



Water tank (type D, E, F)

Water tank



Optional cooling system (equip for water tank)

Type	A	B	C
Cooling capacity	3600W	5200W	7200W
Power supply	Single-phase, AC220V±10%, 50Hz		
Power consumption	1.5kW	2.2 kW	2.75kW
Weight	63.5kG	66kG	72kG
Outside dimension (L x W x H)	728×420×670mm	728×420×670mm	748×440×725mm

Cooling system is used to cool down the temperature of water tank to 15℃

Water tank with cooling system

Optional end closures (end cap)

- Comply with ISO 1167, type A
- Stainless steel type: Φ16~Φ250
- No pull-rod outside seal is the recommend type in test standard.
- Smart design ensures perfect seal without leakage
- Specially made silicon rubber seal is one-body structure even for big size like Φ630mm, not only improving seal quality and mounting efficiency, but also satisfying long time, high pressure and high temperature tests.
- 316 air release valve can be fastened manually, simple to operate

Stainless steel no pull-rod end enclosure

No.	Nominal pipe diameter	Maximum pressure (MPa)
1	Φ16	10
2	Φ18	10
3	Φ20	10
4	Φ25	10
5	Φ32	10
6	Φ40	10
7	Φ50	10
8	Φ63	10
9	Φ75	10
10	Φ90	10
11	Φ110	10
12	Φ125	10
13	Φ140	10
14	Φ160	10
15	Φ180	10
16	Φ200	10
17	Φ225	10
18	Φ250	8
19	Φ280	8
20	Φ315	8
21	Φ355	8
22	Φ400	8
23	Φ450	8
24	Φ500	8
25	Φ560	8
26	Φ630	8
27	Φ710	6
28	Φ800	6
29	Φ900	5
30	Φ1000	4
31	Φ1200	4

Remark:

- Quantity: means quantity for one pair of end enclosure
- Each pair of end enclosure is equipped with one sample connector, one air release valve and two spare O rings.

Standard accessories:

Name	Description	Quantity
Test stations	Made to order	N
Main machine		1
PLC control	SIEMENS (Germany)	N/4
Touch screen		1
Pressure transducer	MEAS (USA)	N
Pressure meter		1
Electrical plunger pump	Interpump (Italy)	1
Electromagnetic valve	Parker (USA)	N x 2
High pressure pipeline	stainless steel	N
Accumulator		N+1
Quick coupling		N+M (M is the quantity of water tank)
Water filter		1
Test software	English version	1

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