



Data Sheet

BTV Series

## BTV Series

- BTV series bending testing machines designed with compact cast steel structure, high stiffness and ergonomic.
- All models designed with three hydraulic cylinders structure.
- Two horizontal positioned cylinders, controlled by highly precise synchronous valve with an error less than 2%, and one upper positioned cylinder, which apply the force to bend the specimen under test.

### BTV series features:

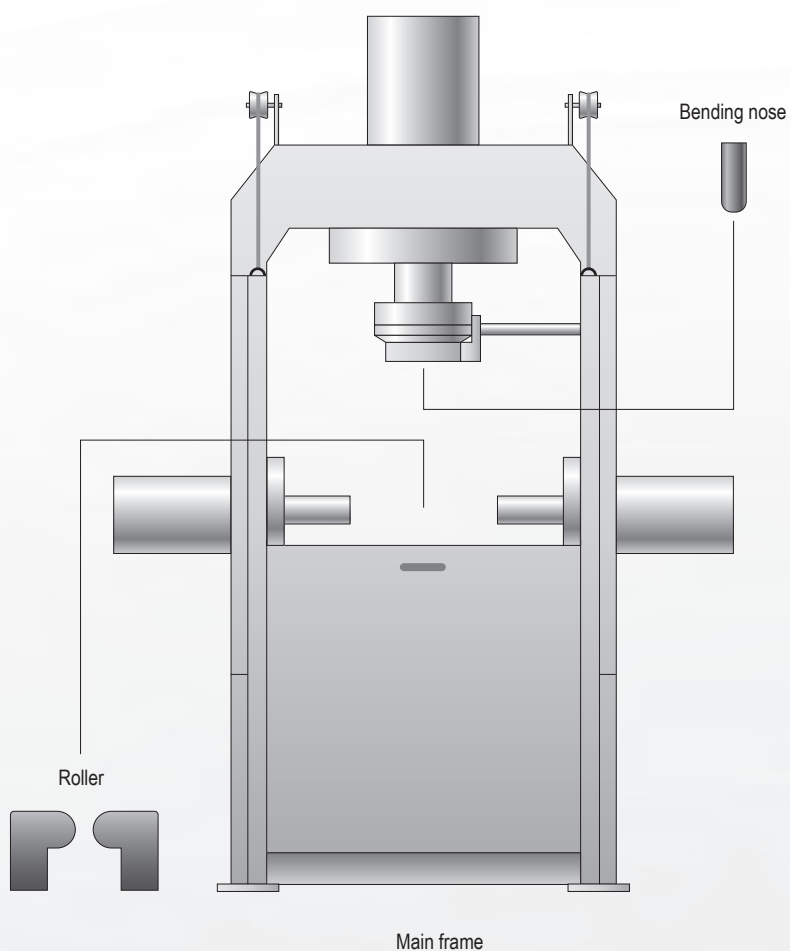
- Automatic and manual bending test
- High accuracy, reliability and stability load cell
- Self-calibration system which allow to perform automatic calibration, force and displacement, in according to the standards
- High speed DSP control electronics
- Overload protections
- Full range stepless 1/500000 resolution controller
- Low noise hydraulic unit

### BTV series machines are in according to the follow international standards:

- ISO 5173
- ISO 7438
- GOST 6996
- ASTM A 370
- ASTM E 190
- ASTM E 290

### For selection the correct bending testing machine must be choosen:

- Frame type according to load capacity
- Mandrels diameters according to standard indications



## BTV Series



BTV		BTV 500	BTV 1000	BTV 2000
<b>Load cell</b>				
Max vertical force	kN	500	1000	2000
Max horizontal force	kN	300	400	1000
Accuracy	-	Class 1		
Force resolution	Fs	1/500000		
Accuracy in synchronism	%	<2		
Displacement resolution	mm	0.01		
Displacement accuracy	%	±1 of reading		
<b>Testing speed</b>				
Force loading speed	kN/s	0.2-20		0.4-40
Vertical compression speed	mm/min	350	167	170
Horizontal compression speed	mm/min	2x300	2x196	2x196
<b>Main frame</b>				
Frame structure	-	One body cast steel		
Maximum specimen thickness	mm	20		40
Maximum piston travel	mm	150	347	350
Maximum span	mm	150		360
Support roller/mandrel	mm	ø30x130/ø1-ø75	ø50x200/ø5-ø160	ø80x210/ø5-ø160
Power consumption	kW	9	10	14
Power supply	V-Hz-ph	400-50/60-3ph		
Hydraulic unit dimensions	mm	Built-in machine	845x1070x460	1150x600x1000
Hydraulic unit flow rate	l/min		7.2	14
Dimensions	mm	950x550x1850	1580x550x2200	1650x672x2450
Weight	kg	1000	3300	4500

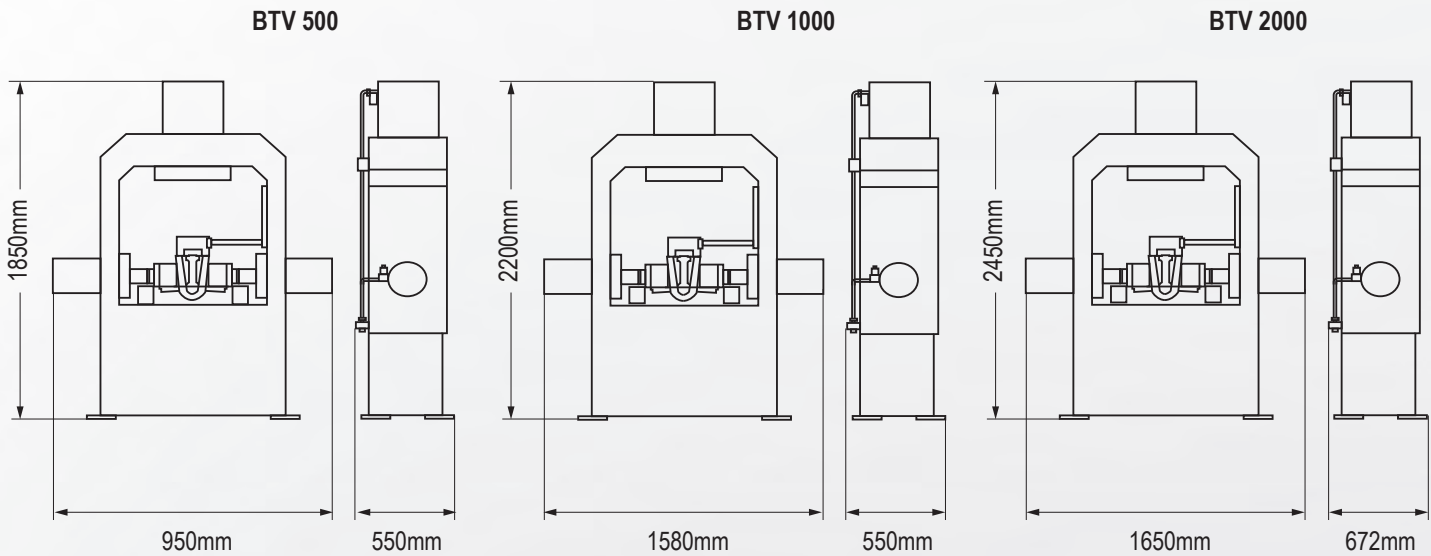
Accessories			
Computer System			
Computer System	ECHOCS01	Computer	
	ECHOCS02	Monitor	
	ECHOCS03	Color printer	
	ECHOCS04	Mouse	
	ECHOCS05	Keyboard	

Mandrels	
Model	Bending nose diameter
BTV460018	18mm
BTV460024	24mm
BTV460030	30mm
BTV460032	32mm
BTV460036	36mm
BTV460040	40mm
BTV460042	42mm
BTV460048	48mm
BTV460054	54mm
BTV460056	56mm
BTV460060	60mm
BTV460064	64mm
BTV460066	66mm
BTV460072	72mm

NOTE: On request different bending noses and support roller diameters available, e.g. BTV460XXX

Mandrels	
Model	Bending nose diameter
BTV460075	75mm
BTV460080	80mm
BTV460084	84mm
BTV460088	88mm
BTV460096	96mm
BTV460100	100mm
BTV460108	108mm
BTV460112	112mm
BTV460120	120mm
BTV460128	128mm
BTV460132	132mm
BTV460140	140mm
BTV460144	144mm
BTV460150	150mm
BTV460160	160mm
BTV460180	180mm
BTV460200	200mm

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