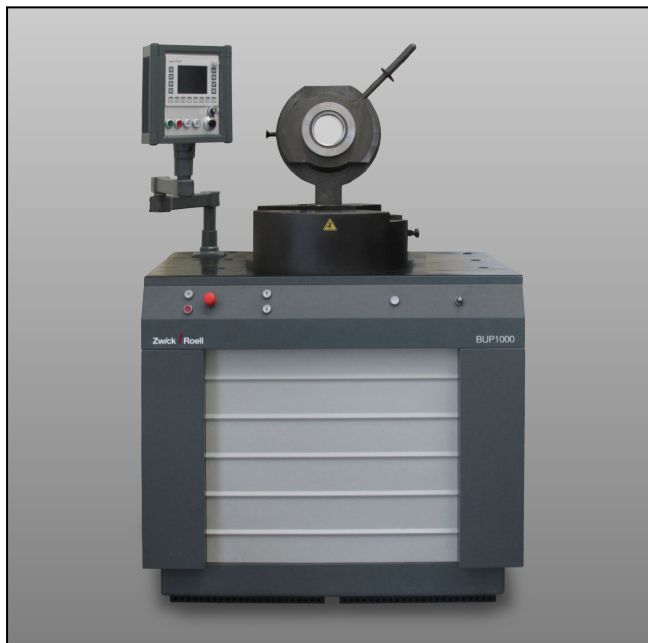


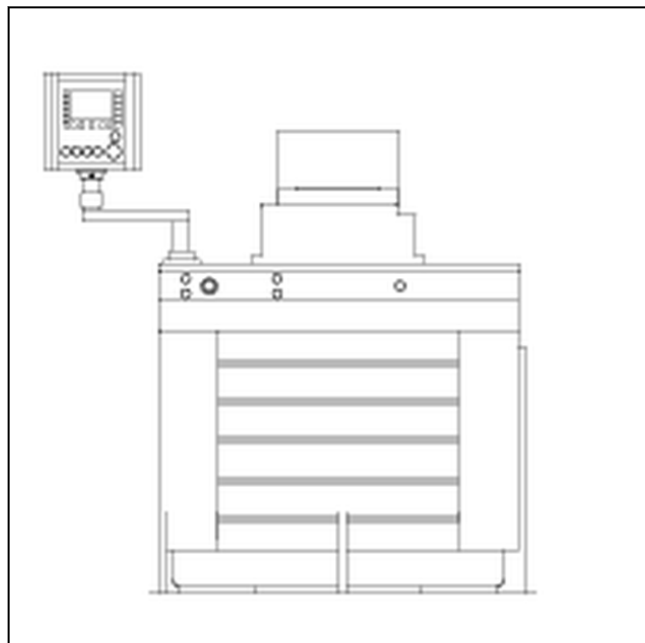
Product Information

BUP 1000 Sheet Metal Testing Machine

CTA: 127421 61739



BUP 1000 sheet metal testing machine



Drawing: BUP 1000

Range of application

Testing the ductility of sheet metals in accordance with established standards (EN ISO 20482, EN 1669).

Investigating the influence of surface treatments, coatings and lubricants in typical forming techniques including cupping and earing tests. Checking the effect of tool and process parameters on the forming process.

Advantages and features

- Fast, easy tool and fixture changes, including drawing-punch, drawing-die, blank-holder, cutting-punch, cutting-ring and scraper-ring. Numerous modular expansion options.
- Test tools/fixtures from earlier-generation machines can still be used (with some restrictions). Test tools/fixtures for established test methods available 'off-the-shelf', special tools/fixtures on application.
- Low piston-cylinder friction enables accurate measurement recording and excellent reproducibility.
- Clean and quiet in operation. Easily transportable thanks to compact design.
- Hydraulic cup-extractor via integrated piston, with piston rod acting through drawing-punch.
- Electronics can be swiveled to optimum viewing angle for measured values.
- Conveniently positioned controls.
- Electrical and hydraulic protection for all functions.
- Adjustable automatic blank-holder unloading during test enables cup-drawing without crushing ears.
- Automatic setting of pre-selected sheet clamping force after blanking procedure.
- Automatic piston withdrawal and switch-off after end of test due to crack detection or on reaching maximum ram stroke (s-limit).
- Swing doors and removable casing panels for easy access to components.
- Change deep drawing speed during test (BUP 400 / 600 / 1000).
- Operating-mode switch for automatic or manual operation (BUP 400 / 600 / 1000).
- Hydraulic opening and closing of tool head, with 2-handed operation (BUP 400 / 600 / 1000).
- Setup stroke for easy tool/fixture change (BUP 400 / 600 / 1000).

Product Information

BUP 1000 Sheet Metal Testing Machine

Type	BUP 1000	
Item No.	632802	
Test load, max. (ram force, max.)	1000	kN
Machine dimensions		
Overall height, approx.	1734	mm
Table height	1076	mm
Height up to tool head (w/o protective screen), approx.	1353	mm
Width	1200	mm
Depth	1970	mm
Approx. weight	2100	kg
Punching force, max.	1000	kN
Clamping force, max.	1000	kN
Specimen dimensions		
Blank (punchable)	Ø 250	mm
Blank insertable, max.	Ø 250	mm
Blank insertable (with centering finger), max.	Ø 270	mm
Sheet metal strip width, max.	260	mm
Sheet thickness, max.	10	mm
Tool/fixture dimensions		
Drawing-die outside, max.	Ø 250	mm
Drawing-punch, max.	Ø 120	mm
Reading accuracies		
Reading accuracy, ram stroke	0.01	mm
Reading accuracy, ram force	0.01	kN
Reading accuracy, clamping force	0.01	kN
Reading accuracy, deep drawing speed	0.01	mm/s
Ram stroke (travel of deep draw piston)	0 - 150	mm
Deep drawing speed, max.	750	mm/min
Coolant water		
Coolant water connection	G3/4"	
Coolant water req. at 20°C water temperature	10	l/min
Electrical supply data		
Electrical power supply	3 x 400	V (3 Ph/PE)
Power consumption	16	kVA
Frequency	50	Hz
Back-up fuse	32	A