

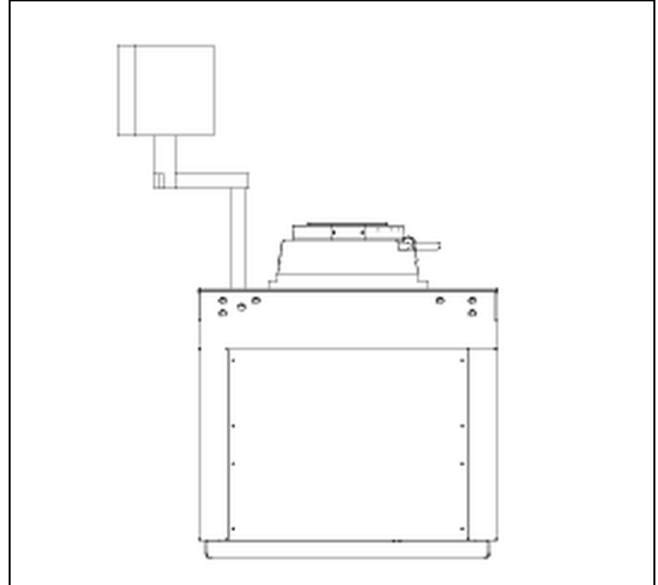
Product Information

BUP 400 / BUP 600 Sheet Metal Testing Machines

CTA: 127419 61733



BUP 600 sheet metal testing machine



Drawing: BUP 400 / BUP 600

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 400 / BUP 600 Sheet Metal Testing Machines

Type	BUP 400	BUP 600	
Item No.	037359	049042	
Test load, max. (ram force, max.)	400	600	kN
Machine dimensions			
Overall height, approx.	1850	1850	mm
Table height	955	955	mm
Height to tool head	1185	1180	mm
Width	1048	1048	mm
Depth	1775	1775	mm
Approx. weight	1600	2100	kg
Punching force, max.	400	600	kN
Clamping force, max.	400	600	kN
Specimen dimensions			
Blank (punchable)	Ø 250	Ø 250	mm
Blank insertable, max.	Ø 250	Ø 250	mm
Blank insertable (with centering finger), max.	Ø 220	Ø 220	mm
Sheet metal strip width, max.	260	260	mm
Sheet thickness, max.	10	10	mm
Tool/fixture dimensions			
Drawing-die outside, max.	Ø 250	Ø 250	mm
Drawing-punch, max.	Ø 120	Ø 120	mm
Reading accuracy, ram stroke	0.01	0.01	mm
Reading accuracy, ram force	0.01	0.01	kN
Reading accuracy, clamping force	0.01	0.01	kN
Reading accuracy, deep drawing speed	0.01	0.01	mm/s
Ram stroke (travel of deep draw piston)	0 - 120	0 - 120.	mm
Deep drawing speed, max.	1000	1000	mm/min
Coolant water			
Coolant water connection	G3/4"	G3/4"	
Coolant water req. at 20 °C water temperature	7	7	l/min
Electrical supply data			
Electrical supply	3 x 400	3 x 400	V (3 Ph/PE)
Power consumption	17.5	17.5	kVA
Frequency	50	50	Hz
Back-up fuse	32	32	A