

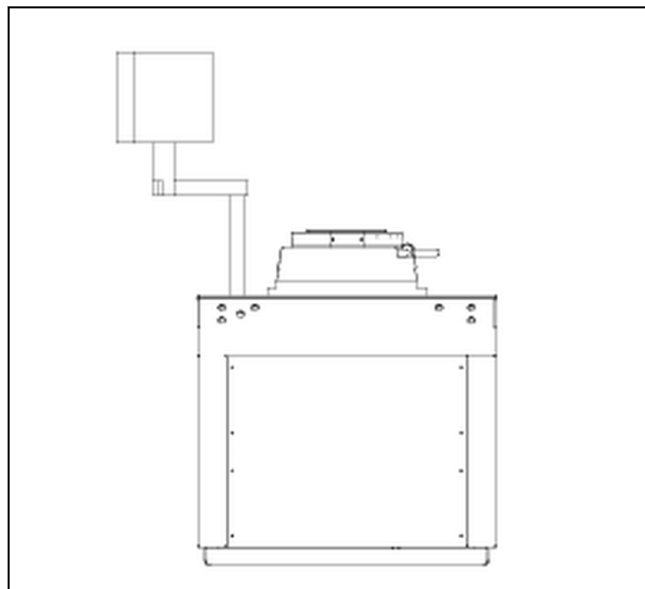
Product Information

Sheet metal testing machine BUP 400/BUP 600

CTA: 127419 61733



Sheet metal testing machine BUP 600



BUP 400/BUP 600 drawing

Applications

Testing the ductility of sheet metal to common standards (DIN EN ISO 20482, DIN EN 1669).

Testing the influence of surface treatments, coatings, and lubricants for typical types of forming such as cupping and earing tests. Testing the influence of tools and method 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 ear.
- Automatic setting of pre-selected 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.
- Open design allows multiple tests to be performed on long sheet-metal strips without the need to open and close the tool head.
- No unpleasant odors thanks to closed oil-circuit.
- Special solutions (e.g. piezo load cell, different deep drawing speeds, separate hydraulic power-packs etc.) are available on request.
- Change deep drawing speed during test (BUP 400 / 600 / 1000).
- Operating-mode switch for automatic or manual operation (BUP 400 / 600 / 1000).
- Two-handed operation eliminates risk of accident when closing the manual tool head of the BUP 100/200 (e.g. falling due to accidental jolt).
- 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

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Technical data

Type Item No.	BUP 400 037359	BUP 600 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	G1/2"	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