

XMP BenchPressUnit – The Compact Manual Workstation for Precise and Reliable Assembly Processes.

✓ Instantly ready – safe operation with integrated DSM press-in technology, complete process traceability, and intelligent data communication.

DSM provides modular all-in-one systems for customized single-workstation solutions.

Whether used as a benchtop unit, with base frame, or as a height-adjustable version – the XMP BenchPressUnit can be flexibly adapted to your production requirements.

With a stroke range of 200 mm, it is ideally suited for the production of small and medium series as well as for prototype and sample manufacturing. The XMP BenchPressUnit is compatible with the press-in units of the XMP 60 series (0.5 kN, 1 kN, 2 kN) and the XMP 90 series (5 kN, 12.5 kN, 25 kN).

Its compact design includes all electronic components required for personal safety in accordance with Performance Level E. The MultiPro 3G control system is also integrated – optimizing production or testing processes with intelligent joining strategies and functions. A separate control cabinet is not required.

One of the standout features of the XMP BenchPressUnit is its user-friendly operating concept, enabling quick and efficient use. The system is delivered as a turnkey solution, tailored to your specific requirements and individual process needs.

- + Intelligent design with complete system integration in various configurations.
 - + Electrically locked lifting door for maximum operator protection, compliant with Performance Level E.
 - + Flexible force ranges:
 - XMP 60 (0.1–2.0 kN) available in variants of max. 0.5 / 1 / 2 kN
 - XMP 90 (1–25 kN) available in variants of max. 5 / 12.5 / 25 kN
- Option: Multi-range calibration for diverse force requirements.

- + Two integrated light fields in the work area signal the process status (OK, NOK, RUN) for clear visual feedback.



Figure shows: XMP BenchPressUnit Base

- + The MultiPro 3G with scalable functionality controls the product-specific process, covering all work steps in a single program – multiple programs can be started.

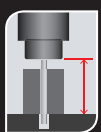
Option:

8" – 19" Windows tablet with MPEC software for process setup, operator guidance, and analysis.

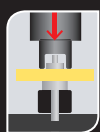
- + Control panel with buttons for Emergency Stop, Emergency Stop Acknowledgment, Start, NOK Acknowledgment, and a button for a process-specific function.

The panel is detachable and can be flexibly positioned for ergonomic operation.

Your all-in-one solution for press-fitting, forming, and custom tasks



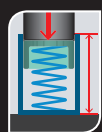
Precision Press-Fitting



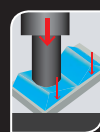
Press-Fitting to Hard Stop



Stamping, Forming



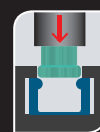
Testing, Measuring



Haptic Testing



Bending



Clipping





Custom Solutions

XMP BenchPressUnit – Variants with Lift Door

XMP BenchPressUnit **Base**

- + Version: Without base frame, with four machine feet


 Dimensions (WxDxH):
approx. 387 × 518 × 960 mm

 **Safety Enclosure:** The electrically interlocked lift door ensures operator protection during the process. It opens automatically after release – combining safety with ergonomic handling.



XMP BenchPressUnit **Frame**


- + Version: Standard work table with flush-mounted clamping plate

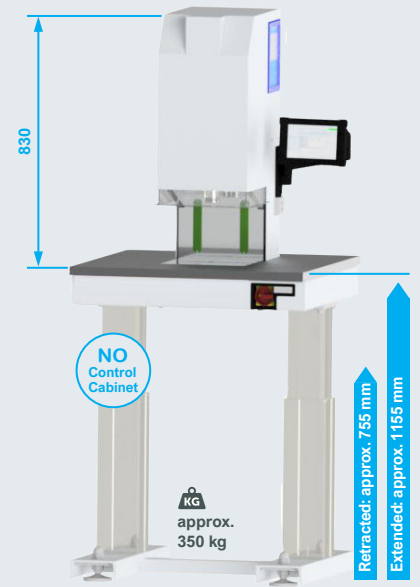
 Dimensions (WxDxH):
approx. 800 × 800 × 1780 mm




XMP BenchPressUnit **Flex**

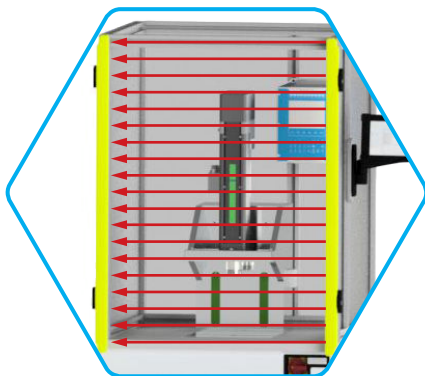
- + Version: Height-adjustable table with flush-mounted clamping plate

 Dimensions (WxDxH):
approx. 800 × 800 × max. 1985 mm



XMP BenchPressUnit – Variants with Safety Light Curtain


 A vertically mounted safety light curtain at the front of the enclosure allows access to the work area. Transmitter and receiver units generate a protective field with defined dimensions. If the field is interrupted during operation, the safety PLC instantly stops the process.

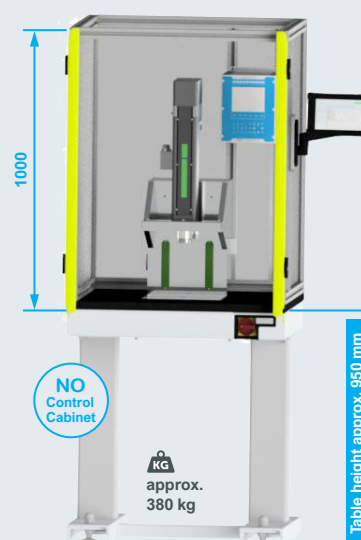


The Electro-sensitive Protective Equipment (ESPE) offers reliable protection and enables quick access without opening protective doors – minimizing setup time and boosting productivity.

XMP BenchPressUnit **OpenFrame**


- + Version: Standard work table with flush-mounted clamping plate

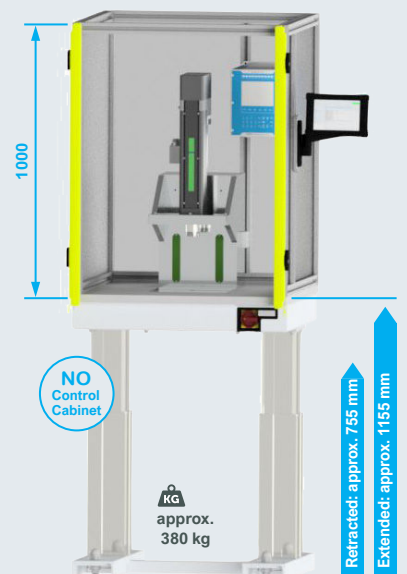
 Dimensions (WxDxH):
approx. 800 × 800 × 1950 mm



XMP BenchPressUnit **OpenFlex**

- + Version: Height-adjustable table with flush-mounted clamping plate

 Dimensions (WxDxH):
approx. 800 × 800 × max. 2155 mm



XMP BenchPressUnit – XMP60 and XMP90 Press-in Units for the Optimal Force Range, also with Multi-range Calibration

With

XMP 60

in the following variants:

- XMP 60 max. 0.5 kN, 200 mm stroke
Operating range: 0.1 to 0.5 kN
- XMP 60 max. 1 kN, 200 mm stroke
Operating range: 0.2 bis 1 kN
- XMP 60 max. 2 kN, 200 mm stroke
Operating range: 0.4 bis 2 kN

Gear configuration:

Maximum speed

- 4Z (400 mm/s): max. 2 kN,
available for 0.5 kN, 1 kN and 2 kN
- 0Z: Special gearbox, e.g., for slow
plunger speeds

With

XMP 90

in the following variants:

- XMP 90 max. 5 kN, 200 mm stroke
Operating range: 1 bis 5 kN
- XMP 90 max. 12,5 kN, 200 mm stroke
Operating range: 2,5 bis 12,5 kN
- XMP 90 max. 25 kN, 200 mm stroke
Operating range: 5 bis 25 kN

Gear configuration:

Maximum speed

- 4Z (200 mm/s): max. 25 kN,
available for 5 kN, 12.5 kN and 25 kN
- 2Z (400 mm/s): max. 12.5 kN,
available for 5 kN and 12.5 kN
- 1Z (900 mm/s): max. 5 kN, only for 5 kN
- 0Z: Special gearbox, e.g., for slow
plunger speeds

Figure shows: XMP 90 integrated into the BenchPressUnit Base

i The XMP 60 and XMP 90 models feature a resolution of the displacement measurement system of 0.003 mm, a repeatability of displacement under load of 0.01 mm at approx. 20 mm/s, and a force measurement accuracy of 0.5% of the full scale. The force measurement can be performed in compression direction (DR) or in both compression and tension directions (DZ). Optionally, a redundant force sensor for measuring force in compression direction can be integrated.

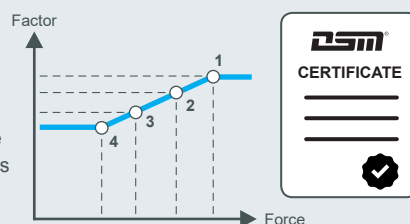
Option:

Multi-range Calibration – Precise Results for Every Task

With multi-range calibration, you can use your press-in unit flexibly for applications with varying force requirements – always obtaining reliable and accurate measurements. Even with frequently changing processes or components, the measurement accuracy remains consistently high.

How Accuracy is Achieved:

Up to five measurement points can be defined through a calibration measurement series with reference sensors. This allows for the force measurement to be specifically adjusted to different force ranges – ensuring maximum precision across the entire working range.



**Additional Information on Components
of the XMP BenchPressUnit:**

- EN-MultiPro3G-Data-sheet.pdf
- EN-MultiPro3G-Press-in-processes.pdf
- EN-MPEC-Data-sheet.pdf
- EN-XMP60-Data-sheet.pdf
- EN-XMP90-Data-sheet.pdf

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