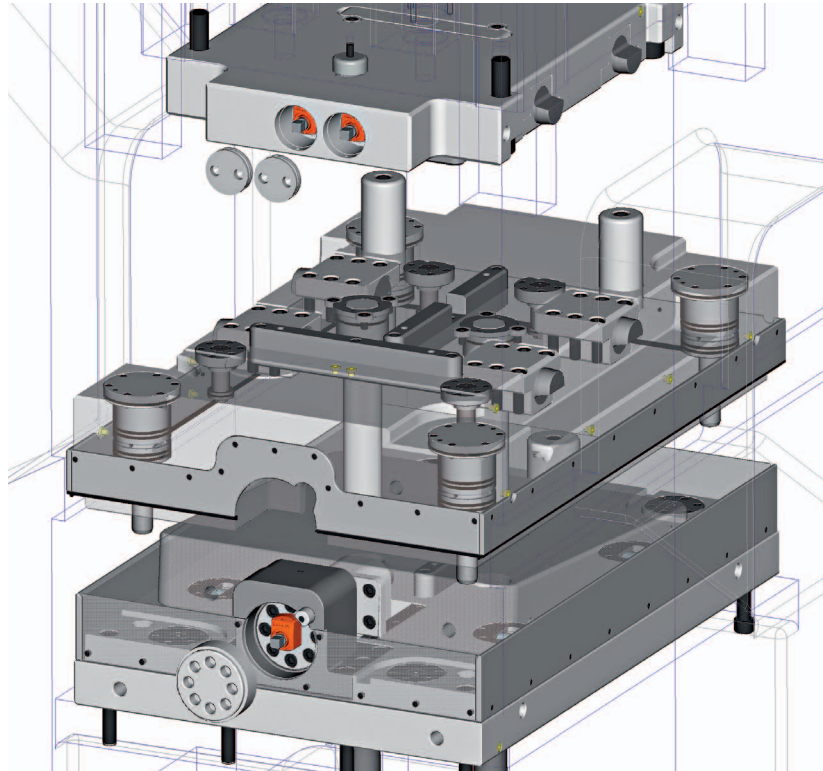


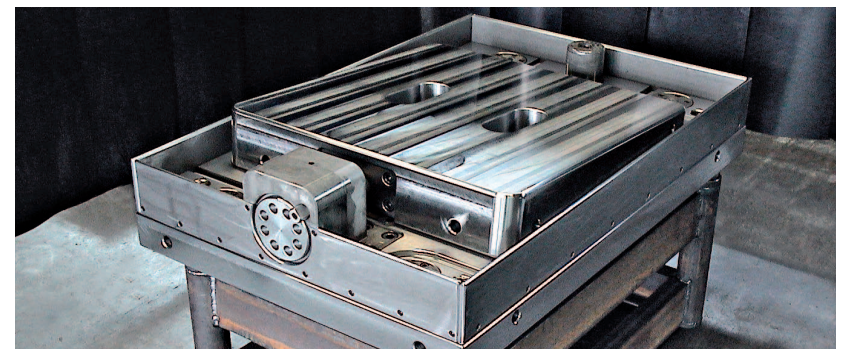
11-16 Dieholder cassette quick-change and precision forging system with forging offset correction and shut height adjustment system for a 16 MN drop forging eccentric press



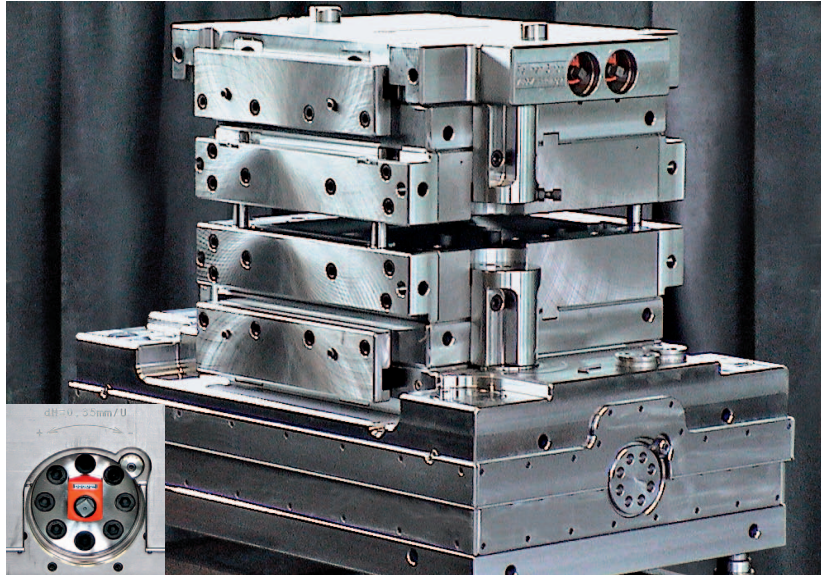
Semi-automatic, hydromechanical Fellner shut height adjustment system on the press bedplate (press as wire model) with lifted-off base holder lower section, base holder upper section with Fellner forging offset correction system on the press ram, press ram with base holder upper section in position "press ram at top" (view from front right top)

- Patented 3rd generation dieholder cassette quick-change and precision forging system with 3-(4) station rectangular (upsetting, 1st preforming, [2nd preforming], finish-forging) and 3-station round forging die (upsetting, preforming, finish-forging) cassettes for forging with and without forging die guides and with manual parts transfer.
- High forging precision thanks to forging die guides, the Fellner shut height adjustment system and the Fellner forging offset correction system.

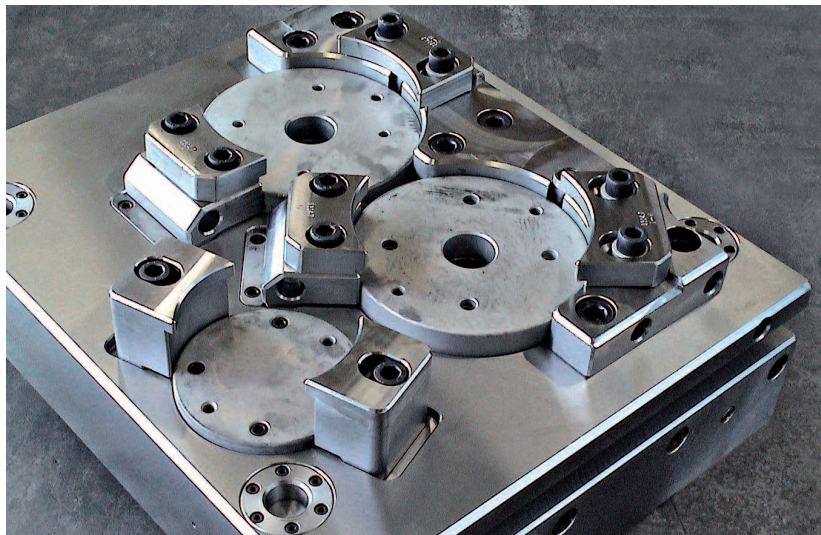
- Fellner shut height adjustment system: correction of the die shut height through height adjustment of the base holder lower section with a semi-automatic, hydro-mechanical spindle height adjustment wedge mechanism and a mechanical-digital position indicator; adjustment travel: here 12 mm (-8 mm, +4 mm), for 10-25 12 mm (± 6 mm), for 02-35 20 mm (-13.3 mm, +6.7 mm); setting accuracy: 0.05 mm; semi-automatic by hydraulic sequence control linked with press control; low oil leakage or free, compact, easily checkable and exchangeable hydraulic modules, no use of hydraulic fluid in the forging pressure transfer areas; sophisticated, safe, hermetic seal against contamination (forging scales, oil, grease and die lubricant such as graphite solution).
- Fellner forging offset correction system: correction of both longitudinal and lateral offset to the amount of max. ± 2 mm in each case (setting accuracy: 0.1 mm) through horizontal displacement of the cassette upper section with a base holder upper section spindle setting block centring strip mechanism and mechanical-digital position indicators with a precisely centred cassette.
- Mechanical ejectors in base holder and cassettes.
- Double-hydraulic lifting cylinders for carefully lifting the cassette off the fitting centring strips of the base holder lower section.
- Problem-free cassette quick changing with a forklift in a few minutes, thus maximum economic efficiency and short payback time.
- The full width of the die installation space of the press can be utilised thanks to the patented inside-to-outside clamping of the cassette.
- Minimal contamination of the cassette clamping equipment, of the reliable hydro-mechanical Fellner wedge-type clamping elements, thanks to complete coverage with the cassette.
- Easy to operate, very easy to clean.
- Easy to service and repair thanks to modular design.
- Only a few press adaptations of minimal scope are necessary.



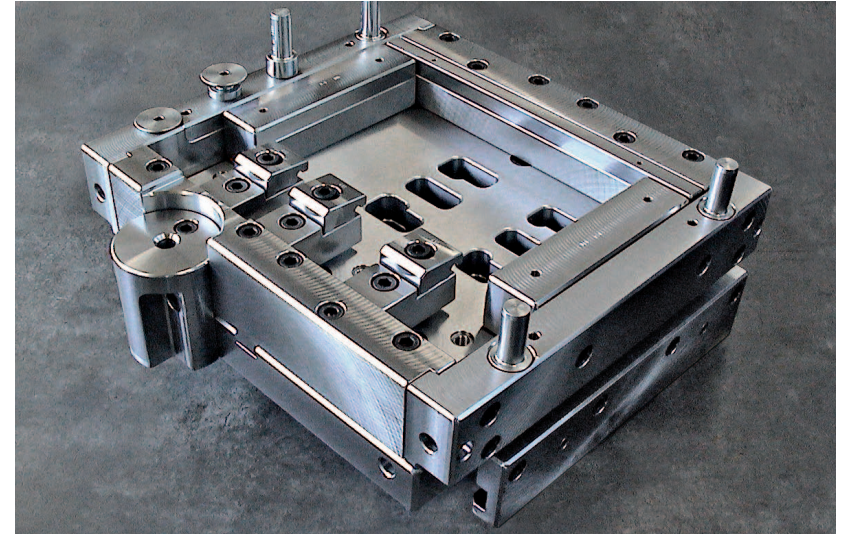
Semi-automatic, hydromechanical Fellner shut height adjustment system with height adjustment wedge on press bedplate dummy (view from front right top)



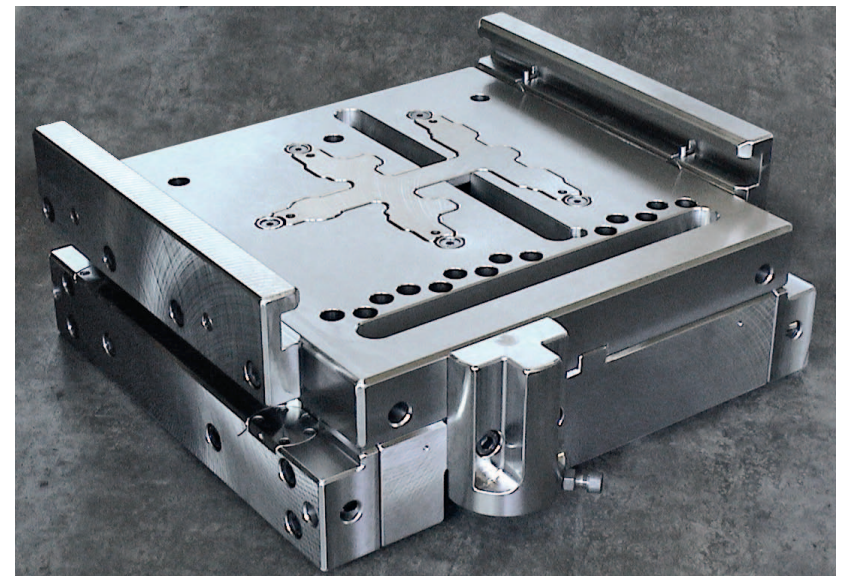
Fellner shut height adjustment system and base holder with installed, clamped rectangular forging die cassette on press bedplate dummy, base holder upper section in position "press ram at bottom" (view from front left)



3-station round forging die cassette upper section, turned (view from front left bottom)



3-[-4]-station rectangular forging die cassette lower section with additional upsetting saddle, ejector windows and rectangular forging die adaptation parts (view from front right top)



3-[-4]-station rectangular forging die cassette upper section with additional upsetting saddle and load-optimised ejector cross (view from front left top)