04-40  Dieholder cassette quick-change and precision forging system with cassette upper section quick-change frame for a 40 MN drop forging eccentric press

- Patented 3rd generation dieholder cassette quick-change and precision forging system with rectangular and round forging die cassettes for forging with up to 3 stations (upsetting, preforging, finish-forging) and with manual parts transfer.
- High forging precision thanks to stable forging die guides, floating cassette and forging die lower sections as well as forging dies which operate independently of one another and of the press and do not affect one another (i.e. completely separate).
- Significantly reduced rectangular forging die costs, because the circumferential rectangular forging die surfaces only have to be sawed or at most rough-milled on account of the special die centring and mounting arrangement.
- Upsetting plate quick-clamping mechanism in the round forging die cassette upper section.
- Mechanical ejectors in base holder and cassettes, automatically resetting ejector rockers in the rectangular forging die cassettes.

- Problem-free cassette quick changing with a forklift and a cassette upper section quick-change frame in a few minutes, thus maximum economic efficiency and short payback time.
- Use of a special Fellner cassette upper section quick-change frame as a lightweight cassette lower section replacement if the available or obtainable forklift is too weak for the cassettes to be changed or a suitably strong forklift is too big for the space available around the press and a cassette change carriage cannot be considered.
- Handling of the cassette lower and upper sections during die tooling and servicing and cleaning work with the aid of a hydraulic/electric-motor-driven cassette handling device on the cassette change forklift.
- 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.
- Hydromechanical Fellner wedge-type clamping elements of reinforced design due to the high return forces to be expected for the range of parts to be forged.
- Minimal contamination of the cassette clamping equipment, of the reliable hydromechanical Fellner wedge-type clamping elements, thanks to complete coverage with the cassette.
- Particularly long service life and thus minimal operating costs thanks to its particularly simple, robust design.
- Easy to service and repair thanks to modular design.
Round forging die cassette lower section with 3 forging stations, from left to right: upsetting, preforming, finish-forming (view from front top)

Base holder lower section with hydromechanical cassette wedge-type clamping elements of reinforced design (here: clamping piston retracted), ejector pins, cassette centring elements and stops: clearly laid out, robust and easy to clean for a very quick, easy cassette change (view from front left top)

Round forging die cassette upper section, turned, with 3 forging stations, from right to left: upsetting with upsetting plate quick-clamping mechanism, preforming, finish-forming (view from front left bottom)

Base holder with installed, clamped rectangular forging die cassette (pillars in the foreground and background = auxiliary props for photographing, no cassette parts), base holder upper section in position ‘press ram at bottom’ (view from front left)