05-31 Dieholder combined forging die/cassette quick-change and precision forging system for a 31.5 MN drop forging eccentric press

- Patented 3rd generation dieholder combined forging die/cassette quick-change and precision forging system with rectangular forging die cassettes for forging technically highly sophisticated passenger car chassis parts causing high transverse forging forces with 2 forging stations and with semi-automatic parts transfer.

- High forging precision thanks to solid, extremely stable forging die guides and floating cassettes = forging stations = forging dies which operate independently of one another and of the press and do not affect one another (i.e. completely separate).

- Quick, separate shut height adjustment of the preforging cassette = of the preforging station = of the preforging die with a quick-change spacer located between the base holder and preforging cassette upper section.

- Significantly reduced forging die costs, because the circumferential die surfaces only have to be sawed or at most rough-milled on account of the special die centring and mounting arrangement.

- Mechanical ejectors in base holder and cassettes.

- The entire die installation space of the press can be utilised thanks to the patented inside-to-outside clamping of the cassettes.

- Problem-free quick changing within a few minutes either of only one die (only one cassette) or else of both dies (both cassettes) simultaneously with a forklift with a hydraulic/electric-motor-driven cassette locating/transportation/handling device, thus maximum economic efficiency and short payback time.

- Minimal contamination of the cassette clamping equipment, of the reliable hydro-mechanical Fellner wedge-type clamping elements, thanks to complete coverage with the cassettes.

- Simple adaptability of other cassette types e.g. for round forging dies.

- Easy to operate and very easy to clean thanks to level, smooth surfaces and the avoidance of dirt sinks.

- Easy to service and repair thanks to modular design.

- Only a few press adaptations of minimal scope are necessary.
Base holder lower section with preforging and finish-forging rectangular die cassette (view from front left top)