

A collage of various commemorative coins and medals. The coins include the Mexican coat of arms (Estados Unidos Mexicanos), a portrait of Albert Einstein (A. EINSTEIN), a violin and bow, the Canadian coat of arms (CANADA), a bull (FUSI... LTURAS), a profile of a man, and a portrait of a man with glasses. The background is a solid blue color.

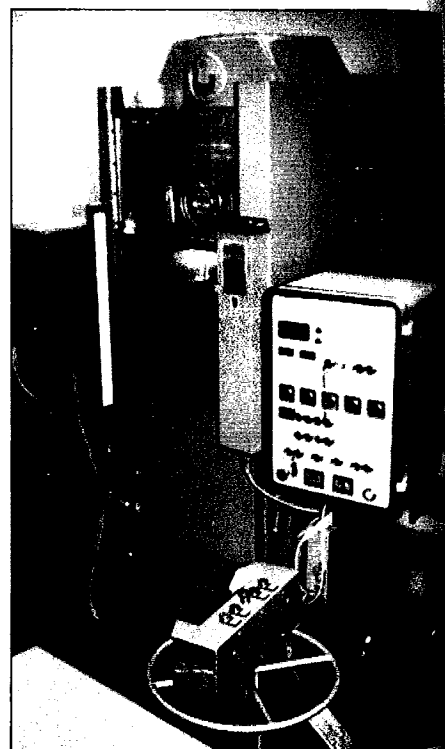
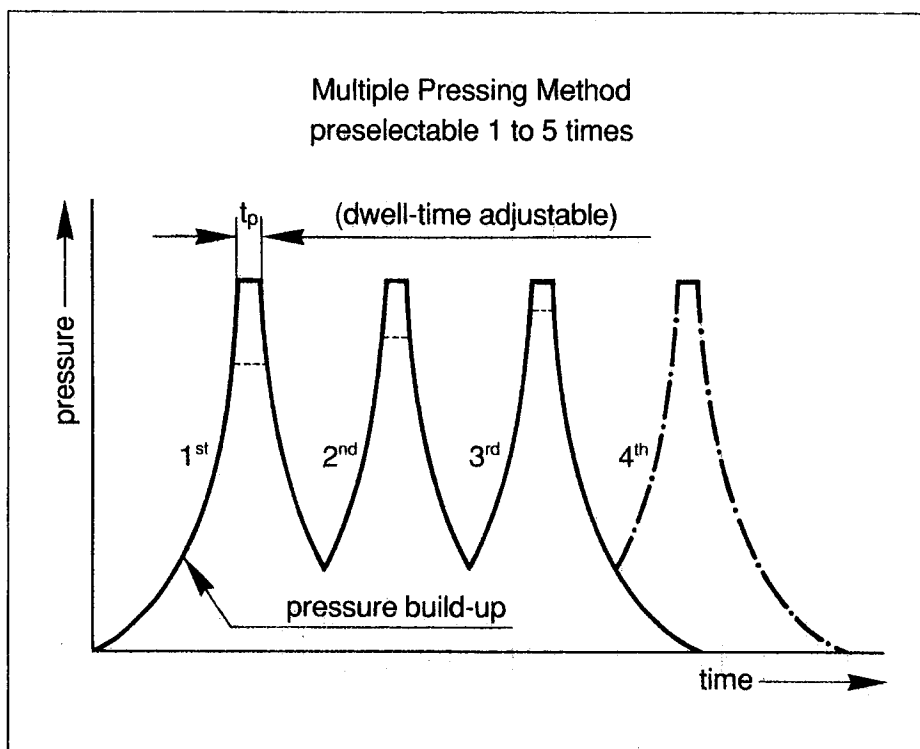
PPM 9.91-E

Sack & Kiesselbach, the partner of medal producers

Depending on customer needs presses up to 12500 kN can be used to produce medals of PROOF- as well as PROOF-LIKE quality. This requires great flexibility of the control system and facilities for universal adjustment. Illustration 3 shows the OPERATING PANEL of such a press.

High quality medals are produced in relatively small batch quantities. Therefore quick tool change-over times are essential. Illustration 6 shows the construction of such a tool and illustration 2 it's hinged lower part.

Standard range of models with press capacities of 3 150, 6 300 and 12 500 kN.



Our delivery programme

- Hydraulic cold hobbing presses (model EP)
- Hydraulic upstroking type production presses (model PP)
- Hydraulic downstroking type production presses (model OKP)
- Complete plants for massive forming
- Hydraulic special purpose presses
- Weighing- and sorting devices for blanks for flow-pressings
- Standard presses and presses to suit customers' special requirements

Our service programme

- Technical consulting
- Method development
- Planning
- Design
- Supply
- Erection and commissioning
- After-sales-service

Speciality:

Hobbing presses with bottom ejector for economic manufacture of coinage dies for coins and medals.

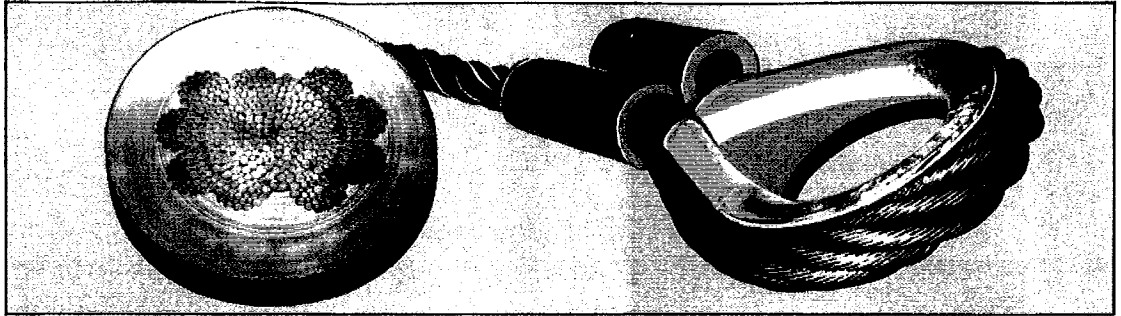


Sack & Kiesselbach Maschinenfabrik GmbH

Postfach 33 03 46
Westfalenstraße 68
D-4000 Düsseldorf 30
Telefon (02 11) 65 60 64
Telefax (02 11) 65 23 14
Teletex 2 114 566 = suk
Telex (17) 2 114 566

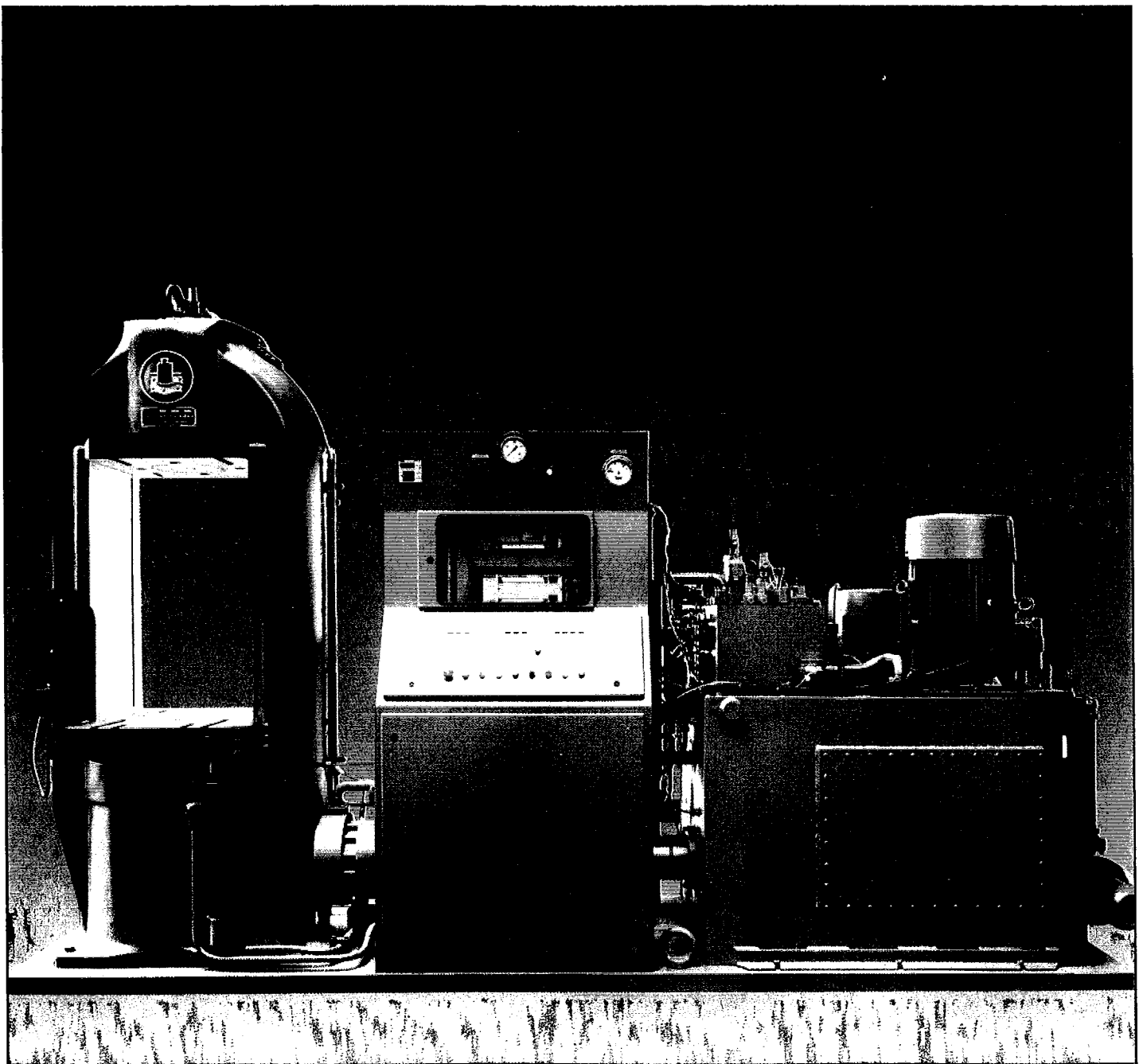
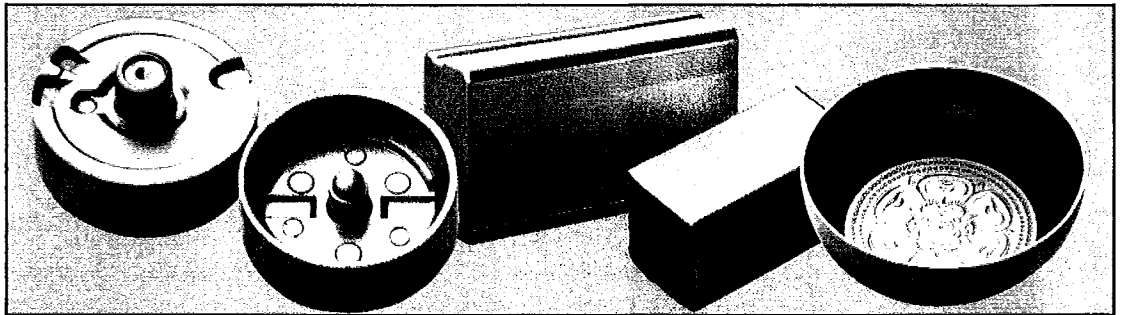
Swaging

of wire rope clamps



Cold flow-pressing

of components of nonferrous material



Special facilities

Standard equipment

Special features

- upstroking drive
- press frame in one-piece rigid cast-iron construction
- hydraulics designed for maximum working pressure of 315 bar
- drive by axial piston pump with variable flow, therefore the pressing speed is infinitely variable
- sensitive adjustment of the pressing force

- bottom ejector
- preparation for installation of upper ejector
- automatically working protecting shield at the front of the press and swinging door with limit switch securing at the rear
- cooling system with filter for the hydraulic oil
- two-hand safety control desk

- driving aggregate for S- or N-type
- upper ejector
- light-barrier for additional protection of the operators and for control of the press
- feeding robot
- facilities for easy tool change
- hobbing device
- separate drive for ejectors

The series PP

Model		PP 315		PP 630		PP 1250		PP 1600		PP 2000	
Type		N	S	N	S	N	S	N	S	N	S
Pressing force F	kN	3150		6300		10000		16000		20000	
Retraction force	kN	150		300		400		500		600	
Table width	mm	430		600		830		1000		1200	
Table depth	mm	640		900		1100		1250		1400	
Stroke	mm	300		325		350		350		400	
Daylight	mm	700		825		1000		1200		1200	
Closing speed	mm/s	150	200	150	200	150	200	150	200	150	150
Pressing speed max.	mm/s	4.0	8.0	3.5	6.5	4.5	8.5	4.5	8.0	4.0	7.5
Pressing speed at 100% F	mm/s	4.0	8.0	3.5	6.5	2.5	5.0	2.5	4.0	2.5	4.5
Opening speed	mm/s	150	200	150	200	150	200	150	250	150	250
Drive power (at 50 Hz)	kW	22	35	35	50	55	105	80	105	83	140
Force of bottom ejector	kN	200		400		500		600		800	
Ejector size	mm ϕ	30		50		60		80		100	
Ejector stroke	mm	100		100		120		120		120	
Ejector speed	mm/s	60	125	60	125	50	100	50	100	100/65	100
Drive power	kW	7.5	11	15	25	18.5	37	18.5	37	22	45