

POLAR 76

SD-P/EM



POLAR 7

The cutter for DIN A2 (43
With microcomputer, dig
measuring scale and dig
indication. With the same
sized POLAR 92, 115, 137



Measurement display: Digitally. With moveable decimal point, in metric or inch system (resp. Shaku).

Cutting line indicator: Optical and hydraulic. Standard equipment.

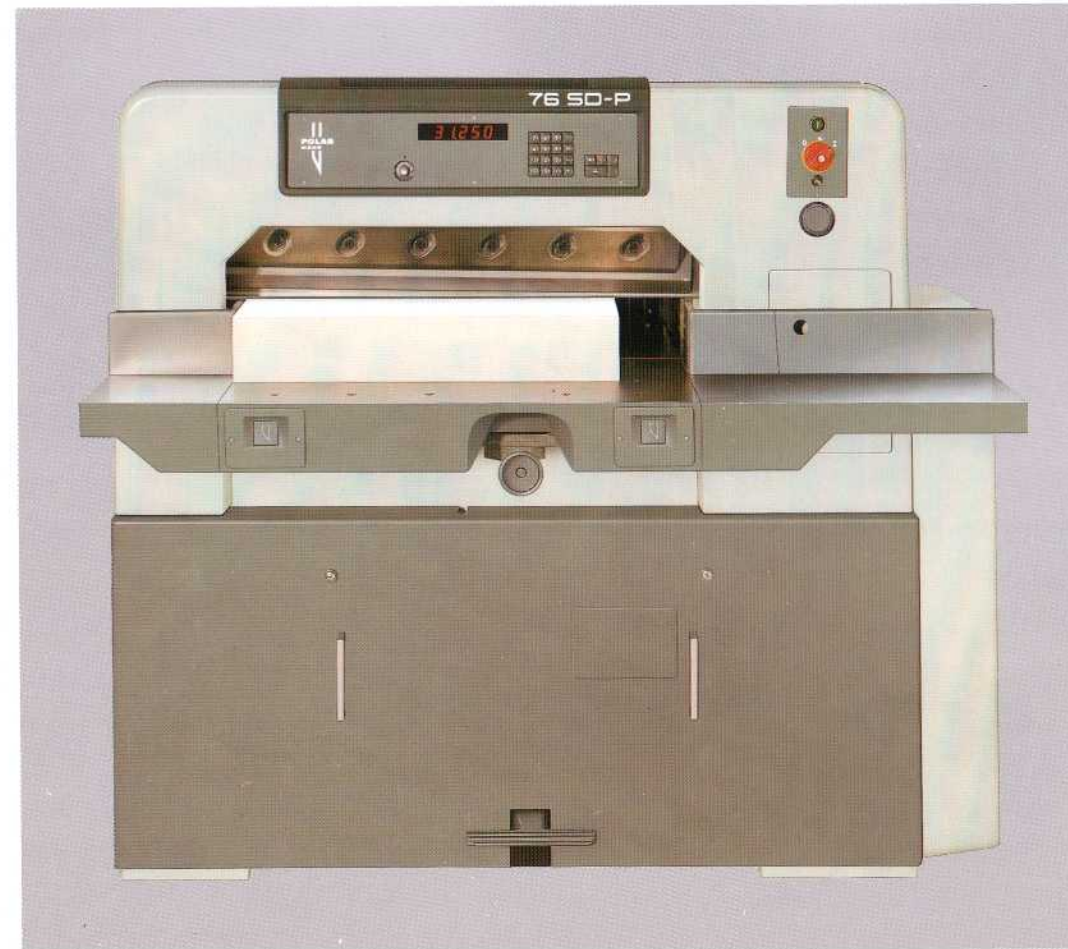
Backgauge drive: By motor with automatic brake and automatic play adjustment. Ground guide rails with narrowly spaced rake fingers for precise operation.

Hydraulic clamp pressure adjustment: Infinitely variable. It is easy to adjust at normal working height with a precision pressure scale. Wide range of pressure. Low minimum pressure. False clamp to protect difficult material fitted from the front of machine. Variable pre-clamping time.

The technique of POLAR 76

Measuring system: The direct linear scale is not effected by wear on the lead screw, by spindle condition, or by changes in the back-gauge drive mechanism. Therefore, the highest possible precision is maintained for many years.

Adjustment of measurement: Manually with one-hand operation or with key for fast-moving backgauge for setting measurements according to print. Automatic adjustment of single measurements on the keyboard (without programming) or after calculating by means of the »integrated pocket calculator« (initial cuts, trim cuts, repeat cuts). Automatically according to programming (EM). Special advantage: You can set fractions, important when working in inches.



POLAR 76 is manufactured in two versions:

SD-P: Standard Digital with Positioning (photo right side). The different modern Standard cutter. For firms converting small quantities, sometimes 1000, 500 or even less sheets and only doing angular or trim cuts. Therefore the high efficiency of a fully automatic cutter is not required. They simply want to cut without the necessity of programming. This is your advantage when cutting small jobs.

POLAR SD-P is easy and fast to operate. You select each individual measurement to be cut via the keyboard. The backgauge is automatically moved with the shortest possible delay, accurate to $\frac{1}{100}$ mm ($\frac{1}{10000}$ "), to the measurement required. No manual setting of cutting measurements. Therefore you cut much faster with a POLAR SD-P than with normal Standard cutters.

EM: Eltromat Memory. The microcomputer controlled, programmable cutter. Apart from what the SD-P provides it offers the facility to store repeat cutting sequences and cuts automatically, as often as necessary. Storing capacity: 999 steps, 99 programs. With POLAR EM measurements can be set with the backgauge stationary. Program limits and backgauge movement are automatically determined. Stored measurements can easily be corrected, added to or erased. The operation of the cutter is simplicity itself. Programmable data protection and repetition processor permits any desired size- and trim-cut combination.

What can POLAR 76 cut?

The area of use for the POLAR 76 starts with offices (cutting up forms and lists, cutting of pads) and extends to trimming test prints in reproduction firms.

In print shops and binderies the POLAR 76 is used for small size jobs. Silk screen printers and manufacturers of name plates use it for cutting different materials.

Some typical materials: Bristol board, copying paper, continuous stationery, EDP-paper, felt, photographic papers, rubber, gummed papers, hard cardboards, index board, cork, art paper, plastic foils, leather, metal foils, films, textiles, transparent paper.



SD-P: Standard Digital
with Positioning
EM: Eltromat Memory

x 61 cm/16 15/16" x 24").
ect linear
tal measurement
benefits of the larger
and 155 cm.

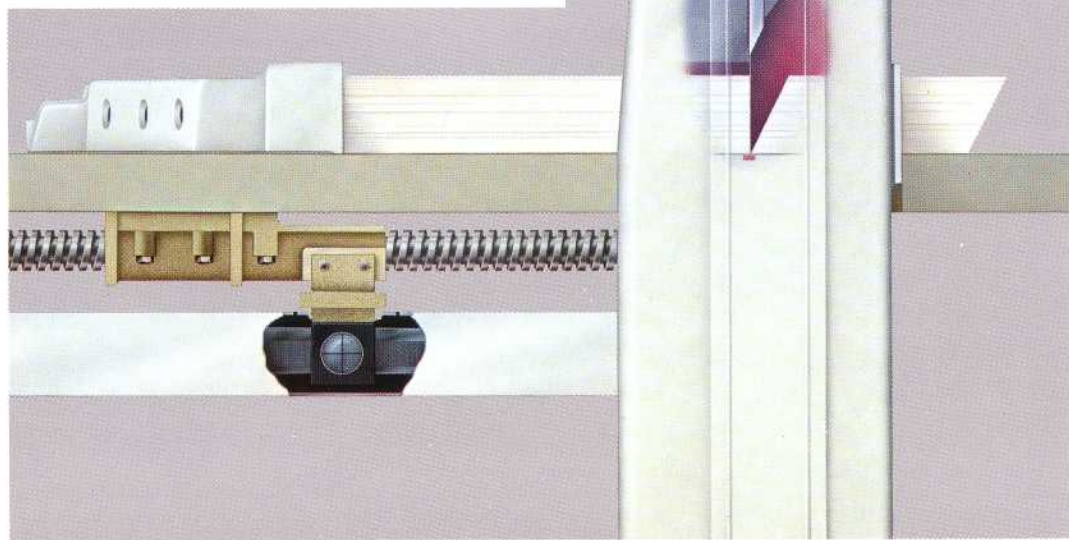
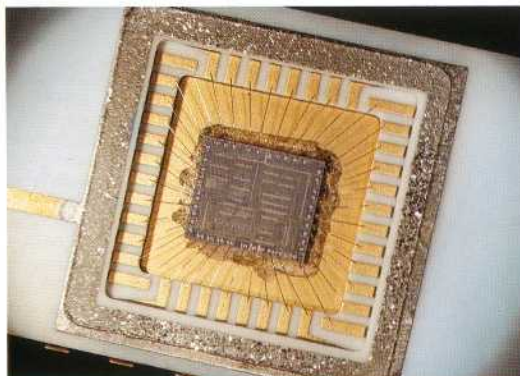


Smooth swing cut: From left to right. Material is not forced against the side guide. Advantages: Smooth material flow and prolonged knife life.

Knife drive: Rigid, strong worm gear, safe and almost maintenance free.

Knife: Original POLAR-knives, extra thick and solid. With high grinding reserve. Double-side ground guide. Easy and fast knife change. No twisting or turning by hand.

Cutting stick: POLAR-SINUS-cutting stick can be changed in seconds and used several times. Special material compliments POLAR knives.



Safety: POLAR are leaders in the development and use of safety devices.

Not only are today's mandatory safety features incorporated in every POLAR cutter, but possible future requirements have also been met.

Two hand cut release with blocking device and timed action feature.

Infrared electric eye with permanent self-controlled checking circuit.

Overload protection, reliable at any knife position.

Mechanical safety bolt: Additional safety device: automatically locks the knife beam in the upper dead center. With electrical self-check (dual-circuit system).

Safety pressure in the entire range of pressure when actuating clamp by pedal.

Electronic self-diagnosis system. All machine functions are monitored continuously, and any

errors or malfunctions are indicated automatically by a digital display in the control readout panel.

The following are also advantages of POLAR 76

- It can easily be operated by anybody right away –
- It needs very little maintenance –
- It cuts everything (paper, cardboard, foils) –
- It has 11 cm/ 4 5/16" clamp opening –
- It cuts with complete accuracy for many years, due to direct linear scale, which is not effected by wear. The cutter are of solid-heavy-duty construction.
- It needs very little space (2,4 m²/25,8 sq. ft.) –
- It is ready to cut at any time (all data which was set before switching off the machine appears again after switching on) –
- It is reasonably priced, due to batch production.

POLAR High Speed Cutters are of rigid construction but still need little space. Important units are directly accessible for easier maintenance.

POLAR, the largest cutting machine manufacturer in the world knows how to achieve the best results. You can take advantage of this experience by buying POLAR cutters.

*Please see index for
»Standard equipment/optional equipment«

POLAR 76

	Technical data	Standard Equipment/Optional Equipment	76 SD-P	76 EM
Cutting width	76 cm/29 15/16"	Complete electrical outfit 220/380 V, 3 phase, 50 Hz	x	x
Clamp opening	11 cm/4 5/16"	Main switch, with safety lock	x	x
Feed depth	76 cm/29 15/16"	Overload switch for main motor	x	x
Power requirement (main drive)	1,5 kW/2 H.P.	Table lighting/optical cutting line indicator	x	x
Net weight	1040 kg/2290 lbs	Digital measurement indication with direct linear measuring system	x	x
Machine width (with side tables)	152 cm/60"	Measuring systems: metric, inch/shaku	x	x
Length	175 cm/69"	Measurements to be entered in fractions of inch	x	x
Height	140 cm/55"	Keyboard for measurement entering at stationary backgauge	x	x
Front table length	48,5 cm/19"	Automatic backgauge positioning	x	x
Table height	90 cm/35 1/2"	Manual setting of measurements by one-hand operation	x	x
Clamp pressure min.	150 daN/330 lbs	Key for fast approach while positioning according to print	x	x
max.	2500 daN/5500 lbs	Motorized backgauge movement (microcomputer-controlled)	x	x
Knife thickness	11,7 mm/ 7/16"	Hydraulic clamping unit, with oil filling	x	x
Grinding reserve max.	2,5 cm/1"	Selfarresting worm gear, wear resistant	x	x
Smallest cut without false clamp	1,5 cm/ 9/16"	Pul rod overload device	x	x
with false clamp	7 cm/2 3/4"	Two hand cut release, timed, with non-repeat device	x	x
Backgauge speed	2,7/8,2 cm/sec.	Safety bolt (additional safety device: automatically locks the knife beam in the upper dead center)	x	x
Static floor load	650 daN/m ² /133 lbs/sq. ft.	Integrated electronic calculator (+/-/x/÷)	x	x
Contact area load	1,5 daN/cm ² /21 lbs/sq. in.	Clamping without cutting, programmable	—	x
Dynamic surcharge	20 %	Variable pre-clamping time	x	x
Supply voltage (3 phase) 190-240 V		Cast iron side tables, right and left	x	x
Fusing	16 A	Table side gauges, right and left	x	x
Wire cross section	1,5 mm ²	1 false clamp plate (to be fixed from the front of machine)	x	x
Supply voltage (3 phase) 340-440 V		2 knives ORIGINAL POLAR, in container	x	x
Fusing	10 A	30 cutting sticks POLAR SINUS	x	x
Wire cross section	1,5 mm ²	Table slot covering	x	x
Supply voltage (3 phase) 500-600 V		Rear table guard	●*	●*
Fusing	10 A	Tools, operating instructions, spare parts book, check list, wiring diagram	x	x
Wire cross section	1,5 mm ²			

x = Standard Equipment ● = Special Equipment * = Standard Equipment – Germany

Further Special Equipment: Waste bin, large side table left, electrical outfit for different voltages/frequencies, flexible face clamp, carbide tipped knives, lightbarrier (standard equipment in some countries), airtable with blower

*daN ≈ kp



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