

High-Speed Cutter POLAR 92 X

the programmable all-round model with 15" color-display for all standard cutting work with graphical programming automation for an extensive automated workflow.

Customer benefits

- Extended operating life of the knife as well as faster knife change thanks to POLAR OptiKnife with knife fine adjustment in the lower dead end
- High productivity by a great number of programmable additional functions
- Shortest make ready times thanks to intuitive cutting program generation via block programming or even Compucut
- Greatest cutting accuracy due to the POLAR-Positioning-System DPS with a mechanical positioning accuracy of 1/100 mm
- Highly reliable in daily use and long lifespan as a result of the stability of the one-piece machine frame, knife drive with worm gear drive and compact closed hydraulic system



Description of the machine

The High-Speed Cutter POLAR 92 X is mainly used in the print format class 50×70 cm | 28" in.. Formats up to a diagonal of 920 mm | 36.22 in. can be easily handled and turned in the high-speed cutter. Cutting material with larger formats can only be turned on the front table.

The high speed cutter has extensive features in the standard equipment already which can increase the productivity up to 20%

The high-speed cutter can be upgraded with peripheral equipment (lift, jogger) to a cutting system.

Technical data

Cutting width	920 mm 36.22 in.
Feeding depth	920 mm 36.22 in.
Loading height max.	130 mm 5.12 in.
Safety clamp pressure	30 daN 66 lbs
Clamp pressure, min	150 daN 331 lbs
Clamp pressure, max	3.500 daN 7,716 lbs
Backgauge speed on return way (0)	200 mm/sec 7.87 in./sec
Knife speed	45 cycles/min
Smallest cut, automatically, without false plate	25 mm 0.98 in.
Smallest cut, automatically, with false plate	90 mm 3.54 in.

Further technical data are available for download on our website.



High-Speed Cutter POLAR 92 XT

the programmable high performance model with 15" color display and Touch-Screen operation for high-end applications thanks to job specific programmable parameter, label and distortion correction as well as a extended range of options.

Customer benefits

- Extended operating life of the knife as well as faster knife change thanks to POLAR OptiKnife with knife fine adjustment in the lower dead end
- High productivity by a great number of programmable additional functions
- Shortest make ready times thanks to intuitive cutting program generation via block programming or even Compucut
- Greatest cutting accuracy due to the POLAR-Positioning-System DPS with a mechanical positioning accuracy of 1/100 mm



Highly reliable in daily use and long lifespan as a result of the stability of the one-piece machine frame, knife drive with worm gear drive and compact closed hydraulic system

Description of the machine

The High-Speed Cutter POLAR 92 XT is mainly used in the print format class 50 x 70 cm | 28" in.. Formats up to a diagonal of 920 mm | 36.22 in. can be easily handled and turned in the high-speed cutter. Cutting material with larger formats can only be turned on the front table.

The high speed cutter has extensive features in the standard equipment already which can increase the productivity up to 20%.

The high-speed cutter can be upgraded with peripheral equipment (lift, jogger) to a cutting system.

Technical data

Cutting width	920 mm 36.22 in.
Feeding depth	920 mm 36.22 in.
Loading height max.	130 mm 5.12 in.
Safety clamp pressure	30 daN 66 lbs
Clamp pressure, min	150 daN 331 lbs
Clamp pressure, max	3.500 daN 7,716 lbs
Backgauge speed on return way (0)	200 mm/sec 7.87 in./sec
Knife speed	45 cycles/min
Smallest cut, automatically, without false plate	25 mm 0.98 in.
Smallest cut, automatically, with false plate	90 mm 3.54 in.

Further technical data are available for download on our website.



High-Speed Cutter Options

Productivity	Quality	Ergonomics	Option	Customer benefit	v	available for	Autotrius	Retrofitable
7	ğ	Ē			Х	XT	Autotrim	Se l
X			Autotrim	Up to 40% greater productivity by automatic waste removal	_	○ 115 - 176		-
X		x	Autoturn	Up to 20% greater productivity by automatic turning of the ream on the rear table	_	o 137 - 176	o 137 - 176	
X			Optimized Cutting Cycle	Up to 10% greater productivity when cutting equal sizes in a sequence	_	o 115 - 176	o 115 - 176	
X		X	Process visualisation	Reduces the risk of mistakes by means of graphical operator guidance	o 78 - 176	• 78 - 176	• 115 - 176	_
X			Carbide tipped knives instead of HSS quality	Up to 10 times longer knife life by means of harder knife quality	o 78 - 176	○ 78 - 176	o 115 - 176	•
x	X	x	Downholder in front of knife	Prevents mixing and shingling of multiple ups when cutting	_	o 115 - 155	0 115 - 155	
X	X		Programmable pressure regulation	Accurate clamp pressure can be progammed to each single cut position ► longer knife life	_	○ 92 - 137 • 155 - 176	 115 - 137 155 - 176	
X	X	X	Automatic pressure regulation	Sensors in machine table ensure ideal clamp pressure ▶ higher cutting accuracy, longer knife life	_	o 115 - 176	o 115 - 176	
	X		False plate 40 mm (cutting width 50 mm)	Small formats (e.g. business cards) can be cut without loss of quality	o 78 - 137	o 78 - 137	o 115 - 137	~
	X		False plate 60 mm (cutting width 70 mm)	Small formats can be cut without loss of quality	o 155 - 176	o 155 - 176	o 155 - 176	~
	х		Swivel backgauge	Simple correction for squareness by motor driven backgauge adjustment	_	o 115 - 176	o 115 - 176	
	X		Tilting backgauge	Simple correction of over- and undercut by motor driven backgauge adjustment	_	o 115 - 176	o 115 - 176	
	X		Fixomat	Enables the correct aligning of concave, convexe or not angled material	_	o 115 - 176	o 115 - 176	

USP - exclusively by POLAR

o optional | ● standard | — not available



High-Speed Cutter Options

Productivity	ity	onomics	Option	Customer benefit		available for		Retrofitable
Prod	Quality	Ergo			X	XT	Autotrim	Retro
	Х	Х	Downholder at backgauge	Holds down curly sheets for better aligning at backgauge	_	o 115 - 176	o 115 - 176	
X	X		TwinClamp	Compensates for height differences in the material ▶ higher ream heights at consistant quality	_	∘ 115	∘ 115	
X		X	Retractable small format guide*	Prevents small ups from jamming in between front and rear side gauge on right side	_	_	o 115 - 137	
x		X	AirKnife	Prevents static loaded material or plastic sheets from sticking to the knife	_	_	o 115 - 155	_
X			Mini-label device**	Cutting of small formats (smallest cut minimum 16 mm) and pushing of last strip onto front table	_	_	∘ 115	_
X		X	Super air table	Increased air cushion for easier handling of heavy material	∘ 155 • 176	∘ 155 • 176	∘ 155 • 176	_
X		X	Separate air control for front table	Eases the unloading of cut material while material on the rear table is fixed	115 - 137155 - 176	 115 - 137 155 - 176	• 115 - 176	~
x		X	Rear table guard movable	Enables easy access to the knife from rear, e.g. for cleaning when cutting post-it's	 78 - 137 155 - 176	○ 78 - 137 ● 155 - 176	 115 - 137 155 - 176	~
X			P-Net Connect	Integration of POLAR high-speed cutters and peripheral equipment into the workflow	o 78 - 176	o 78 - 176	o 115 - 176	~
x		X	P-Net Service Compucut incl. CIP 3 / CIP 4	Automatic cutting program generation and reduction of makeready times at the cutter down to zero	o 78 - 176	o 78 - 176	o 115 - 176	~
X			P-Net Service Remote Diagnosis	Regular control of the cutter as prevention to reduce down times	o 78 - 176	o 78 - 176	o 115 - 176	~

i USP - exclusively by POLAR

optional | ● standard | — not available

^{*} only in connection with programmable or automatic pressure regulation

^{**} incl. downholder in front of knife, feeding depth is reduced by 50 mm, not possible in combination with Fixomat, downholder at backgauge or Autoturn