

High-Speed Cutter N 115 PLUS



the programmable all-round model with 18.5" color-display and Touch-Screen operation 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 High-Speed Cutter N 115

The High-Speed Cutter POLAR N 115 is mainly used in the medium-size range. Formats up to a diagonal of 1,150 mm 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, buffer, transport grippers, loading and unloading system) to a cutting system.

Technical data

Cutting width	1,150 mm 45.28 in
Feeding depth	1,150 mm 45.28 in
Loading height max.	165 mm 6.50 in
Safety clamp pressure	30 daN 66 lbs
Clamp pressure, min	150 daN 331 lbs
Clamp pressure, max	4,500 daN 9,921 lbs
Backgauge speed on return way (0)	300 mm/sec 11.81 in/sec
Knife speed	45 cycles/min
Smallest cut, automatically, without false plate	25 mm 0.98 in
Smallest cut, automatically, with false plate	95 mm 3.74 in

Further technical data are available for download on our website.





High-Speed Cutter N 115 PRO HD



the programmable high performance model with a capacitive 21.5" Touch-Screen display and real image preview for highend applications thanks to job specific programmable parameter, label and distortion correction as well as an 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

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68.000cm



High-Speed Cutter N 115 AT HD



the programmable high performance model with automatic trim removal, capacitive 21.5" Touch-Screen display and real image preview for highend applications thanks to job specific programmable parameter, label and distortion correction as well as an 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
- The automatic trim removal can increase your productivity up to 30%
- 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

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Productivity	Quality	Ergonomics	Option	Customer benefit	available for		Retrofitable	
Pro	Quí	Erg			N PLUS	N PRO HD	N AT HD	Ret
X			Autotrim	Up to 40% greater productivity by automatic waste removal	— ○ 115 - 176 • 115 - 176		-	
X		X	Autoturn PACE	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	Progressive central lubrication	machine can be greased easily via one greasing point on front side	115 - 155176	○ 115 - 155 ● 176	○ 115 - 155 ● 176	
X		X	Process visualisation	Reduced 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	○ 78 - 176 ○ 78 - 176 ○ 115 - 176		o 115 - 176	~
	х		Adjustable knife speed 100-50%	The knife speed is easily adjusted to different materials, for example plastic panels	○ 92 - 137 ○ 92 - 137 ○ 115 - 137			
X	Х	X	Downholder in front of knife	Prevents mixing and shingling of multiple ups when cutting	—		o 115 - 176	
X	х		Programmable pressure regulation	Accurate clamp pressure can be progammed to each single cut position ► longer knife life			 115 - 137 155 - 176	
X	х	X	Automatic pressure regulation	Sensors in machine table ensure ideal clamp pressure ▶ higher cutting accuracy, longer knife life	—			
	х		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	~
	х		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	~
X	х		OptiClamp	for optimisation the cutting of challenging cutting material, e.g. UV-coated material			 115 - 137 155 - 176	
X	х		1 TwinClamp	For cutting of material with height differences, e.g. banknotes ▶ Up to 100% greater productivity			-	
			USP - exclusively by POLAR		o optional	• standard -	not available	

Status: 02.2015 | Subject to technical alterations.



Productivity	lity	Ergonomics	Option	Customer benefit	available for N PLUS N PRO HD N AT HD		Retrofitable	
Pro	Quality	Erg					Retr	
	Х		Swivel backgauge	Simple correction for squareness by motor driven backgauge adjustment	e		o 115 - 176	
	X		Tilting backgauge	Simple correction of over- and undercut by motor driven backgauge adjustment	— ○ 115 - 176 ○ 115 - 170		o 115 - 176	
	X	X	Downholder at backgauge	Holds down curly sheets for better aligning at backgauge	— o 115 - 176 o 115 - 176			
X		X	1 AntiStickKnife	Knife with special coating prevents buildup of glue ▶ Up to 30% greater productivity	o 78 - 176	o 78 - 176	o 115 - 176	•
X		X	AirKnife	Prevents static loaded material or plastic sheets from sticking to the knife	9 — 0 11		o 115 - 155	
X		X	Separate air control for front table	Eases the unloading of cut material while material on the rear table is fixed			• 115 - 176	•
		X	ErgoFrontTable	Machine front table is extended by 500 mm by two tiltable air ○ 155 - 176 ○ 155 tables ► Eases loading / unloading		o 155 - 176	o 155 - 176	•
		X	Firmly mounted lift	Lift directly mounted to the frame — ○ 115 - 15 > space saving alternative compared to free-standing lift		o 115 - 155	o 115 - 155	•
X		X	Rear table guard movable	Enables easy access to the knife from rear, e.g. for cleaning when cutting post-it's	g		•	
X		X	Compucut®	Transfer of prepress-data for external cutting program generation ► reduces make-ready times down to zero	0 78 - 176 0 78 - 176 0 115 - 176		•	
X		X	Barcode	Enables automatic loading of the appropriate cutting program	m		•	
X		X	CutManager	Workflow integration with interface to prepress and HD Postpress-Manager for job data and production data	—		○ 115 - 176	~
	X	X	Guillo-Crease	Unique creasing system that transforms your cutter quickly and easily into a creasing machine			○ 115 - 176	•
X		X	knock up block "WiMotion"			○ 115 - 176	~	

1 USP - exclusively by POLAR

optional | ● standard | — not available