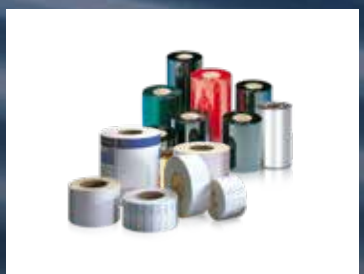
Status: 04/2018



cab devices and systems

Products need labeling

For any requirement a proper solution

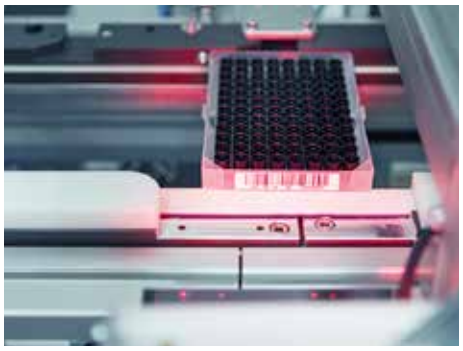
Since more than 40 years cab develops and manufactures solutions and a large amount of accessories for product marking. The product range includes label printers, print & apply systems, label dispensers and marking laser systems. In addition, cab provides ribbons and labels for the perfect imprint.

PRODUCTS NEED LABELING

In the automotive sector, labeling ensures traceability of components to the smallest screw. In logistics, it guarantees scheduled delivery. On electrical devices, typeplates refer to performance data and use. Pharmacy sees labeling prevent from errors relevant to health, in chemistry it points out to risks associated with the handling of a product - multi-colored and without any barrier as regards language. On food, labeling informs about ingredients and on textiles about its best possible care.

FOR THE CUSTOMER‘S BENEFIT

When it comes to using the devices, cab customers expect both a long service life and 100 per cent availability. All the printing and labeling processes have to be precise and reliable. Intuitive operability is a further criterion especially with alternating staff. On this basis, cab continuously develops ideas and assigns new technologies to real applications.



88 per cent of all the customers steadily rely on cab solutions - many of them for 20 years or more.

Long before Advanced Manufacturing and the Internet of Things became evident, cab devices did far more than just printing on a label. The products‘ architecture has always been designed according to easy operation, integration in automated production lines as well as reliability. The interfaces and protocols of cab‘s current printer generation enable bi-directional interaction with master networks, production planning or PLC.

Shaping innovation together

MADE IN GERMANY

As an owner-operated family company cab offers customer focus and economic continuity.

Foresight, ideas, added by curiosity and joy in its own products and their further development have always been driving forces in the company.

Local subsidiaries in Germany, France, USA, Mexico, South Africa and Asia form the basis to meet the individual markets in the best possible way.

COMPANY FACTS AND FIGURES

- founded 1975
- nine sites in seven countries
- Production and distribution of more than 35,000 devices every year
- 85 million Euros group turnover in fiscal year 2017
- Industry leader in automated and high-precision labeling
- Europe‘s major manufacturer of label printing systems

For further information see
www.cab.de/en

cab headquarters in Karlsruhe, Germany: Product Development and Engineering, International Sales, Marketing, Administration

KLAUS BARDUTZKY
Managing Director and company founder

ALEXANDER BARDUTZKY
2nd generation Managing Director

Get an overview!

Design and technical specifications correspond to the date of the printing. Subject to change.
The data provided in the catalog do not represent any warranty or guarantee.
For current data see website *www.cab.de/en*

Label printers **MACH1, MACH2**

MACH1 with control buttons and LED signal

MACH2 with colored LCD display and navigator pad

4“ desktop printers in proven technology

With the MACH1 and MACH2 cab completes its printer range in the lower price segment.

The devices ideally fit with small to medium duty applications in thermal transfer and direct thermal printing.

MACH1 is provided with control buttons and a LED signal, while MACH2 has a colored LCD display and a navigator pad.

■ Standard ☐ Option

Label printer			MACH1		MACH2	
Print head	Printing method		Thermal transfer, thermal direct			
	Printable resolution	dpi	203	300	203	300
	Print speed	up to mm/s	127	102	177	127
	Print width	up to mm	108	105.7	108	105.7
Labels	Roll outside diameter	up to mm	127			
	Width	mm	25 - 112			
	Height	mm	4 - 1,727	4 - 762	4 - 1,727	4 - 762
Ribbon	Ink side		outside or inside			
	Variable length	up to m	300			
Printer sizes and weights	Width x Height x Depth	mm	210 x 186 x 280			
	Weight	kg	2.7		3	
Electronics	Data storage	MB	16			
	Main storage SDRAM	MB	8			
Interfaces	RS232-C		■		■	
	USB for PC		■		■	
	Ethernet		■		■	
	USB host		-		■	

The device can be opened up widely to insert the ribbon and the label roll.

For further information see
www.cab.de/en/mach1-2

Label printers **EOS1, EOS4**

EOS1 for label rolls up to diameter 152 mm

EOS4 for label rolls up to diameter 203 mm

Compact printers providing many features of large industrial printers

The EOS combine all the functions of a solid label printer with highest ease of operation.

EOS1 is the compact one requiring little space, EOS4 processes label rolls up to diameter 203 mm.

■ Standard ☐ Option

Label printer			EOS1		EOS4	
Print head	Printing method		Thermal transfer, thermal direct			
	Printable resolution	dpi	203	300	203	300
	Print speed	up to mm/s	125			
	Print width	up to mm	108	105.7	108	105.7
Labels	Roll outside diameter	up to mm	152		203	
	Width	mm	single lane 10 - 116, multi lane 5 - 116			
	Height	mm	5 - 1,000			
Ribbon	Ink side		outside or inside			
	Variable length	up to m	360			
Printer sizes and weights	Width x Height x Depth	mm	253 x 189 x 322		264 x 245 x 412	
	Weight	kg	4		5	
Electronics	Processor clock rate	MHz	400			
	Data storage	MB	16			
	Main storage RAM	MB	64			
Interfaces	USB for PC		■			
	Ethernet		■			
	Periphery		■			
	USB host		■			

The EOS can be supplied with the battery pack provided by cab - wherever labels are needed but no socket for power connection is available.

For further information see **www.cab.de/en/eos**

Label printers **MACH 4S**

MACH 4S to insert consumables from the front.

Industrial printers to insert consumables from the front

The MACH 4S provide all features of an industrial printer with a wide application range. Labels and ribbons are easy to insert from the front.

The large, colored touchdisplay with self-explanatory symbols offers best operability. The centered material guide eliminates any need of adjustments.

■ Standard ☐ Option

Label printer			MACH 4S		
Print head	Thermal transfer		■		
	Thermal direct		■		
	Printable resolution	dpi	203	300	600
	Print speed	up to mm/s	250	300	150
	Print width	up to mm	108.4		
Labels	Roll, reel outside diameter	up to mm	205		
	Width	mm	5 - 116		
	Height without label backfeed Height peel-off, single cut	from mm	5 12		
Ribbon	Ink side		outside or inside		
	Variable length	up to m	360		
Printer sizes and weights	Width x Height x Depth	mm	240 x 317 x 435		
	Height when cover is open	mm	596		
	Weight	kg	6		
Electronics	Processor clock rate	MHz	800		
	Data storage	MB	50		
	Main storage RAM	MB	256		
Interfaces	RS232-C		■		
	USB for PC		■		
	Ethernet		■		
	Periphery		■		
	USB host		■		

Printer version with a tear-off edge

Printer version with peel-off function

Printer version with a cutter

For further information see
www.cab.de/en/mach4s

Label printers **SQUIX 2, SQUIX 4, SQUIX 6**

Material guide
left-aligned

SQUIX label printers with left-aligned material guide

Flexible printers for industrial applications

The SQUIX are the further development of the successful printer series A+. They represent innovative technology, accuracy of impression, fast printing and highest quality standards.

Their development is foremost focused on simple and convenient operation coupled with high reliability.

All materials wound on rolls resp. fanfold can be printed.

■ Standard ☐ Option

Label printer			SQUIX 2		SQUIX 4			SQUIX 6	
Print head	Thermal transfer					■			
	Thermal direct		☐	-	■	■	-	■	
	Printable resolution	dpi	300	600	203	300	600	203	300
	Print speed	up to mm/s	250	150	250	300	150	250	
	Print width	up to mm	56.9		104	108.4	105.7	168	162.6
Labels	Roll outside diameter with core diameter	mm	205 / 38,1 - 76						
	Width	mm	4 - 63		20 - 116			46 - 176	
	Height without label backfeed	from mm	4		4			6	
Ribbon	Ink side		outside or inside						
	Variable length	up to m	450						
Printer sizes and weights	Width x Height x Depth	mm	200 x 288 x 460		252 x 288 x 460			312 x 288 x 460	
	Weight	kg	9		10			14	
Electronics	Processor clock rate	MHz	800						
	Data storage	MB	50						
	Main storage RAM	MB	256						
Interfaces	RS232-C, USB for PC, Ethernet, Periphery, USB host, WLAN		■						
	Digital I/O		Peel-off version ■, basic version ☐						

For further information see
www.cab.de/en/squix

Customized handling

Labels can either be cut or perforated. Various peel-off adapters enable either automatic or manual dispensing. The labels can also be rewound for further processing.

For operation in production lines various applicators are provided that allow semi-automatic printing and applying.

Reliability

Due to comprehensive peripheral equipment the printers fully tackle any task, allowing to demonstrate their reliability in continuous operation in any working environment.

Tester for linear and 2D barcodes

Cutter and cutter tray

Internal rewinder

External rewinder

Applicators to be integrated in production lines

Demand module for packaging in motion

Label printers **SQUIX 4 M, SQUIX 4 MT**

Material guide
centered

SQUIX label printers with centered material guide

M series - precise and versatile

For printing on all materials that are wound on rolls or reels or fanfold - especially very small labels or slim continuous materials such as pressed shrink tubes.

MT series - textile printers

It is also possible to print on labels or continuous materials that are wound on rolls or reels.

Valid for both printer series:
As regards the label width, no adjustment of the plungers is needed. Adapted print rollers are provided for slim materials.

■ Standard ☐ Option

Label printer			SQUIX 4 M			SQUIX 4 MT	
Print head	Thermal transfer				■		
	Thermal direct		■	■	-	■	-
	Printable resolution	dpi	203	300	600	300	600
	Print speed	up to mm/s	250	300	150	300	150
	Print width	up to mm	104	108.4	105.7	108.4	105.7
Labels	Roll, reel outside diameter with core diameter	mm	205 / 38.1 - 76 180 / 100			205 / 38.1 - 76 180 / 100	
	Width	mm	4 - 110			4 - 110	
	Height without label backfeed	from mm	3			4	
Ribbon	Ink side		outside or inside				
	Variable length	up to m	450			450	
Printer sizes and weights	Width x Height x Depth	mm	252 x 288 x 460			252 x 288 x 460	
	Weight	kg	10			10	
Electronics	Processor clock rate	MHz	800			800	
	Data storage	MB	50			50	
	Main storage RAM	MB	256			256	
Interfaces	RS232-C, USB for PC, Ethernet, Periphery, USB host, WLAN		■			■	
	Digital I/O		☐			☐	

SQUIX 4 M with a stacker and cutter

For further information see
www.cab.de/en/squix

Label printers **A8+**

A8+ for pallet and barrel labeling

8“ printers for wide label applications

The print mechanics and chassis of SQUIX and A+ printers match in terms of shape and function.

The highspeed processor ensures fast processing of a print job and immediate label output.

■ Standard ☐ Option

Label printer			A8+
Print head	Thermal transfer		■
	Thermal direct		■
	Printable resolution	dpi	300
	Print speed	up to mm/s	150
	Print width	up to mm	216
Labels	Roll outside diameter	up to mm	205
	Width	mm	46 - 220
	Height without label backfeed	from mm	10
Ribbon	Ink side		outside or inside
	Variable length	up to m	360
Printer sizes and weight	Width x Height x Depth	mm	352 x 274 x 446
	Weight	kg	15
Electronics	Processor clock rate	MHz	266
	Data storage	MB	8
	Main storage RAM	MB	64
Interfaces	Centronics		☐
	RS232-C		■
	USB for PC		■
	Ethernet		■
	RS422 / RS485		☐
	Periphery		■
	USB host		■
	WLAN		☐
	Digital I/O		-

For further information see
www.cab.de/en/a8plus

Label printers **XD4T**

XD4T for double-sided printing also on textile materials

Textile printer XD4T

The XD4T prints on both sides of a textile tape, cardboard labels, pressed tubes, continuous or ready-for-use, as well as on continuous plastic, paper or cardboard materials:

- No print head adjustment for different material widths
- Print rollers for narrow and slim materials

■ Standard ☐ Option

Label printer			XD4T
Print head	Printing method		Thermal transfer
	Printable resolution	dpi	300
	Print speed	up to mm/s	125
	Print width	up to mm	105,6
Labels	Roll outside diameter	up to mm	300
	Width	mm	10 - 110
	Height without label backfeed	from mm	20
Ribbon	Ink side		outside or inside
	Variable length	up to m	360
Printer sizes and weight	Width x Height x Depth	mm	248 x 395 x 554
	Weight	kg	21
Electronics	Processor clock rate	MHz	266
	Data storage	MB	8
	Main storage RAM	MB	64
Interfaces	RS232-C		■
	USB for PC		■
	Ethernet		■
	Periphery		■
	USB host		■
	WLAN		☐
	Digital I/O		-

XD4T with a stacker and cutter

For further information see **www.cab.de/en/xd4t**

Label printers **XC4, XC6**

XC4, XC6 for two-color printing up to printh width 162.6 mm

Printing two colors in one operation

In order to simultaneously print with two colors in one label, the XC have two thermal transfer units arranged in-line:

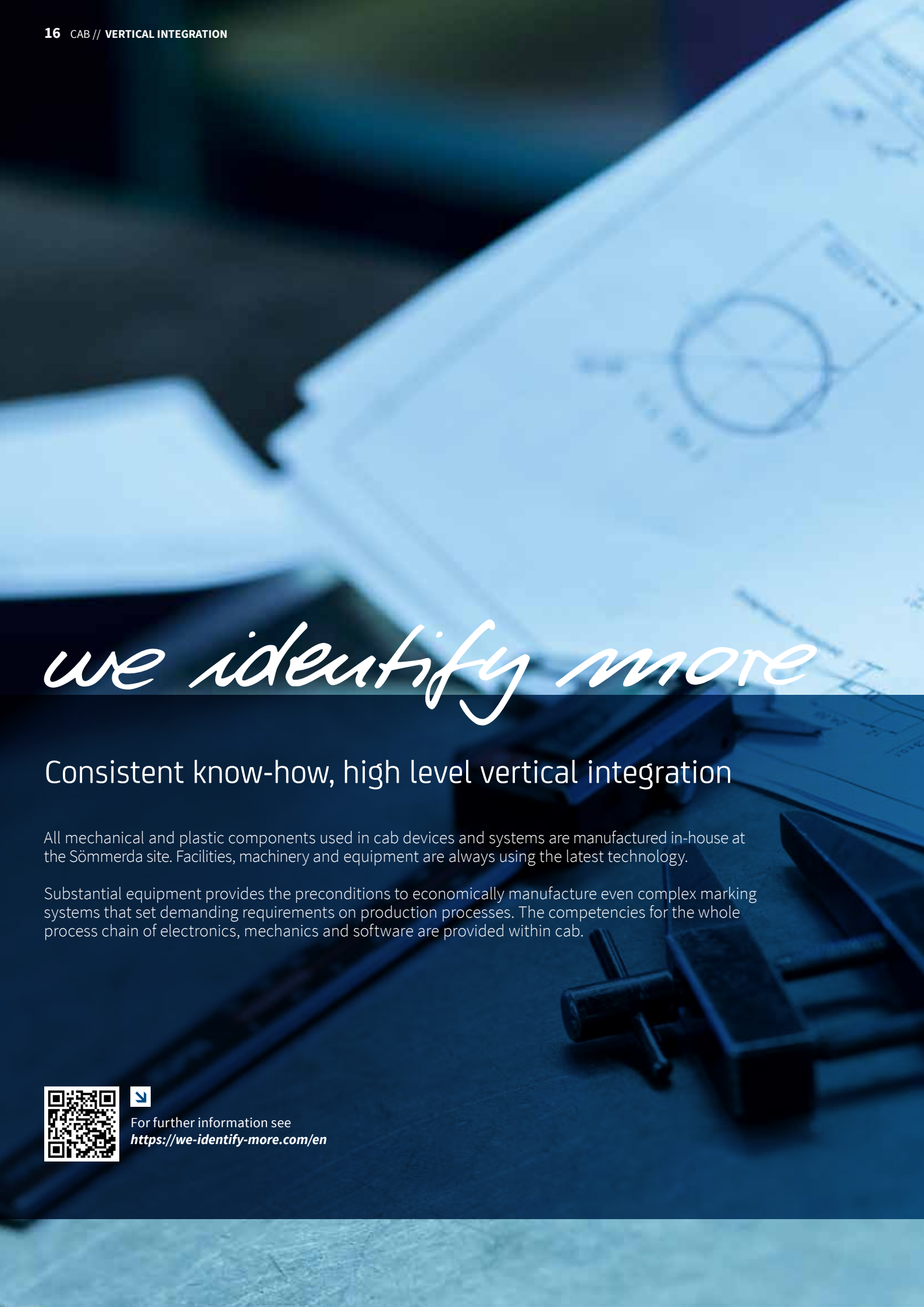
- Meets the conditions for the Classification and Labeling Inventory according to GHS
- For large label rolls to diameter 300 mm
- Provides ribbon saving function at one print head

■ Standard ☐ Option

Label printer			XC4	XC6
Print head	Printing method		Thermal transfer	
	Printable resolution	dpi	300	
	Print speed	up to mm/s	125	
	Print width	up to mm	105.6	162.6
Labels	Roll outside diameter	up to mm	300	
	Width	mm	20 - 116	46 - 176
	Height	mm	20 - 2,000	20 - 1,500
Ribbon	Ink side		outside or inside	
	Variable length	up to m	360	
Printer sizes and weights	Width x Height x Depth	mm	248 x 395 x 554	358 x 395 x 554
	Weight	kg	22	24
Electronics	Processor clock rate	MHz	266	
	Data storage	MB	8	
	Main storage RAM	MB	64	
Interfaces	USB for PC		■	
	Ethernet		■	
	Periphery		■	
	USB host		■	
	WLAN		☐	

XC6 with a cutter

For further information see
www.cab.de/en/xc



we identify more

Consistent know-how, high level vertical integration

All mechanical and plastic components used in cab devices and systems are manufactured in-house at the Sömmerda site. Facilities, machinery and equipment are always using the latest technology.

Substantial equipment provides the preconditions to economically manufacture even complex marking systems that set demanding requirements on production processes. The competencies for the whole process chain of electronics, mechanics and software are provided within cab.

For further information see
https://we-identify-more.com/en

Print and apply systems **Hermes+, Hermes C**

Hermes+ with stroke applicator 4114

Hermes C with stroke applicator 4136

Hermes+

Hermes+ has been designed for automatic printing and applying in production lines.

Dispensing to the left

Dispensing to the right

Hermes C

Hermes C is for printing and applying with two colors in one operation. It has been developed and optimized especially for applications compliant to the Classification Inventory according to GHS.

For further information see
www.cab.de/en/print-apply

■ Standard ☐ Option

Print and apply system			Hermes+ 2		Hermes+ 4			Hermes+ 6		Hermes C 6L
Print head	Thermal transfer		■		■			■		■
	Thermal direct		■	-	■		-	■		-
	Printable resolution	dpi	300	600	203	300	600	203	300	300
	Print speed	up to mm/s	150	100	250		100	200		125
	Print width	up to mm	54.2	57	104	108.4	105.6	168		162.6
Labels	Roll outside diameter	up to mm	305							
	Width	mm	4 - 58		10 - 114			50 - 174		46 - 176
	Height	mm	4 - 200		8 - 320			25 - 320		20 - 356
Ribbon	Ink side		outside or inside							
	Variable length	up to m	500							450
Device sizes and weights	Width x Height x Depth	mm	207 x 538 x 518		260 x 538 x 518			320 x 538 x 518		320 x 550 x 630
	Weight	kg	15		16			20		30
Electronics	Processor clock rate	MHz	266							
	Data storage	MB	8							
	Main storage RAM	MB	64							
Interfaces	Centronics		☐							-
	RS232-C		■							
	USB for PC		■							
	Ethernet		■							
	USB master		■							
	RS422 / RS485		☐							-
	Digital I/O		■							
	Applicator		■							
	Warning light		■							
	E-stop		■							
	Main valve for air pressure supply		■							

Applicators for **product marking with Hermes+**

3214
Swing applicator

4114/4116
Stroke applicators

4214
Stroke turn applicator

4414
Stroke applicator

4514
Swing stroke applicator

4712
Flag applicator

Labels may be applied from all sides. Depending from the type of applicator, the product is either in motion or not in motion during labeling.

Applicators for **package marking with Hermes+**

3014/3016
Front side applicators

4014/4016
Stroke applicators

4614
Stroke blow applicator

5114
Demand module

5314/5316 and 5414/5416
Vacuum belt applicators

6114
Air jet box

Labels may be applied from all sides. Depending from the type of pad, the packaging / product is in motion or not in motion during labeling.

Applicators for **Hermes C**

4126C / 4136C
Stroke applicators

Labels may be applied from all sides. Depending from the type of pad, the product is in motion or not in motion during labeling.

Transfer modules for stroke applicators

Tamp pad
To press labels on flat surfaces

Tamp pad spring-mounted
To apply labels even on surfaces up to approx. 8° inclination

Roll-on pad
To roll labels on flat surfaces in motion

5326C / 5426C
Vacuum belt applicators

For labeling on packaging or products in motion.

Labeling heads **IXOR**

IXOR is driven by a high-torque servo motor.

Highly performant devices to be integrated into labeling machines

54 mm chassis depth and a modular construction kit perfectly allow IXOR to be integrated into labeling machines or attached to conveyors in a production line via a wide range of accessories such as mounting equipment. A large-scale modular system of rewinders, unwinders and peel edges enable to confi-gure the labeling head according to any customer specification.

Wide voltage input allows IXOR to be linked to all common power supplies. By means of the LAN and the serial interface, IXOR can be easily connected to existent control units. As regards service purposes such as firmware updates, reading out formats and diagnostics, IXOR comes standard with WLAN.

■ Standard ☐ Option

Labeling head			IXOR			
Basic unit	Construction width	mm	124	186	248	310
Power data	Label web speed	up to m/min	50, 100, 150, 200 - depending from type			
Labels	Roll outside diameter	up to mm	310 / 410			410
	Width	up to mm	120	182	244	306
	Length	mm	5 - 6,000			
Device sizes and weights	Width x Height with supply roll 310 mm	mm	600 x 600			-
	Width x Height with supply roll 410 mm	mm	680 x 700			925 x 825
	Depth	mm	266	328	390	452
	Weight	kg	14	14.5	15	32
Interfaces	Analog		■			
	Periphery		■			
	WLAN		■			
	Digital I/O		■			
	End of label web sensor		■			
	Start and stop sensor		■			
	Product speed synchronization		■			
	Serial		☐			
	LAN		☐			

Customized configuration

Every IXOR application follows individual demands. To evaluate all your requirements and apply them to the specifications of IXOR, cab has set up its own contact and sales department. Please contact our specialist staff at ***labeling@cab.de***

IXOR types and assembly examples

Labeling head 124 L
Label web width 124 mm
Dispensing to the left
Unwinder: D310 V 124 L

Vertical assembly

Labeling head 124 R
Label web width 124 mm
Dispensing to the right
Unwinder: D310 V 124 R

Vertical assembly

Labeling head 124 L
Label web width 124 mm
Dispensing to the left
Unwinder: D410 V 124 L

Vertical assembly

Labeling head 186 L
Label web width 186 mm
Dispensing to the left
Unwinder: D410 H 186 L

Horizontal assembly

For further information see
www.cab.de/en/ixor

Print modules **PX4, PX6**

PX4 for a large number of applications

PX6 for Odette and UCC labels

Fully automatic printing and applying in industrial applications

Perfect performance, high reliability, comfortable operation and little maintenance downtimes - the PX can be integrated in any mounting orientation and solves even complex marking applications.

In case of a repair, components and units are easy to replace.

The footprint of the device is screw compatible with other manufacturers.

■ Standard ☐ Option

Print module			PX4			PX6	
Print head	Printing method		Thermal transfer, thermal direct				
	Printable resolution	dpi	203	300	600	203	300
	Print speed	up to mm/s	300	250	100	200	
	Print width	up to mm	104	105.6		168	162.6
Labels	Width	mm	10 - 116			50 - 174	
	Height without backfeed from	mm	6			12	
Ribbons	Ink side		outside or inside				
	Variable length	up to m	600				
Electronics	Processor clock rate	MHz	266				
	Data storage	MB	8				
	Main storage RAM	MB	64				
Interfaces	Centronics		☐				
	RS232-C		■				
	USB for PC		■				
	Ethernet		■				
	USB host		■				
	RS422 / RS485		☐				
	Wireless Bridge		☐				
	Digital I/O		■				

Dispensing to the left

Dispensing to the right

For further information see
www.cab.de/en/px

Label dispensers **HS, VS**

HS60+ for horizontal dispensing | **VS120** for vertical dispensing | **VS180+** for wide labels up to 180 mm

Dispensing labels - automatical or on request

With the HS and VS all label sizes can be easily dispensed. Labels may be punched or cut without space in between. Any outside shape, square or round, can be processed. Even transparent material can be dispensed:

- With horizontal dispensers (HS) the labels are peeled off in upward direction from their bottom edge and stuck to the product.
- With vertical dispensers (VS) the labels are peeled off in forward direction from their upper edge and stuck to the product via the shortest path.

"+" models have an operation panel added.

■ Standard ☐ Option

Label dispenser			HS	VS	HS+, VS+
	Materials		Paper, textile, plastics on roll, punched or die cut, Leporello as an option		
	Feed rate	up to mm/s	200		100 / 200
Rewinder	Carrier material outside diameter	up to mm	155		
Label sensor	Scanning		Label front edge		
	Distance to locating edge	mm	5 - 55		
	Height pre-dispense	mm	4 - 18		
Connectors	Peel-off on request via external signal		-		■
	Power socket for non-heating apparatus		Power supply		
	Power switch		ON, OFF		
Device specific			**HS60, VS60**	**HS120, VS120**	**HS180+, VS180+**
Labels	Roll outside diameter	up to mm	200		
	Width[1]	mm	8 - 65	20 - 120	80 - 180
	Height one wide	mm	5 - 300	8 - 600	20 - 600
	Height multi wide	mm	5 - 110	8 - 110	20 - 110
Device sizes and weights	Width x Height x Depth	mm	180 x 250 x 360	230 x 250 x 360	300 x 250 x 360
	Weight	kg	3.3	3.6	4

[1] carrier material included

For further information see
www.cab.de/en/hsvs

Marking laser systems **FL+**

FL+20 with scan head

Durable marking of metal and plastics

Marking is possible with stationary metal or plastic products in Medtech, aerospace, electronics and in the automotive industries.

FL+ are diode-pumped and air-cooled. They offer a high beam quality and pulse peak power.

FL+ consist of two units: the control unit with the laser source and the scan head

The laser sources provide 50 W maximum output power.

■ Standard ☐ Option

Marking laser system			FL+10	FL+20	FL+30	FL+50
Laser source	cw output power	up to W	10	20	30	50
	Pulse energy	mJ	0.5	1		
	Wave length	nm	1,064			
	Beam quality M^2		< 1.8			
	Pulse width	ns	90 - 120	80 - 120		
	Pulse frequency	kHz	20 - 80	2 - 200		
	Connecting line	m	4.5	2.5		
Scan head	Mounting orientation		horizontal, vertical			
	Marking speed	mm/s	approx. 5,000			
Pilot laser	Wave length	nm	650			
	cw output power	mW	< 1			
Electronics	Processor clock rate	MHz	600			
	Data storage	MB	512			
	Main storage RAM	MB	256			
Laser safety class EN60825-1	Laser source		Class 4			
	Pilot laser		Class 2			
Interfaces	RS232-C		■			
	Ethernet		■			
	Digital I/O		■			
	Remote		■			
	E-stop		■			
			Rack 4RU 19“			
Device sizes and weights	Control unit Width x Height x Depth	mm	420 x 178 x 420			
	Control unit weight	kg	16			
	Scan head Width x Height x Depth	mm	170 x 110 x 330			
	Scan head weight	kg	7			

For further information see
www.cab.de/en/laser

Periphery samples for **marking laser systems FL+**

LSG+100E for the marking of serial parts

LM+ for the marking of labels made of laser markable foil

Laser safety housing LSG+100E

The LSG+100E is the industrial solution for marking serial parts with the FL+. The solid metal design besides a large work area provides enough space to integrate the laser source and an industrial PC within the 19“ assembly frame.

The operation door is electronically opened and closed.

Laser label marker LM+

The LM+ allows to precisely mark labels of different sizes directly from the roll and cut them without the need of additional tools.

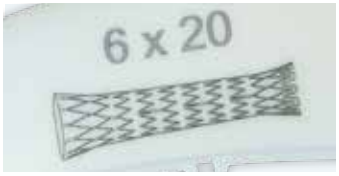
After the marking, the labels made of laser markable foil can either be separated with a cutter or rewound with an external rewinder.

■ Standard ☐ Option

Laser safety housing		LSG+100E 230 V	LSG+100E 120 V
	Work area Width x Height x Depth mm	980 x 460 x 980	
	Traversing speed up to mm/s	60	
	Positional accuracy mm	0.02	
Device sizes and weight	Width x Height x Depth mm	1,000 x 2,280 x 1,120	
	Weight kg	395	
Interfaces	Digital I/O	■	
	Remote	■	
	E-stop	■	
	Step motor Z axis, X axis, rotary axis	■	
	Extraction and filter device	■	
Laser label marker		**LM+160.1**	**LM+254.1**
	Work area Width x Height x Depth mm	160 x 5 x 190	
	Transport speed mm/s	200	
	Positional accuracy mm	0.2	
Labels	Roll outside diameter up to mm	300	
	Width mm	25 - 120	
	Height up to mm	180	
Device sizes and weights	Width x Height x Depth mm	440 x 520 x 802	
	Weight kg	22	
Interfaces	RS232-C	■	
	E-stop FL+	■	
	E-stop external	■	
	Cutter	■	

Typeplates made of aluminum

Code traceability in sterilization



Size allocation in Medtech

Ident clips made of plastic

Marking laser systems **XENO 1**

XENO 1 marking laser system “out of the box”

Easy and fast marking of single workpieces and series

XENO 1 is a desktop device easy to handle and intuitively operable. At the same time it provides the features and functionality of a premium system. The laser sources provide 20 or 30 W maximum output power.

XENO 1 completes the range of cab marking laser systems in the lower price segment.

■ Standard ☐ Option

Marking laser system			XENO 1	
Laser source	cw output power	up to W	20	30
	Pulse energy	mJ	1	
	Wave length	nm	1,064	
	Beam quality M^2		< 1.6	
	Pulse width	ns	120	
	Pulse frequency	kHz	20 - 60	
Pilot laser / focus finder	Wave length	nm	650	
	cw output power	mW	< 0.4	
	Work area Width x Height x Depth	mm	500 x 180 (100) x 250	
	Traversing speed	mm/s	20	
	Positional accuracy	mm	±0.1	
	Laser safety class EN60825-1		Class 1	
Interfaces	Work area		Rotary axis Digital I/O	
	Back of device		Ethernet TCP/IP 24 V for digital I/O Extraction and filter device AF5 External start External E-stop	
Device sizes and weight	Width x Height x Depth	mm	580 x 660 x 700	
	Weight	approx. kg	50	

For further information see
www.cab.de/en/laser

Software for **cab devices**

Label software **cablabel S3**

Designing, printing, administrating with cablabel S3

The cablabel S3 software opens up the full potential of cab devices. First of all the label must be designed. Only when it comes to printing it has to be decided whether the label shall be processed on a label printer, a print and apply or marking laser system.

cablabel S3 is of a modular design which makes it adaptable to requirements step by step. To support functions like native JScript programming elements such as the JScript Viewer are embedded as plug-ins. The designer user interface and the JScript code are synchronized in real time. Special functions like the Database connector or barcode testers can be integrated.

For further information see
www.cab.de/en/cablabel

Marking laser software **cabLase**

Designing, controlling, monitoring with cabLase

cab marking lasers have installed cabLase Editor 5. It offers the key features

- graphic design of layouts,
- control of marking,
- monitoring the marking process.

Further software features are

- support of marking without a PC,
- remote control,
- remote API interface for integration in manufacturing processes,
- integrability in MES and ERP platforms.

For further information see
www.cab.de/en/cablase

Stand-alone operation of **cab printers**

This operating mode is the printer‘s ability to select and print labels even when it is not connected to a host system.

The label has to be designed with a software such as cablabel S3 or by direct programming with a text editor on a PC. Label formats, texts, graphics as well as database contents are stored on a memory card, a USB memory stick or in the internal IFFS memory.

Only variable data are sent to the printer via a keyboard, a barcode scanner, scales or other systems. With the Database Connector, these data are recalled from the host and printed.

Precise printing with **cab labels**

cab labels are custom made from more than 400 materials - plain or pre-printed.

Good reasons to choose cab labels

The surfaces of cab labels are optimized for high image fidelity in thermal transfer printing. The roll and core diameters as well as the winding are tailored specifically to cab printers. Three samples of stock materials:

Paper white - slightly glossy

Applications are address labeling as well as the marking of product and goods in general in industry, logistics, trading or services.

This material offers high whiteness combined with a permanent adhesive.

Polyester white - matt

Applications are with customized stock materials resp. storage locations, goods on consignment, outdoor and production areas as well as potential hazards.

This material is highly resistant to tearing, oils and extreme temperatures, repelling dirt and water.

Polyester silver - matt

Applications are with printers having a high printable resolution: e. g. product type-plates or indicating labels when labeling devices indoor and outdoor

This material convinces with a strong adhesive power on smooth surfaces and high resistance to extreme temperatures.

For further information see
www.cab.de/en/labels

High-quality printing with **cab ribbons**

cab ribbons have a special back coating to avoid static electrification and better dissipate residual heat.

Good reasons to choose cab ribbons

Whether narrow or wide labels have to be applied, if it is for product or typeplate marking - cab provides more than 20 types of ribbons for any demand. Tailored specifically for cab printers, these ribbons offer a consistent high quality.

Wax ribbons

Fitting with fast and economical printing on vellum or coated paper, wax ribbons produce high-contrast, sharp and clear imprints with a high density. Recommended if wipe resistance is not a top priority.

Resin/wax ribbons

Resin/wax ribbons provide a higher abrasion and sratch resistance than pure wax ribbons while offering the same density. Recommended for a bunch of applications with chromated or coated papers as well as plastics.

Resin ribbons

Resin ribbons are highly resistant to scratching, extreme temperatures and dissolvers. They are therefore primarily used with plastic materials, even with coated surfaces. Ribbons withstanding washing and ironing are also available.

Colored ribbons on request

Colored cab ribbons in pure wax, resin/wax or pure resin qualities exhibit the same characteristics as the black ribbons. Golden or silver wax ribbons are specifically recommended for high-quality decorative labels.

For further information see
www.cab.de/en/ribbons

At home in **any industry**

A quarter of a million cab devices and systems are in continuous operation all over the world. They are in use in the automotive, chemical, pharmaceutical and textile industries, in electronics and medtech, transport and logistics as well as in retail and wholesale trading and the services sector.

Applications

Informational labels, warning labels, inventory, product labels, logging, labels for certification or testing, patient admission, pricing, storage location marking, shelf marking, address labels, shipping labels, incoming goods, tickets, typeplate marking, warranty labels, cable marking, tube marking, barrel labels, encoding, container labels, spare parts marking resp. identification

Customers

cab devices are operated by global players as well as by small and medium-sized companies.

„We set milestones in the development and manufacturing of devices and systems for product marking."

Roman Schnider
Head of Software Development

Services and Training

Services

Well-trained cab service engineers worldwide support in the maintenance and repair of the devices.

Send your printer to a cab service center or a service partner selected by us. Your device will be checked and repaired within few workdays. If requested, a loan device will be offered.

You prefer maintenance and repair on-site in your company? Then make an appointment with our Services Department:

Phone **+49 721 6626 300**, Email: **service.de@cab.de**

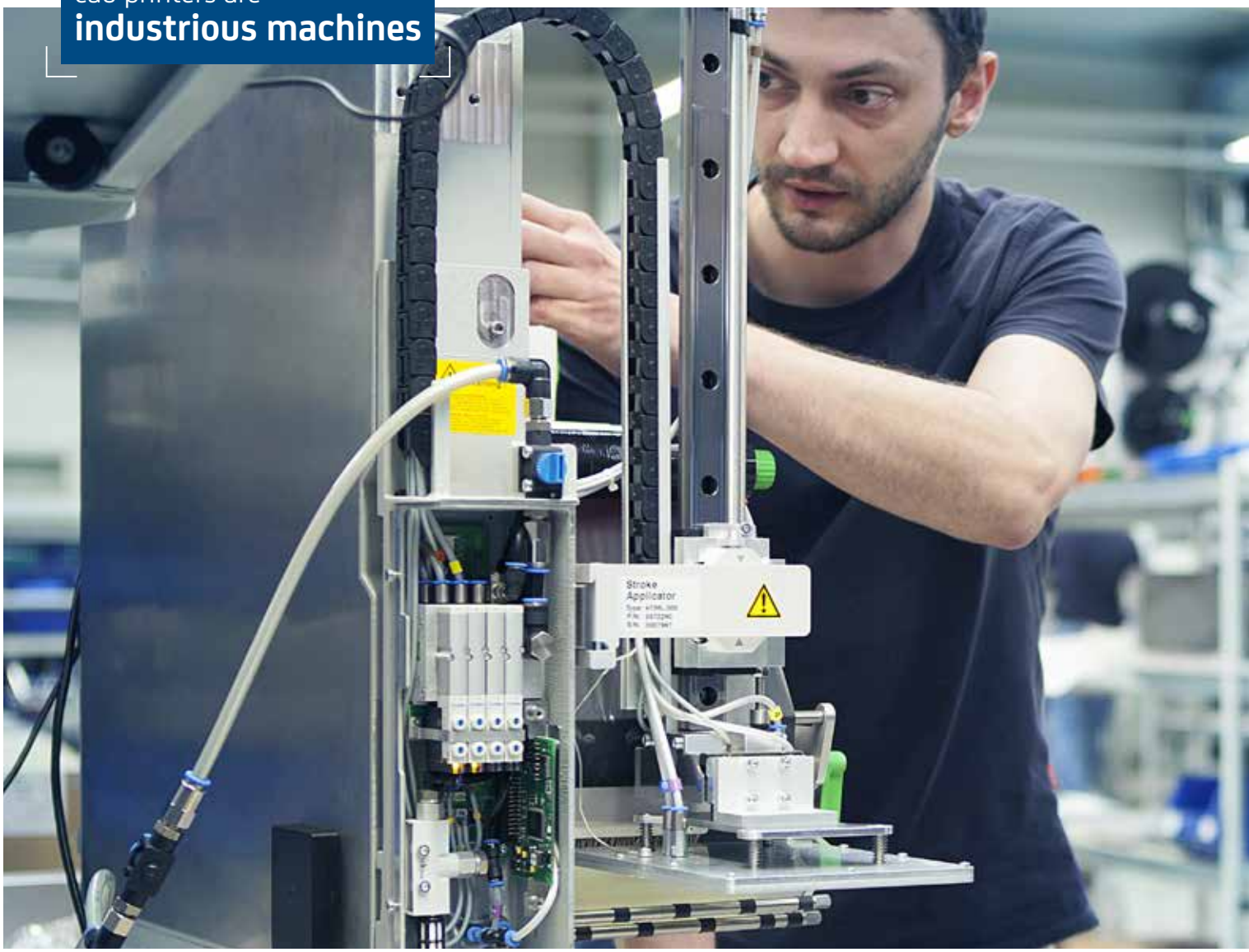
Training

Enhance your know-how on cab devices with regard to an effective use, service and repair.

In Karlsruhe we offer trainings on the handling of the devices, label design, software, printer drivers, programming, database access as well as on how to integrate in networks or superior ERP systems. We gladly send you detailed information on all our current training offers on request.

Individually we offer trainings according to your specific demands – in Karlsruhe or on-site in your company.

cab printers are
industrious machines



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