Pad Printing Laser Systems Automations



LEADS Pad Printing



PAD PRINTING LASER MARKING CONSUMABLES SERVICE STAND-ALONE Pad Printing Machines BUILT-IN Pad Printing Machines



TAMPOPRINT®

Worldwide



TAMPOPRINT[®] GmbH Headquarters Germany



TAMPOPRINT[®] Int'l. Corp. Subsidiary USA



TAMPOPRINT® IBERIA S.A.U. Subsidiary Spain



Sales Network Europe, America, Africa, Asia, Australia

TAMPOPRINT

Industrial product marking and labeling using pad printing and lasers - that is our profession and our passion. TAMPOPRINT develops a perfectly coordinated system of machines and processes for numerous industries. Our goal: to make pad printing and laser processes better and more effective.

As a typical "hidden champion" from Baden-Württemberg, TAMPOPRINT is unbeaten when it comes to industrial pad printing and laser marking technologies that are in demand internationally. We have a special level of expertise in process and application technology. This enables us to offer coherent concepts and developments for every requirement of our customers from a single source.

technologies for your future

Pad printing machines

Summary



SEALED INK CUP Series



HERMETIC Series

14



RAPID Series



ENCODER Series



TSM Series



V-DUO Series



CONCENTRA Series



HYBRID 90-2



RTI COMPACT SERVO



SEALED INK CUP 90 Q



MODULE ONE XXS/XS



Service, accessories and consumables







Everything from a single source

PROCESS OWNERSHIP

Consulting Application technology Development Standard machines Special machines Consumables Service Accessories Service Retrofit



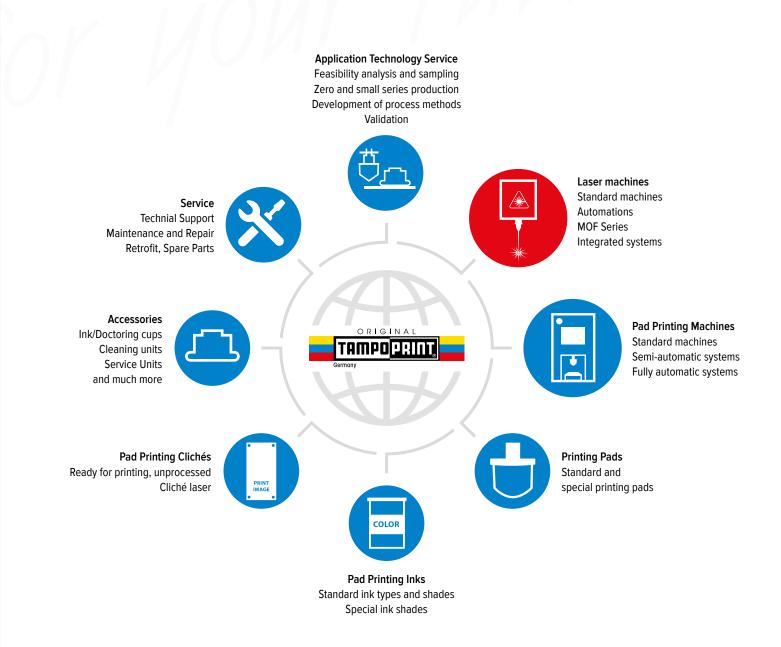


We take care of the entire process

Our Mission

Your Partner for Laser Marking and Pad Printing

As a company that has been supporting customer applications worldwide for decades through in-house developments in the field of pad printing and lasers, the definition of the company mission with "100 % process ownership" is almost logical. We see ourselves as a "one-stop shop" for all customers who need a partner who takes care of their needs right from the start. Our strength here lies in the turn-key solution, from the entry-level machine in the manual processing sector to the fully automated high-tech solution. We accompany our customers throughout their product life cycle and beyond. Driven by our mission, we not only take care of the machine, but also offer our customers all consumables from our own production sites as well as from selected suppliers.





OVERVIEW INDUSTRIES



WHITE GOODS Washing machine panel Printed with TSM, ink type U-HF



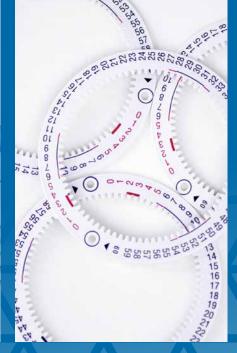
HYGIENE AND COSMETICS Mascara Printed with MODULE ONE M, ink type U-HF



MEDICAL TECHNOLOGY Valve cover for masks Printed with HERMETIC, ink type U-HF



MEDICAL TECHNOLOGY BFS Container Printed with customized machine, ink type P-AF

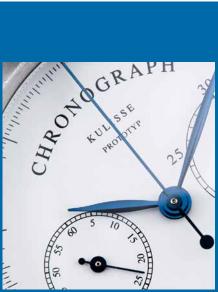


MEDICAL TECHNOLOGY Counter rings Printed with MAP, ink type U-HF





BEVERAGES Crown corks Printed with pad printing automation



EXCLUSIVE PRODUCTS Clock face Printed with customized machine, ink type N



STATIONERY Highlighter Printed with automation, ink type P-AF



BEVERAGES Plastic closure Printed with ROTOPRINT, ink type RDF-HF



BEVERAGES LongCaps Printed with customized machine, ink type RDF-HF



INDUSTRIES



AUTOMOTIVE Engine cover Printed with customized machine, ink type S



TOOLS Screwdriver bits Printed with customized machine, ink type F

LTRA



AUTOMOTIVE Spotlight Printed with TSM, ink type S

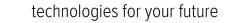


OPTICS AND MEASUREMENT TECHNIQUE Binoculars Printed with HERMETIC, ink type N

SPORT Golf ball Printed with HERMETIC, ink type LOGO

LIRA

ULTRA







ELECTRONICS LED lamp Printed with ENCODER, ink type N



SANITARY Gas and water fittings Printed with ENCODER, ink type TP-CD



HOME INTERIOR Christmas tree ball Printed with MAP, ink type B/GL



BABY PRODUCTS Baby bottles Printed with pad printing automation, ink type U-HF

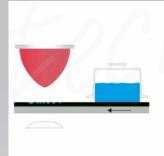


TOYS Play bricks Printed with pad printing automation, ink type CFU



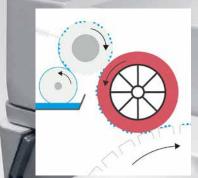
General

Pad Printing Ink Distributing System



Closed ink distributing system "hermetic"

The printing ink is tightly sealed in an ink/doctoring cup, which takes over the doctoring function. This combines the functions of doctor blade, flood blade and ink well in a single step.



Open ink distributing system Rotary pad printing The printing ink is contained in

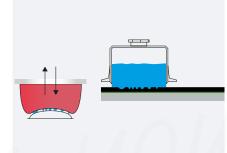
The printing ink is contained in an ink well and is transferred via a cliché cylinder first to the printing roller and then to the material to be printed. The inking and transfer process is continuous.

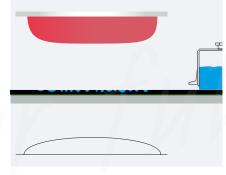


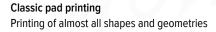
TAMPOPRINT®

Pad Printing Technologies

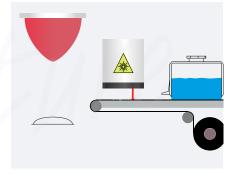
"HERMETIC" SYSTEM





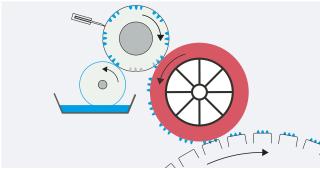


Transverse doctor blade Printing of long and narrow surfaces

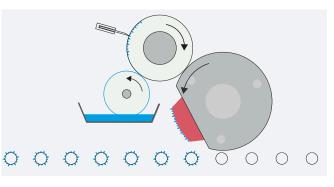


Pad printing with integrated cliché production Cliché production and pad printing combined

ROTARY PAD PRINTING PROCESSES

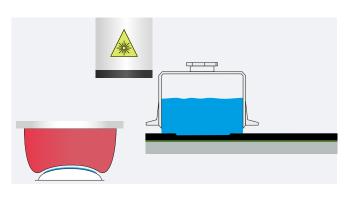






Clocked rotary printing All-around printing of cylindrical surfaces

Laser-Print-Combination Laser and pad printing combined in one marking process



Print-Laser-Combination Combined marking process in one automation possible

More information under solutions on our homepage



PAD PRINTING AND LASER COMBINATION

ENTRY MODEL

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SEALED INK CUP 90

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SEALED INK CUP Series

Automation-capable entry-level model

The pad printing machines of the SEALED INK CUP series are ideally suited for stand-alone use. In addition, their compact, robust and low-maintenance machine concept also allows them to be used in smaller automations. With useful functions such as pad dwell time and programmable ink residue pick-up system, the SEALED INK CUP series is an ideal entry-level model for pad printing.

Machine Highlights

- Robust design
- Good view of the doctoring unit
- Low maintenance
- Reliable electro-pneumatic components
- Programmable ink residue pick-up system
- Simple setting of strokes
- Freely programmable pad dwell time
- HMI up-to-date



SEALED INK CUP 90

Printing force: 750 N Number of cycles/hour: 1400 Ink/doctoring cup size: Ø 90 mm Print image size max.: Ø 85 mm









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technologies for your future



HERMETIC Series

The universal classic in pad printing

The HERMETIC series can be used both as a manual workstation and in automations. In the manual workstation area, the machine impresses with its wide range of settings and high printing force, and in the automation area above all with the cam control, which ensures a smooth and stable printing process. Its absolute highlight is its drive: The up and down movement of the printing pad as well as the forward and backward movement of the pad printing cliché are controlled by a cam disk.

Machine Highlights

- Excellent smooth running
- Stable printing process due to cam plate
- Many program options are already integrated in the machine
- High printing speed
- High printing force
- Low maintenance and reliable thanks to electromechnical drive



HERMETIC 60 Printing force: 500 N Number of cycles/h: 1300–4100 Ink/doctoring cup size: Ø 60 mm Print image size max.: Ø 55 mm

HERMETIC 90

Printing force: 1200 N

Number of cycles/h: 1000-3700

Ink/doctoring cup size: Ø 90 mm

Print image size max.: Ø 85 mm





HERMETIC 130 / HERMETIC 140 Printing force: 1800 N Number of cycles/h: 1000–2700 Ink/doctoring cup size: Ø 130 mm / Ø 140 mm Print image size max.: Ø 125 mm / Ø 135 mm HERMETIC 150 Printing force: 2500 N Number of cycles/h: 750–2100 Ink/doctoring cup size: Ø 150 mm Print image size max.: Ø 140 mm



EFFICIENCY IN HIGHSPEED

RAPID Series

Integrated machine for continuous operation

The pad printing machines of the RAPID series are integrated into fully automatic processes as built-in machines. Their focus here is on product marking and decorating, which is done in high volume and at high process speed. The series impresses with very high repeatability, durable construction and its smooth running, which ensures a stable and continuous printing process in continuous operation.

Machine Highlights

- Excellent smooth running
- Stable printing process due to cam plate
- Very high printing speed
- Compact design
- High printing force



RAPID 60

Printing force: 500 N Number of cycles/hour: 1600–6000 Ink/doctoring cup size: Ø 60 mm Print image size max.: Ø 55 mm





RAPID 90

Printing force: 1500 N Number of cycles/hour: 1400-5100 Ink/doctoring cup size: Ø 90 mm Print image size max.: Ø 85 mm RAPID 130 / RAPID 140 Printing force: 2000 N Number of cycles/hour: 1700–4500 Ink/doctoring cup size: Ø 130 mm / Ø 140 mm Print image size max.: Ø 125 mm / Ø 130 mm



INTEGRATED IN NO TIME

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CLICHE

CLICHE

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ENCODER Series

For the most demanding printing positions

The ENCODER machine series has been specially developed for integration in all types of automated systems. Its special feature is the universal integration possibility. It provides the possibility of different pad stroke lengths, which also allow printing below the machine level. Thanks to its rear mounting, it can be easily attached above a component in the automated system. The ENCODER shows its advantages especially in limited space conditions. In addition, the ENCODER can be mounted in almost any angular position, allowing it to reach even hard-to-reach areas.

Machine Highlights

- Compact design
- Universal integration option thanks to rear mounting
- Sublevel printing possible
- Printing in any angular position up to 360°
- Overhead printing-possible



ENCODER 40

Printing force: 270 N Number of cycles/hour: 400-3500 Ink/doctoring cup size: Ø 42 mm Print image size max.: Ø 37 mm





ENCODER 60 Printing force: 450 N

Number of cycles/hour: 400-2400 Ink/doctoring cup size: Ø 60 mm Print image size max.: Ø 55 mm



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LARGE IMPRESSION

technologies for your future

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TSM Series

For large print images

The machines of the TSM series are optionally equipped with different printing units and different drive controls. They can be used for single-color transverse doctor printing or multicolor printing. In addition to the freely selectable printing units, another feature of the TSM series is the enormous printing force paired with standardized machine design. The robust machine design and high printing force contribute to a stable printing process, especially in transverse doctor blade applications.

Machine Highlights

- Electro-pneumatic drive or servo drive
- High printing force
- Sturdy machine construction
- Configurable as a transverse doctor blade or multicolor kit
- Many extensions/options to choose from



TSM 60/90 universal multicolor kit Solo Control: Servo-mech./electro-pneum. Printing force (servo/electropn.): 3500/3000 N Number of cycles/hour: 200–1300 Ink/doctoring cup size: Ø 5x 60/4 x 90 mm Print image size max.: Ø 55/85 mm



TSM 60/90 universal transverse doctor blade Control: Servo-mech./electro-pneum. Printing force (servo/electropn.): 3500/3000 N Number of cycles/hour (servo): 200–1100 Number of cycles/hour (electropn.): 200–1000 Ink/doctoring cup size: Ø 42/60/90 mm Print image size max.: Ø 37/55/85 mm



TSM 130 universal transverse doctor blade kit Control: Servo-mechanical Printing force: 7500 N Number of cycles/hour: 600–1300 Ink/doctoring cup size: Ø 130/140 mm Print image size max.: Ø 125/130 mm





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UNBEATABLE DUO

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22 technologies for your future

V-DUO Series

Two-color pad pritnting machines

The machines of the V-DUO series are two-color pad printing machines with electro-pneumatic drive. The special feature of the V-DUO machines is the two interconnected pad units that move in a V-shape towards a dispensing point. This movement principle allows ink to be picked up from two independent cliché units and delivered to one delivery point. The advantage here is that the workpiece does not have to be moved and therefore a high register accuracy is given. In addition, each pad can be programmed independently with each function separately.

Machine Highlights

- Delivery of printing ink at one position
- Rear side set-up
- Printing process can be freely programmed
- Pad stroke can be individually adjusted
- High-quality electro-pneumatic drive
- High register accuracy
- Suitable for installation in automations



V-90 DUO

Printing force: 1170 N Number of cycles/hour max.: 1200 Ink/doctoring cup size: Ø 2x 90 mm Print image size max.: Ø 85 mm



V-130 DUO (with option light curtain) / V-140 DUO Printing force: 2900 N Number of cycles/hour max.: 800 Ink/doctoring cup size: Ø 2x 130 mm / Ø 2x 140 mm Print image size max.: Ø 125 mm / Ø 130 mm



VERSATILE AND FLEXIBLE

technologies for your future

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CONCENTRA Series

Versatile multiple printing

The CONCENTRA series is suitable for 4- to 6-color pad printing and offers high flexibility regarding the printing options. Diverse applications can be covered by various machine extensions. The optional addition of an X/Y shuttle is the icing on the cake of the machine concept and, in addition to the multicolor capability, enables different print images to be reproduced at different positions in a single printing process. And on just one workpiece! The option for programming double printing and special sequences is already integrated in the pad printing machines of the CONCENTRA series.

Machine Highlights

- High register accuracy thanks to one printing position
- Very flexible thanks to the X/Y shuttle option
- Flexibility in the choice of printing units
- Printing units are freely programmable
- Versatile printing possibilities



CONCENTRA 90-4 / CONCENTRA 90-6 Printing force max.: 1150 N Number of cycles/hour:

800–1680 / 500–1500 Ink/doctoring cup size: Ø 4x 90 mm / 6x 90 mm Print image size max.: Ø 85 mm



CONCENTRA 130-4 /

Printing force max.: 2900 N

Number of cycles/hour:

480-1050 / 400-1050

Ink/doctoring cup size:

Ø 4x 130 mm / 6x 130 mm

Print image size max.: Ø 120 mm

CONCENTRA 130-6





CONCENTRA 140-4 / CONCENTRA 140-6 Printing force max.: 2900 N Number of cycles/hour: 480–1050 / 400–1050 Ink/doctoring cup size: Ø 4x 140 mm / 6x 140 mm Print image size max.: Ø 130 mm

CONCENTRA 210-4 / CONCENTRA 210-6 Printing force max.: 2900 N

Number of cycles/hour: 380–990 / 250–700 Ink/doctoring cup size: Ø 4x 210 mm / 6x 210 mm Print image size max.: Ø 200 mm





ONE OF A KIND

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HYBRID 90-2

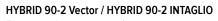
With integrated pad printing cliché production

The HYBRID 90-2 is a 2-color pad printing machine with integrated cliché production. Thanks to the specially developed TAMPOPRINT Laser Suite software, cliché production - from print image creation to cliché production - can take place directly in the machine. Cliché production is performed using a laser on cliché bands immediately before printing. This means that print motif changes can be carried out in seconds without having to change the cliché. The HYBRID 90-2 digitizes the pad printing process down to the smallest detail and is therefore particularly suitable for very small series.

Machine Highlights

- Cliché production in the machine
- Simple operator access
- Tool-free ink/doctoring cup change
- Fast set-up times
- Option for fully automated production of smallest runs





Engraving: Line engraving/raster engraving Printing force: 1170 N Number of cycles/hour: 1200 Ink/doctoring cup size: Ø 2x 90 mm Print image size max.: Ø 85 mm

> ORIGINAL TAMPO<mark>PRINT,</mark>

COMPACT, PRACTICAL, GOOD

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RTI COMPACT SERVO

The compact solution for rotary printing

The RTI COMPACT SERVO standard rotary pad printing machine is a smart, compact solution for your all-round printing needs. Its printing accuracy and small footprint make it an attractive choice for applications where the required number of parts must be realized with manual feeding. Operator protection is provided by a light curtain. The ink residue pick-up system is integrated in the RTI 21-150. In addition, the use of state-of-the-art rotary technology in the RTI 21-150 offers reliable supply security for spare parts. The user-friendly operating structure in the HMI ensures easy handling and clarity. Multiple automatic print cycles can be programmed in, allowing double or multiple prints without operator intervention. Product changeover can be realized quickly thanks to servo technology.

Machine Highlights

- Printing unit with three servo motors
- Freely programmable sequences in the printing process
- Digital positioning both axially and radially
- Continuously variable adjustment to all substrate diameters
- Compact design
- Manual workplace with open design







RTI COMPACT SERVO

Print image size: 40 x 314 mm / 90 x 314 mm Number of cycles/hour: max. 600 Cliché cylinder (Ø 25 mm): 50 x 100 mm / 100 x 100 mm Printing speed: max. 40 m/min



TRANSVERSE DOCTOR BLADE

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SEALED INK CUP 90 Q

The solution for long and narrow print images

The SEALED INK CUP 90 Q is a single-color pad printing machine for longer print images. Designed as an entry-level model for transverse doctor blade pad printing, this machine provides a good basis for a wide range of applications, such as catheter printing, elongated covers or housing parts. Its basis is provided by the reliable and proven machine technology of the SEALED INK CUP series. The good basic equipment of the SEALED INK CUP 90 Q makes it an excellent price-performance tip.

Machine Highlights

- Very good price-performance ratio
- Simple setting of strokes
- Freely programmable pad dwell time
- The latest HMI
- Low space requirements due to the compact design
- High-quality pneumatic components
- User-friendly





Printing force: 1800 N Number of cycles/hour: max. 870 Ink/doctoring cup size: Ø 90 mm Print image size max.: Ø 85 mm Pad printing cliché size: 100 x 800 mm

STANDARD AT HIGH LEVEL

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TAMPOPAINT

HERMETIC 130

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MODULE ONE XXS

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MODULE ONE XXS/XS

Pad printing machines with high operator protection The MODULE ONE XXS and XS are manual workstations whose focus is on operator safety. The manual workstations basically consist of a compact frame and a protective enclosure with a practical storage area. Depending on the design variant, they are equipped differently with standardized assemblies. The pad printing machine is selected individually from the HERMETIC, SEALED INK CUP and V-DUO machine series. Typical applications for the MODULE ONE XXS and MODULE ONE XS are in the area of smaller components.

Machine Highlights

- Compact frame
- Protective housing and light curtain for more safety
- For max. two-color print images
- Wide range of applications
- Short delivery times
- Individually configurable
- Rotary indexing table as loading aid for MODULE ONE XS
- Available pad printing machines: HERMETIC, SEALED INK CUP or V-DUO series



MODULE ONE XXS Number of colors: 1 to 2 Available printing machines: HERMETIC series, V-DUO series, SEALED INK CUP series Equipment: light curtain, angle table



MODULE ONE XS Number of colors: 1 to 2 Available printing machines: HERMETIC series, V-DUO series, SEALED INK CUP series Equipment: light curtain, angle table, X/Y machine cross table, rotary index table (partition 2 or 4)





The right machine

Your Selection Guide

Standard pad printing machines series			SEALED INK CUP Series	SEALED INK CUP 90 Q	HERMETIC Series	RAPID Series	ENCODER Series	V-DUO Series	CONCENTRA Series	RTI COMPACT SERVO	HYBRID 90-2	TSM Series	MODULE ONE XXS/XS	
	Integration cap	ability		++	_	+++	+++	+++	++	+	_	++	+	_
	Number of colo	ors max.		1	1	1	1	1	2	6	_	2	1 to 5	1 to 2
	Ink residue picl	k-up system (Rl	FA)	0	0	0	0	0	~	~	_	~	0	_
	Center print im edge (without F		interfering	120	154	95 - 240	38,5 - 75	-	124 - 250	200- 315	_	150	146 - 190	I
ent	Number of cycl	es/hour		max. 1500	max. 870	max. 4100	max. 6000	max. 3500	max. 1200	max. 1680	-	max. 1200	max. 1300	I
Equipment	Printing force N	1		450 - 1800	1800	500 - 2500	500 - 2000	270 - 450	1170 - 2900	2900	-	1170	3000 - 7000	I
Eq	Integrated clich	né laser		-	_	-	_	_	_	-	_	~	-	I
	Ink/doctoring cup Ø mm	Print image size max. Ø mm	Square/ Rectangle max. mm										1	
	42	37	26 x 26	-	_	-	-	~	_	-	_	_	-	Ι
	60	55	38,5 x 38,5	-	_	~	1	~	_	-	_	_	М	Ι
	90	85	60 x 60	~	_	~	~	-	~	-	_	_	М	I
	130	120	85 x 85	~	_	~	~	-	~	~	_	-	-	I
	140	130	92 x 92	~	_	~	~	_	~	~	_	_	-	_
	150	140	98,5 x 98,5	-	_	~	_	_	_	_	_	_	-	_
	60	ade	50 x 180/340/450	-	_	-	_	_	_	_	_	_	~	_
	90	ctor ble	80 x 160/320/520	-	_	-	_	_	_	_	_	-	1	-
	90	e doc	80 x 500	-	~	-	-	-	-	-	_	-	-	-
ige size	130	Iransverse doctor blade	110 x 340/540/650	_	_	_	_	_	_	_	_	_	~	_
Print image	140	Tra	120 x 340/540/650	-	_	-	_	_	_	-	_	-	~	-
Prin	Rotary		90 x 310	-	_	-	_	-	_	-	~	-	-	_
	Electro-pneuma	atic	1	~	~	_	_	_	~	~	_	~	~	I
	Servo			_	_	_	_	_	_	_	✓	_	_	_
e	D Servo-mechanical			_	_	_	_	_	_	_	_	_	-	_
Drive	Electro-mechanical			-	_	~	1	_	_	✓	_	_	0	I
This table is an initial assessment. We will be happy to find your solution together with you.														

O = Optionally possible

I = Individually configurable / Depending on machine used

√ = Yes

M = Multicolor

Technical data under download on our homepage

OUR SERVICE 100 % TAMPOPRINT®

TRINROUGHINT

From the first consultation to the determination of process requirements and finally to maintenance.

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TAMPO

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Service

Everything from a single source

We support you

As a full-service supplier, we are also there for you after the purchase! We will quickly and reliably find the right solution for your technical concerns. Whether troubleshooting, maintenance or repair, our service technicians are on site for you worldwide or with fast problem solving, thanks to remote maintenance in real time.

Advantages

- Support on site or remote maintenance in real time
- Reliable supply of spare parts
- Individual service and maintenance concepts
- Production of ready-to-print pad printing clichés
- Comprehensive training offers
- Process optimization

Artwork production/DTP Artwork production by professionals





Technical spare parts and retrofit Test prints, sampling and production outsourcing

Year-round training offers Basic and industry-specific training



Working around the world We are there for you - by remote maintenance or on site



SERVICE APPLICATION TECHNOLOGY Well advised down to the last detail All customer-related topics concerning pad printing and laser technology come together in our application technology department.

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Sealed Ink Cup 90 E

Service

Application Technology

Well advised down to the last detail

Our application engineering department performs a detailed analysis of the task at hand, determines all process requirements and develops the best possible approach for your marking process. We support you in the introduction phase of your series production, verify your process flow and integrate it into your existing production line.

Our service

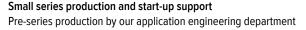
- Support with machine setup
- Process optimization of existing production lines
- Support from pad printing and laser specialists
- Development of marking processes
- Determination of printing/laser machine parameters
- Verification of process sequences
- Integration into automations or production lines
- Validation in accordance with the GMP guidelines
- Validation in accordance with the IATF 16949 guidelines

Feasibility analysis and sampling Determination of the optimal interaction of all components





Contract manufacturing Test prints, sampling and production outsourcing





Validation Comprehensive support for the required validation processes



PAD PRINTING AUTOMATION MAP High-performance with standard components in modular design

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TECHNOLOGIES FOR YOUR FUTURE



Automations

Modular and Rotary

Automated industrial marking systems

With the invention of the silicone printing pad, TAMPOPRINT founded the industrial pad printing. Our claim is to further develop the pad printing technology on a high quality level with our innovations and to constantly increase the performance and efficiency.

With our pad printing machines, we ensure that TAMPOPRINT customers receive the best technology on the market and the ideal technology for their respective application, thus securing competitive advantages. That is why, among other things, we have further increased the degree of automation of our pad printing machines. We offer our customers in this area complex, fully automated systems for large quantities and high cycle rates.

These include the rotary automation systems ROTOPRINT, CLOSURE PRINT COMPACT, or the modular system MAP (Modular Automation Platform). In applications where production flexibility and user-friendliness are particularly important, our semi-automatic systems of the MODULE ONE series score points

MAP Modular Automation Platform



MODULE ONE Series Semi-automatic lines in modular design





ROTOPRINT Rotary automation



CLOSURE PRINT COMPACT Rotary automation

Technical data under download on our homepage



References

Automations



AUTOMOTIVE MODULE ONE S Pad printing automation with standard components



SPORT Transverse doctor blade automation Customized pad priting solution with rotary index table



TOYS RAPID automation Customized linear pad printing solution



TOYS, MEDICAL TECHNOLOGY AND SANITARY MAP Pad printing automation with standard components







BEVERAGES ROTOPRINT Rotary pad printing automation

ELECTRONICS Automation Customized pad printing with flat/circular printing



BEVERAGES CONTINUOUS CIRCULAR Automation for 360° all-around printing



MEDICAL TECHNOLOGY MODULE ONE M Pad printing automation with standard components



PRECISION EVEN UNDER PRESSURE

TAMPOPRINT® PRINTING PADS Varied assortment According to Original TAMPOPRINT® recipe



44 technologies for your future

Original TAMPOPRINT® Printing Pads

According to Original TAMPOPRINT® recipy

In our immense standard printing pad portfolio, there is a suitable solution for almost every application. If no suitable pad shape is available, we will create a printing pad perfectly matched to your printed material.

Advantages

- Wide range of standard and rotary printing pads
- Production of customized special printing pads
- Advice on the choice of printing pads
- Can be used universally even with third-party systems
- Do-it-yourself kit for your own printing pad production
- In-house production and constant quality control
- Silicone material perfectly matched to the TAMPOPRINT[®] overall process

TAMPOPRINT[®] Printing Pads - Data Base: www.tampoprint.com/en-en/pad-database/

Standard Printing Pads Ready for use in many applications



Printing Pads

Pad roller RP roller for the rotary pad printing available in different Shore hardnesses



COLORFUL, DURABLE, BRILLIANT

PAD PRINTING INK Standard or special inks We will mix the suitable ink shade for you.

INK/DOCTORING CUP 90 NE With unique ventilation system Significantly reduced viscosity increase, higher mechanical dimensional stability, practical handling.

6/0060

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Our consumables – For optimal printing results

Pad Printing Ink

Pad printing inks for every application

TAMPOPRINT develops innovative pad printing inks in cooperation with well-known manufacturers. Our ink types are perfectly matched to pad printing and meet our customers' requirements for halogen-free and cyclohexanone-free inks.

Our pad printing ink portfolio includes 12 basic inks for mixing special ink shades as well as 23 premixed standard inks. European ink shades for screened 4-color printing (CMYK), gold and silver are also included. In addition, we offer special ready-to-print inks with optimally defined solvents for rotary pad printing.

Advantages

- Large selection of ink series
- Ink series designed specifically for rotary pad printing
- Production of special ink shades
- Implementation of sampling
- Ink type recommendations
- Inks comply with European requirements
- Coordinated auxiliaries available
- Mixing of individual ink shades
- Depending on color series: halogen-free, cyclohexanone-free, phthalate-free, etc.



Pad printing inks Standard ink types/shades and auxiliaries (For example thinner, hardener, retarder and many more)



PAD PRINTING CLICHÉS From unprocessed to ready-to-print clichés Wide range of cliché types and sizes.

TAMPOPRINT

FOR THOSE WITH HIGH DEMANDS

POPRINT

rampole:

Original TAMPOPRINT® Pad Printing Clichés

Self-developed cliché material

Thanks to our many years of experience and process expertise, we know how essential it is for all process components to be in perfect harmony in order to achieve ideal print results. That's why we produce our cliché material ourselves. Through constant optimization and further development of the cliché material, we are able to offer a cliché material that is optimally matched to the pad printing process for every application.

Advantages

- Large selection of pad printing clichés
- Cliché cylinders for rotary pad printing
- "Do-it-yourself" pad printing clichés
- Pad printing clichés for third-party products
- In-house prepress department
- Ready-to-print pad printing clichés
- In-house production and continuous further development of the cliché material

Cliché plates Ceramic cliché plate, steel cliché plate



Cliché production

Thin cliché plates (for laser engraving and UV exposure) INTAGLIO laser cliché, Magnet-Aloxid, Magnet-microflex, Aloxid, special, Magnet-screen, record-special and Magnet-Aqua clichés

Cliché cylinders and cliché bands Ceramic and CP cliché cylinders, microflex cliché band HYBRID and INTAGLIO laser cliché band HYBRID



Selection guide

Printing Pad

Your printing pad selection

The material properties of silicone rubber are ideally suited to the manufacture of printing pads. The special release effect, namely the absorption of the pad printing ink from the pad printing cliché and its subsequent release onto the printed part, is due to the contrasting material properties of silicone rubber. Particular mention should be made of the release effect of the surface against inorganic and organic materials, the permanent elasticity, and also the high impression accuracy.

Silicone material*	04 light blue silicone	03 red-brown silicone	02 white silicone	01 yellow silicone
Antistatic	optimal, 100 times less electrostatic charge than with silicone material 03	very good	good	good
Mech. resilience	very good	very good	good	good
Main application	universal, suitable also for UV pad printing inks	universal	opt. industry, easy to clean, finest print images	preferred in special applications
Swelling behavior	good	good	very good	good
Shelf life (more than this = decreasing hardness)	over 1 year	over 1 year	max. 3 months	max. 3 months
Hardness/Shore-A	1, 3, 6, 12, 18	1, 3, 6, 12, 18	6, 12, 18	1, 3, 6, 12

The hardness of the pad is specified as Shore-A according to DIN 53505. Usually, pads between 0 and 18 Shore-A are offered. In case of hardnesses above 18 Shore-A, these are considered special pads or are used in rotary pad printing as printing pad rollers (55 Shore-A is common here). All our pads are available with wood or aluminum base plates.

Shore-A*	Hardness	Usage
1 Shore-A	soft	sensitive, easily breakable surfaces
3 Shore-A	soft	strongly curved surfaces
6 Shore-A (standard)	medium	universal application areas
12 Shore-A and 18 Shore-A	hard	textured surfaces, flat printed parts, extremely high printing speeds

TAMPOPRINT® Printing Pads Data Base: www.tampoprint.com/en-en/pad-database/

*Please note that the information on this page is a guideline. A concrete recommendation depends on the application. An incoming inspection (test print) must always be carried out. We will be pleased to advise you.



Selection guide

Pad Printing Ink and Cliché

Your pad printing ink selection

Which ink type is the right one is based on various influencing factors. The opacity of the ink types and ink shades depends on the surface to be printed as well as the engraving depth, cliché screening and the number of prints (single or

Industry	Ink type
Medical technology	U-HF
Beverages	RDF-HF, P-AF
Automotive interior / exterior	N, B, S
Sports	LOGO, ACP, GU-N
Hygiene and cosmetics	U-HF, CFU
Sanitary	B/GL, S
Stationery	CFU, P-AF
Baby products	U-HF

double/multiple printing). The ink consistency must also be adjusted to the correct viscosity with the appropriate thinner (solvent), depending on the print image. You will find the auxiliaries perfectly matched to our pad printing inks in our portfolio.

Industry	Ink type
Toys	P-AF, CFU, U-HF
Tools	B, B/GL, TP-CD, G-UN
Optics and measuring technique	S, B/GL
Electronics	CFU, P-AF, silicone-free version possible
White goods	CFU, U-HF
Exclusive products	Ν
Home Interior	CFU, P-AF

Technical data sheets for pad printing ink under Download on our homepage

Your pad printing cliché selection

In our cliché studio, we have been developing new materials and imaging processes for decades. With our many years of

experience, we can produce the optimal pad printing cliché for any application.

Pad printing cliché type	Max. number of printed parts	Production	Do-It-Yourself	Motif
Ceramic cliché	3 Mio.	Laser	yes	Line
Steel cliché	1 Mio.	Etching	-	Line, screen
Steel cliché SST	1 Mio.	Etching	-	Line, screen
Aloxid-special cliché	80.000	Laser	yes	Line
Aloxid-special cliché -R ¹⁾	80.000	Laser	yes	Line
Magnet-Aloxid cliché	80.000	Laser	yes	Line
Magnet-Aloxid cliché -R ¹⁾	80.000	Laser	yes	Line
record-special cliché	80.000	Etching	yes	Line, screen
Magnet-Aqua cliché	20.000	Water	yes	Line, screen
Magnet-screen cliché	20.000	Alcohol	yes	Line, screen
INTAGLIO laser cliché	30.000	Laser	yes	Screen
Magnet-Eco cliché	6.000	Water	yes	Line, screen
microflex-cliché band HYBRID	10.000	Laser	yes	Line
Cliché band CTP	10.000	Laser	yes	Line
CP cliché cylinder	35 Mio. ²⁾	Laser	-	Line, screen
Ceramic cylinder	350 Mio. ²⁾	Laser	-	Line, screen

Thin cliché with reduced coating thickness

2) with 2 lanes and 8 motifs/lane

*Please note that the specifications are guidelines. A concrete recommendation depends on the application and the material.

An incoming inspection (test print) must always be carried out. We will be pleased to advise you.
**The stated production output corresponds to the values determined by TAMPOPRINT, taking into account a wide range of influencing factors.



DURABLE AND SHARP

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INK/DOCTORING CUPS Our variety of ink/doctoring cup designs offers a wide choice for any application.

52 technologies for your future



Original TAMPOPRINT® Ink/Doctoring Cups

Ink/doctoring cups for every application

We also rely on our process expertise when it comes to consumables! We have worked for decades on optimizing the closed system and can now offer the ink/doctoring cup best suited to the application. Our range includes a wide variety of designs. Whether with replaceable doctor rings, sophisticated ventilation concepts or for multicolor print images.

Advantages

- Available in various material designs
- Available for all commonly used system sizes
- Ink/doctoring cups for multicolor print images
- Replacement and mechanical relapping of doctoring rings
- Perfectly matched to the overall TAMPOPRINT[®] process

Ink/doctoring cups Ø 60 NE and Ø 90 NE With ventilation concept for more stability of the viscosity



Ink/doctoring cups, 1 color Versions in plastic, aluminum, stainless steel



COMPLETE SUPPORT

CHE LASER PLUS

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TAMPOPRINT

ACCESSORIES

VPR RDF-HF

Our accessories are perfectly designed for the interaction of all TAMPOPRINT components in the pad printing process.

TAMPOPRINT

UN 1210

Туре АСР

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Our consumables – For optimal printing results

Original TAMPOPRINT® Accessories

Pad printing accessories for optimal printing results In addition to machines and consumables, we also supply the appropriate process accessories. Thanks to our many years of experience and process expertise, we know how essential it is for all process components to work in perfect harmony to achieve ideal print results. These useful auxiliaries accompany the process, facilitate your work and you achieve high-quality print results.

Advantages

- Fast, effective and clean work
- Large and versatile selection for beginners and professionals
- Perfectly matched to the pad printing process
- For every pad printing system
- For optimal printing results

Accessories and much more can be found in our TAMPOPRINT[®] online catalog. Take a look!

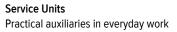
Auxiliaries Practical auxiliaries for the pad printing process

<image>

Cross support

For easier positioning of parts to be printed

Tabletop laser unit & CLICHE LASER Xi For the independent production of pad printing clichés





Thank you

For your Interest and your Trust

Your Partner for Laser Marking and Pad Printing We offer you everything from a single source: from consulting, machines and consumables down to service.

New product designs, product markings and plagiarism protection are possible with pad printing and laser machines. Use our experience for optimized or new production processes. Our core competencies are industrial pad printing and laser marking. Of course, both processes can be combined and integrated into automations using software developed in-house.

Our reliable, uncomplicated and efficient standard pad printing machines for classic pad printing are suitable for numerous tasks in industry. The standardization of our machines has many advantages for our customers: The industrial marking systems deliver optimal printing results, high process stability and offer ease of operation, maintenance friendliness and cost savings.

We offer our customers complex, semi- and fully automated industrial marking systems for large quantities and high cycle rates. These include the modular system MAP (Modular Automation Platform) or the rotary automations ROTOPRINT as well as CLOSURE PRINT COMPACT. Rotary pad printing offers speed combined with frequent motif changes. For applications where production flexibility and user-friendliness are particularly important, our semi-automatic systems of the MODULE-ONE series score highly.

Our industrial marking systems, which combine pad printing and laser technology, enable special solutions in pad printing that are perfectly matched to the requirement. The combined systems offer versatile application possibilities when printing on the smallest areas, combined with individual laser engraving.

Similar decoration processes such as offset printing or screen printing, embossing or etching reach their physical and economic limits in comparison. It is possible for pad printing and also our laser systems to print or mark concave as well as convex and uneven surfaces. Take your time to get to know pad printing and develop your own ideas and concepts.

In recent decades, pad printing has undergone a transformation from the so-called "open" ink/doctoring system to the closed, i.e. "hermetic", ink/doctoring system (invented by TAMPOPRINT and first introduced to the global market in 1983 with the "ENCODER" pad printing machine).

For some years now, there has been another technical revolution, the integrated printing cliché production within the printing process, integrated into the standard pad printing machine.

Today, the "hermetic" system and its use dominate the market. Advantages for the user include:

- No health hazards such as solvent evaporation
- Constant ink consistency
- Cleanliness and time savings during ink changes
- Stable printing process
- No drying of the printing ink during downtimes
- Minimized waste during set-up
- Fast changeover of the pad printing machines

Send us your request!

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