ORIGINAL
TAMPOPRINT
Germany

HYBRID
Pad Printing Machine

PAD PRINTING MACHINES   ACCESSORIES   SERVICE

Standard pad printing machine for minimum-size series production
Ideal for variable, frequently changed data amounts
2-color printing, cliché production integrated

Standard Pad Printing Machines

HYBRID Series

The future in the pad printing process lies in the integrated cliché production using laser engraving. The pad printing machine **HYBRID 90-2** combines the concept of the "hermetic" pad printing with the flexibility of the digital data for cliché production. Thanks to the software TAMPOPRINT Laser Suite which was specifically developed for this purpose, the cliché production takes place in the **HYBRID 90-2**. Automatic changeover of print motifs takes place in a matter of seconds. A multi-color print motif will be directly produced with precise register setting.

The **HYBRID 90-2** is based on the well-tried V-DUO principle with an ink/doctoring cup size Ø 90 mm.

Our in-house developed microflex cliché band plays an important role making this concept possible. It possesses a high engraving quality and mechanical stability.

The control of the **HYBRID 90-2** iTAMPOPRINT is already prepared for the use of the software iTAMPOPRINT. This offers the possibility to connect the pad printing machine for example to an ERP system in order to allow a complete data management. In addition, it is possible to process external information of camera systems, testing devices etc.

Comparison

HYBRID – Cliché production by means of laser engraving		Production of Magnet-screen clichés	
1	Prepress	1	Prepress
2	Setup laser software	2	Creation of film
3	Cliché engraving	3	Mounting of film
4	Printing	4	Exposure
–		5	Washing out
–		6	Curing
–		7	Mounting of cliché
–		8	Adjusting of register
–		9	Printing

HYBRID-90-2
Integrated laser unit for production of printing clichés

HYBRID-90-2
Slewable printing unit

Focus on flexibility

With pad printing
it will be safer

Technology

HYBRID Series

HYBRID		HYBRID 90-2	HYBRID 90-2 INTAGLIO	HYBRID 90-2 iTAMPOPRINT
Floor standing/Integrated model	Item No.	01 00 95	01 00 97	01 00 96
Ink residue pick-up system		integrated	integrated	integrated
Single cycle		yes	yes	yes
Multiple printing		yes	yes	yes
Continuous run		yes	yes	yes
Piece counter		yes	yes	yes
Variable speed control		yes	yes	yes
Cycles/hour	max.	1200	1200	1200
Ink/doctoring cup size	Ø mm	2 x 90	2 x 90	2 x 90
Variable doctoring contact pressure		yes	yes	yes
Cliché band microflex 2x	mm	L 28 000 x B 120	L 28 000 x B 120	L 28 000 x B 120
Print image size max.	Ø mm	85	85	85
Number of colors		2	2	2
Variable pad stroke onto workpiece	mm	10–160	10–160	10–160
Variable pad stroke onto cliché	mm	10–70	10–70	10–70
Pad installation height max.	mm	95	95	95
Force of pressure	N	1170	1170	1170
Drive		electropneumatic	electropneumatic	electropneumatic
Connected load	kW	1,5	1,5	1,5
Power supply	V/phase	230V/1/N/PE	230V/1/N/PE	230V/1/N/PE
Interface		D-SUB 37-pole	D-SUB 37-pole	D-SUB 37-pole and Ethernet connection
Power frequency	Hz	50–60	50–60	50–60
Control		PLC	PLC	network-compatible PLC for OPC + TAMPOPRINT
Control voltage	V/DC	24	24	24
Prefuse	A	16	16	16
Pneumatic supply fine filter 5 µm	bar	6	6	6
Air consumption	NL	8	8	8
Width	mm	941/1700[1]	941/1700[1]	941/1700[1]
Depth	mm	1217/1760[2]	1217/1760[2]	1217/1760[2]
Height	mm	2079/1239	2079/1239	2079/1239
Weight	approx. kg	530/420	530/420	530/420

1) Width with doors open and printing unit swung out   2) Depth with printing unit swung out at 180°

Cliché engraving with integrated laser source SK 62	
Laser source	Pulsed Yb:YAG fiber laser,1064 nm, air-cooled
Frequency	20–80 kHz
Output power	< 20 W
Ambient temperature	+5°C up to +35°C, relative air humidity < 85%
Deflection unit	Galvo head, standard with aperture Ø 7 mm (Ø 14 mm for HYBRID 90-2 INTAGLIO)
Optics	Focal length f-160 mm
Marking area approx.	120 mm x 120 mm
Software	TAMPOPRINT Laser Suite (Language versions: German, English, other languages upon request) consisting of TAMPOPRINT Designer: Creation of simple graphic objects, 1D and 2D barcode modules, text functions, variable text functions (e. g. serial number, date), import filter (*.pdf, *.ai, *.eps, *.dxf, pixel graphic) TAMPOPRINT Control: Control and monitoring of the laser function; optional external control via TCP/IP protocol TAMPOPRINT Protocol Viewer: Logging of all system-relevant events
Supply unit	Box-PC, Windows 10, 64 Bit, touch-screen display and keyboard

Standard Pad Printing Machines

HYBRID Series

HYBRID 90-2
with option light curtain

HYBRID 90-2
in an automation

Scope of supplies

Toolkit
Paper cups
Stirring spatula
Spray bottle
Ink/doctoring cups
Ink cup holder
Thrust collars
Pad couplings
Printing pads
Pad cleaning
Software iTAMPOPRINT light
HYBRID 90-2 iTAMPOPRINT:
SIEMENS OPC Server
Preparation for external data connection

Accessories & Options

Rotary index table
Light curtain
x-y cross support
2-color ink/doctoring cups
Workpiece sliding unit
Bench model
Software iTAMPOPRINT

Technical Data
tampo.link/hybrid