

# **Catalogue ST Drucksysteme**













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With a Swiss inventor's enthusiasm for perfection, ST Drucksysteme develops innovative automatization systems as required by the customer's requests and desires that are a match to any worldwide scale. precision from the first machining step to the last.

ST Drucksysteme has been designing, building and selling a variety of assembly machines and In-line transfer machines since years. Always focusing on the customer's goals: Highest economical standards through optimal assembly cycles.

For all of the customers throughout the world, the co-workers of company on a very high technical level and provide an excellent service from ST Drucksysteme in the industries of packaging, cosmetics, automobiles, electronics and medical articles

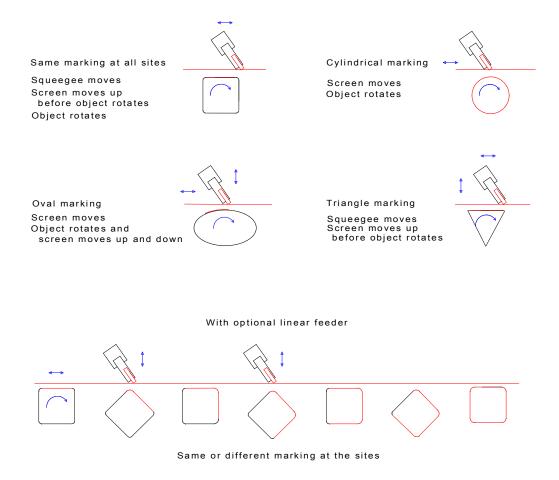


# **Printed samples**



### **CNC Screen Printing Machine SM-500**

With our CNC screen printing machine we offer a new possibility from flat, cylindrical, oval, conical one as well as to print angular parts one and multicolored. By the free-programmable expiries and the single tool bearing, this machine is adaptable in the situation and to print exactly all conceivable forms in the silk screen.



## **CNC Screen Printing Machine SM-500**



### CNC Screen printing machine SM-500 for cylindrical and flat printing

The screen printing machine SM-500 is CNC controlled. The printing on cylindrical, flat, oval and angular parts is made very simple.. By the free-programmable expiries and the single tool bearing, this machine is adaptable in the situation and to print exactly all conceivable forms in the silk screen.

	Cylindrical print	Flat print	
Print area in mm:	200x250	400x250	
Frame size:	500x350 mm	500x350	
Working table:	Height adjustable by motor		
Electric: 110/230V / 50/60Hz			



### **Screen Printing Machine Series SP-400**

Powerful screen printing machine for hard and flexible materials. The machine can be used for flat printing as well for cylindrical printing.

The horizontal and vertical drives happen be AC-servo motors. The squeeze pressure is done by mechanical spring loaded cam. Speeds, horizontal stroke and all function can be selected at the touch screen display.

By using an array of optional "plug and play" devices such as our servo actuated slides, motor driven turn tables, carousel or over/under indexers, the user can easily transform a SP printer to meet different printing situations and requirements

With a few grips the machine can be converted from flat to cylindrical printing. or opposite .



#### Product advantage of the ST screen printing machines

ST printing machines are compact, flexible printing machines for a modern production. The advantages are:

**Drive:** Machine movement is provided by two frequency controlled

electric motors and guarantees smooth movement.

**No pneumatic:** Machines with an electric drive dies not suffer from air pressure

fluctuations, the result being you get better and more constant

printing

quality. Low running costs, which increase your company's profit.

**Guide** The up - down stroke and squeeze stroke are guided by precision

rolls and steel guides. which allows a wear and tear friendly

production with a minimal amount of maintenance.

**Simple and flexible** Operation control by visual touch screen panel where can be

selected and stored all set parameters.

**Telephone – Modem:** Long distance diagnostic by phone modem (Option)

Low running costs:

**No additional**No pneumatic and no installation for a compressor or compressed

**installation costs:** air pressure.

**Electrical:** Connection to 110 V or 230 Volt

**Electrical power:** Electrical power consumption

SP 400 approx. 200 Watts SP 2000 approx. 500 Watts

**Maintenance:** Maintenance low complete system.



### **Screen Printing machine SP-400**

The SP-400 is an electrical driven screen printing machine with a spring loaded cam for the squeeze system .



There are six models in our line of ST Drucksysteme series SP screen printing machines. Although each model is separated by size and multifunctional capabilities, they are united by common design criterion that brings advanced and practical advantages to the end user.

Our modular concept incorporates built in mechanical, electrical and control interface features, which enables every model SP printer to be automation ready (yours or ours).

.

By using an array of optional "plug and play" devices such as our servo actuated slides, motor driven turn tables, carousel or over/under indexers, the user can easily transform a **SP** printer to meet different printing situations and requirements

### **Screen Printing machine SP-400**



#### SP- 400 Flat printing

The SP-400 is a screen printing machine with electrical drive for vertical and horizontals stroke. The squeeze system is done by an mechanical spring loaded.

Drive happens by electrical motors.

Print area in mm:	450x250		
Frame size:	max. 700x350 mm		
Electrical connection:	110/230V / 50/60Hz		



#### SP- 400 with vacuum table

The SP-400 is a screen printing machine with electrical drive for vertical and horizontals stroke. The squeeze system is done by an mechanical spring loaded.

Print area in mm:	450x250		
Frame size:	max. 700x350 mm		
Electrical connection:	110/230V / 50/60Hz		
Vacuum:	By Electro motor		



### **Screen Printing machine SP-400PS**

The SP-400 is an electrical driven screen printing machine with pneumatical squeeze system .



There are six models in our line of ST Drucksysteme series SP screen printing machines. Although each model is separated by size and multifunctional capabilities, they are united by common design criterion that brings advanced and practical advantages to the end user.

Our modular concept incorporates built in mechanical, electrical and control interface features, which enables every model SP printer to be automation ready (yours or ours).

.

By using an array of optional "plug and play" devices such as our servo actuated slides, motor driven turn tables, carousel or over/under indexers, the user can easily transform a SP printer to meet different printing situations and requirements.

## **Screen Printing machine SP-400PS**



### SP- 400 Flat printing

The SP-400 is a screen printing machine with electrical drive for vertical and horizontals stroke. The squeeze system is done by pneumatic cylinders.

Drive happens by electrical motors.

Print area in mm:	500x250		
Frame size:	max. 700x350 mm		
Electrical connection:	110/230V / 50/60Hz		
Air pressure:	3 bar		



### SP- 400 cylindrical printing

The SP-400 is a screen printing machine with electrical drive for vertical and horizontals stroke. The squeeze system is done by pneumatic cylinders.

Brive happens by circumcarmotors.			
Print area in mm:	250x250		
Frame size:	Max. 700x350 mm		
Registration Multi color:	Mechanically or by Optical sensor		
Electrical conection:	110/230V / 50/60Hz		
Air pressure:	3 bar		

# Screen Printing Machine SP-400PS with machine stand



#### SP-400 Flat printing

The SP-400 is a screen printing machine with electrical drive for vertical and horizontals stroke. The squeeze system is done by pneumatic cylinders.

Drive happens by electrical motors.

Print area in mm:	500x250		
Frame size:	max. 700x350 mm		
Electrical connection:	110/230V / 50/60Hz		
Air pressure:	3 bar		



### SP- 400 cylindrical printing

The SP-400 is a screen printing machine with electrical drive for vertical and horizontals stroke. The squeeze system is done by pneumatic cylinders.

Print area in mm:	250x250		
Frame size:	Max. 700x350 mm		
Registration Multi color:	Mechanically or by Optical sensor		
Electrical conection:	110/230V / 50/60Hz		
Air pressure:	3 bar		

# **Screen Printing Machine SP-2000PS**



#### SP- 2000 Flat printing with stand

The SP-400 is a screen printing machine with electrical drive for vertical and horizontals stroke. The squeeze system is done by pneumatic cylinders.

Drive happens by electrical motors.

Print area in mm:	Up to3600x450		
Frame size:	bis 4000x600		
Electrical connection:	110/230V / 50/60Hz		
Air pressure:	5-6 bar		



### SP- 2000 cylindrical printing with stand

The SP-2000 is a screen printing machine with electrical drive for vertical and horizontals stroke. The squeeze system is done by pneumatic cylinders.

Print area in mm:	up to 2000x500		
Frame size in mm:	up to 2400x600		
Registration Multi color:	Mechanically or by Optical sensor		
Electrical connection:	110/230V / 50/60Hz		
Air pressure:	5-6 bar		

# **Pad Printing Machine SL-Series**



Equipment dependability, economic efficiency and a wide variety of applications have been incorporated in the SL type series in order to comply with the requirements of modern production technologies. ST machines feature high longevity and robustness and set a new standard for printing machines.

Operator convenience and ease of maintenance top off the advantages of this machine.

The compact design allows for a smooth integration in any automation. The machines are equipped to handle the use of peripheral equipment, such as automatic pad cleaning, two-color print, or an indexing table. Controlled motors power the movement of the machine.

Electric motors drive the pad as well as the cliché. The advantages are as follows:

- Machine operation via touch screen.
- · Machine diagnostic of every single movement.
- · Allows remote diagnostic via telephone/modem.
- Operation lift off and set down speed of the pad and speed of the ink dispenser can be selected individually.
- A printing machine powered by an electric motor, not dependent on compressed air, resulting in a higher print quality.
- High pressure during printing makes it possible to use larger, harder, and steeper pads and therefore increases print quality.



# Product advantage of the ST Printing Machines Models SL-100-ES, SL-200, SL-300, SL-600

ST printing machines are compact, flexible printing machines for a modern production. The advantages are:

#### Drive:

Machine movement is provided by two frequency controlled electric motors and guarantees a quit vibration free movement.

#### No pneumatic:

Machines with an electric drive dies not suffer from air pressure fluctuations, the result being you get better and more constant printing quality. Low running costs, which increase your company's profit.

#### Ball screw spindle:

The pad stoke is driven by a ball screw spindle, was guarantee an excellent transfer of the printing force to the printing object. The increased printing force by using a spindle allows you to optimise your printing operations by allowing you to use pads that are larger, harder and with steeper sides.

#### **High printing force:**

Increased printing force allows you to optimise your printing operations by allowing you to use pads that are larger, harder and with steeper sides.

#### **Program stores:**

Individual print job programs and parameters are stored in memory and can be recalled at the press of a button. This gives ease of machines set up and a reduction in both set up and down times giving increases in both production and profit.

#### Simple and flexible Machine operation:

Operation control by visual touch screen panel where can be selected and stored all set parameters.

#### Self diagnostic:

The machine is equipped by a self – diagnostic check.



#### Password:

The parameters once set, can be locked by an access code to prevent alterations by unauthorized personal.

### Low running costs:

#### No additional installation costs:

No pneumatic and no installation for a compressor or compressed air pressure.

#### **Electrical:**

Connection to 110 V or 230 Volt

#### **Electrical power:**

Electrical power consumption	SL- 100	approx. 200 Watts
	SL- 200	approx. 300 Watts
	SL-300	approx. 200 Watt
	SL- 600	approx. 500 Watts

Maintenance: Maintenance low complete system.

### **Tampondruckmaschine SL-100**

The compact SL 100ES, equipped with a sealing ink system, it is a pad printing machine in a high quality. She was developed for a large application of 1 and 2 color prints. The construction of the machine allowed the integration into automatic systems or the use as a stand alone unit.

The machine is prepared for the use of periphery units: likes rotary indexing tables, automatic pad cleaning and 2-color shuttle





Drive:	Electrical			
Speed:	1200 Cycle / hour.			
Print force:	1000 N			
Pad stroke:	Max. 150 mm			
Plate size:	1-color 2-color		1-color	
	200x100		200x170	
Ink pot:	45 72 90			
Pad cleaning:	optional			
Electrical connection:	110/230V /50Hz / 60Hz			
Part movement: (multi color)	Linear motor or mechanical drive			



# **Pad Printing Machine SL-200**

The SL-200 is an electrical driven pad printing machine with a sealed inking system for a maximal plate size of 400x400 mm.





Drive:	Electrical	Electrical			
Speed:	1000 cycl	les / hour			
Print force:	2000 N				
Pad stroke:	Max. 230	mm			
Plate size:	1-color 2-color				
	40	0x400	400	)x400	
Ink pot:	72	100	120	190	
Pad cleaning:	optional				
Electrical connection:	110/230V /50Hz / 60Hz				
Part movement: (multi color)	Linear mo	otor or mecl	nanical drive	9	



# **Pad Printing Machine SL-300**

The SL-300 is an universal electric driven pad printing machine with an open or sealed inking system and with a maximal plate size of  $300 \times 200$  or  $300 \times 100$  mm

### Combinations are:

Multi color functions, rotary tables and integrations in automatic lines.





Drive:	elect	electrical110V / 230V						
Speed:	1000	cycle	s / hoı	ur				
Print force:	1000	N						
Pad stroke:	Max.	170m	ım					
Plate size:	Oper	Open System S			Sealed System			
	1-C	1-C 2-C 3-C 4-C			1-C	2-C	3-C	4-C
	100-300x100 mm				nm			
Ink pots:	90 90 90 72					72		
Pad cleaning:	Optional							
Electrical:	110/230V /50Hz / 60Hz							
Part movement: (multi color)		Linear motor or mechanically drive Oval or linear conveyor						

# **Pad Printing Machine SL-600**

The SL-600 is an universal electric driven pad printing machine with an open or sealed inking system and with a maximal plate size of 600x280 or 600x150 mm

#### Combinations are:

Multi color functions, rotary tables and integrations in automatic lines.

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Drive:	elect	electric110V / 230V						
Speed:	1000	cycles	s / hou	ır				
Print force:	4000	N						
Pad stroke:	Max.	170m	m		_			
Plate size:	Oper	Open system Sealed system						
	1-C	1-C 2-C 3-C 4-C 1-C 2-C 3-C				4-C		
	15	150-600x100 mm					nm	
Ink pots:		130 130 130 120					120	
Pad cleaning:	Optio	Optional						
electrical:	110/230V /50Hz / 60Hz							
Part movement: (multi color)		ar moto or line			nically	drive		



# Pad Printing MachineSX-600

This servo motor driven pad printing machine can be supplied with an open ink system or with a sealed inking.

All three axes plate carriage, pad horizontal carriage and pad stroke can be adjusted by touch screen display. The plate carriage can be mechanically adjusted in X-axe and can be rotated. The pad carriage and pad stroke can steeples adjusted as well.



Drive:	electri	electrical110V / 230V								
	Pad st	Pad stroke:				Servo motor				
	Pad ca	arriage				Serv	o moto	r		
	Plate	carriage	e:			Serv	o moto	r		
Speed:	900 cy	/cles / ł	nour							
Print force:	40001	٧								
Pad stroke:	Max. 1	170mm								
Plate size:	Open	system			9,	Sealed system				
	1-C	2-C	3-C	4-C	•	1-C	2C	3-C	4-C	
	15	60-600x	100 m	m		1	50-600	)x300 m	m	
Ink pots in mm:					•	130	130	130	120	
Pad cleaning:	Optional									
Electrical:	110/230V /50Hz / 60Hz									
Part movement: (multi color)		motor or linear			icall	ly drive	e			

# **Pad Printing Machine Pneumatic Series**



The T-Line is a electro-pneumatic pad printing machine for 1 color prints with a sealed inking system.

Drive:	pneumatic	
Print force:	670 N	
Plate size	100x200 mm	
Ink pot:	90 mm	



The Eco-Series is a game of electro pneumatic drive pad printing machines for 1 and 2 color printing.

Drive:	pneumatic		
Print force:	670 N		
Plate size:	1-color 200x100mm	2-colors 200x200mm	
Ink pot:	D 90mm	D 90 mm	



The TP-150 is an economically, and flexible pad printing machine with stand and automatic pad cleaning system ..

Drive:	pneumatic
Print force:	1000 N
Plate size:	150x150 mm
Pad cleaning	automatically

If a product must be printed, it must be supplied very often automatically, pretreated, turned, positioned, printed and after treated.

ST Drucksysteme offers systems approaches to you based on decades of experience in the printing and automation business. Is it for a simple solution or is it for a solution, which may be somewhat more complicated.

ST Drucksysteme is the specialist for automation plants and custom-made system approaches. This means investment into the future. As a professional in the project management works stds with most modern tools and develops as reliable and responsible partners convincing solutions. With only one goal: the success of the customer.

Together with you we develop high-quality and solution-oriented systems. Our know-how in the printing and automation business, as well as our proven methodical approach form is the basis of our service.











**Laser marking system for** semiconductor strips Operating from stack to stack magazine, marked by laser and checked by vision control system.

Conversion automatically





Pad printing machine with rotary indexing table for printing on semiconductor strips, scales etc.

Loading automatically from double magazine, pre-treatment, cleaning by brush, printing, drying and off-loading in magazines.





Pad printing system. This machine concept was developed for In-Line production of humidification chambers and breathing masks. The machine is build for swaging and printing of the humidification chambers.





Pad printing system for the printing of catheter horses. The catheter horses comes from roll, pre-treatment with corona, Printing with pad printing, drying and cutting to pieces with several lengths.







1 colour pad printing system for marking on closures in colour. Loading autmatically, pre-treatment, pad printing and autmatically reject





**1 - 4 colours machine** for the printing on closure caps.

Loading automatically from sorter, pretreatment by gas flame, printing up to 2colors, drying and automatic reject.





**5-color cylindrical screen printing machine** with rotary indexing table for the printing on parts like bottles, cans, perfume containers, cosmetic jars drinking glasses etc.

Loading automatically, printing up to 5 colours, curing by ultra violet, off-loading automatically.





**Screen printing machine** for multicolour printing on ski stick, moving Stick Nordic walking stick.

Loading manually, automatic registration, transport printing and curing by ultra violet







**Screen printing machine fort** he printing on 200 litre barrels

Loading from customer side, printing with screen printing





**Screen printing machine fort** he printing on 200 litre barrels

Loading from customer side, printing with screen printing





**Screen printing system.** This automatic screen printing system was developed for printing up to 5 meter long wooden sticks.

This system is made for the building industry. The printing includes names or logos.



# Periphery units

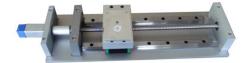


Carousel CR-150				
Drive:	Servo motor			
Registration	Mechanically be cam			
Indexed plates:	4 pieces			
Registration accuracy:	+/- 0,015mm			
Step:	150 or 75 mm			
Drive direction:	programmable			



Linear conveyor TFL 150			
Drive:	Servo motor		
Registration:	Mechanically by cam		
Indexed plates:	4 pieces		
Registration accuracy:	+/- 0,015mm		
Step:	150 or 75 mm		

# Periphery units



Linear drive				
Drive:	Servo motor			
Registered plate:	1 piece			
Registered accuracy:	+/- 0,015mm			
Step:	programmable			
Carriage length:	200-2000 mm to customer request.			



Rotary indexing tables			
Drive:	Electro - mechanically		
Registration:	mechanically		
Steps:	2,4,6,8,12		
Registration ccuracy:	+/- 0,015mm		



Cross table KTK			
X-Y- Axe:	adjustable		
Adjustable length:	80 mm		
Z-axe:	Rotating 360°		
Weight:	Approx 25 kg		

### **Machine stands**

For all machines we supply machine stands with fixed or adjustable working tables. Onto this tables corss tabeles or jigs can be mounted. The working table can be adjusted manually or by motor.



Machine stand with manual height adjustable working table.



#### Höhenverstellbarer Arbeitstisch

Mit dem höhenverstellbaren Arbeitstisch lassen sich die Peripheriegeräte per Knopfdruck in ihrer Höhe verstellen.

Dies ermöglicht eine Anpassung der Arbeitshöhe für die Farbabgabe auf unterschiedliche Druckgüter und deren Werkstückaufnahmen



Machine stand with automatic height adjustment of the working table.

The table will be adjusted by an electro motor up to 300 mm.

### **UV-Curing**

The use of an UV - drying process is an economic factor with the drying and hardening process of colors and lacquers. Under effect of UV - UV reactive substrates polymerize and can radiation within seconds be processed immediately.

The equipment is equipped with a Shutter, which takes off and thus against an overheating protects the UV lamp automatically with a machine stop to the drying object. The compact building method ensures a small space requirement as well as an easy installation into automatic systems.



UV-Bridge	
Curing width:	100 -250 mm
Lamp power /cm:	80 -200 Watts
Voltage:	3x400 Volt
Current start up:	11 A
Current:	7 A
Power consumption:	4 KW



UV-Curing conveyor	
Curing width	100 -250 mm
Lamp power / cm:	80 -200 Watts
Voltage:	3x400 Volt
Current start up:	11 A
Current:	7 A
Power consumption	4 KW
Conveyor width:	50-400mm
Conveyor length:	1000 – 4000 mm
Conveyor speed:	adjustable



#### **Consumables**



**Printing Pads:** We offer an extensive variety of pad shapes and sizes. All of our pads begin with a computer generated master mold that ensures consistency and quality. We use only the highest quality silicones in the production of our pads. Mounting the pads is never an issue as we offer a variety of bases including wood and aluminum. In addition to our standard selection of pads, we can match any pad from any manufacturer. Send us a pad and notify us of any special instructions. We are confident that you will find our quality to be superior.



**Printing ink:** ST Printing Systems offers pad printing and screen printing inks for practically any substrate. All of our inks feature excellent adhesion properties and easy printability. We have 24 standard shades, a 12 color mixing system and process colors. Custom color matching and formulations are available. Send us your parts for adhesion testing. We will be glad to make recommendations and supply you with samples.



Ceramic rings and printing plates. For the sealed ink cups we supply ceramic rings in several sizes in an excellent quality and to interesting prices. We have several options for printing plates. This means we can supply polymer plates for any type of machine. We also offer both thin and thick steel plates for long life printing. Please contact us for instructions on supplying artwork and pricing.



### **Always Available Anywhere**



Engineering and manufacturing are conducted by ST Drucksysteme in Switzerland. In order to fulfill our objective of minimizing your downtime and being your preferred supplier irrespective of your location, we have established a professional service support organization. Your success depends on continuous operation and top quality performance. If you need spare parts, our organization will minimize the delivery time. And the same goes for operational assistance. We are available for assistance when you need it – by phone, e-mail, fax or for personal visit.



# Video

