

# SD 05

# RokuPrint

screen printing machines



## Screen printing machine SD 05

Universally usable screen printing machine  
with various equipment for flat or rotary printing

e.g. standard version for flat printing:  
with pneumatic squeegee mechanism PR 01  
and adjustment table KO 03  
(see picture)

### Advantages:

- Latest technology for optimal printing results and consistent quality
- Universally useable (flat and rotary printing)
- Printing speed steplessly adjustable (drive system with controlled DC motors)
- Precise and low maintenance by the use of high-quality guiding elements
- Easy operation and quick set-up of new programs by teach-in-mode
- Adjustment of screen detachment in program mode
- Electronic counter
- Short set-up time due to memory function (25 individual programs)
- Quick and easy cleaning
- High printing performance (depending on operator / automation up to 1800 prints per hour)
- Space-saving and portable due to compact design
- Prepared for automated use

### Technical data:

- max. printing size (L x W): approx. 300 x 200 mm (DIN A4)
- max. space (machine foot to screen): 160 mm / 250 mm (with / without adjustment table KO 03)
- max. printing performance: approx. 1800 prints per hour (automated use)
- printing mechanism: pneumatic squeegee mechanism (separately adjustable)
- screen frames: Aluminum frame
- max. frame height: 20 x 20 mm
- max. recommended screen size (L x W): approx. 600 x 300 mm
- power supply: 230 V / 50 Hz (Schuko plug)
- power consumption: 250 VA
- drive system: controlled DC Motors
- weight: approx. 60 kg
- dimensions (L x W x H): approx. 820 x 550 x 785 mm

### Control system:

- Manual control unit with text display
- Menu-assisted setting of printing stroke, screen detachment and screen lift up
- Adjustment of screen detachment in steps of 0,1 mm
- Variable printing speed
- Elektronik counter
- Interface for external control (START / STOP) for integration in a production line

perfect prints on objects

# SD 05

## Equipment



### PR 01

#### **Pneumatic squeegee mechanism**

- with programmable printing axis
- printing and flood speed steplessly adjustable



### KO 03

#### **XYR - adjustment table (3-axes coordinate table)**

- 2 x linear axes
- 1 x rotation axis
- T-slots for mounting of work piece fixtures

Use: for the fine adjustment of the work piece to the screen

Mounting area: approx. 400 x 180 mm



### FS 01

#### **Adjustable side screen holders**

- mounted on the printing axis
- alternative to the rear screen holder (standard)

Use: for lateral screen clamping and fine adjustment of the screen during flat printing

max. screen length: approx. 440 mm

max. frame height: 40mm



### FS 01-VK

#### **Adjustable side screen holders**

- mounted on the printing axis
- screen holder guided on continuous square bar
- alternative to the rear screen holder (standard)

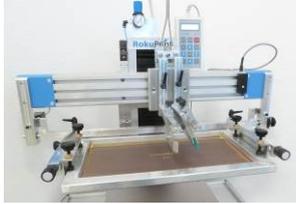
Use: for lateral screen clamping and fine adjustment of the screen during flat printing

max. screen length: approx. 440 mm

max. frame height: 40mm / 20mm (under square bar)

# SD 05

## Equipment



### FS 01-E

#### Adjustable side screen holders

- mounted on the blue end caps of the printing axis
- screen holder guided on continuous square bar
- alternative to the rear screen holder (standard)

Use: for lateral screen clamping and fine adjustment of the screen during flat printing

max. screen length: approx. 630 mm

max. frame height: 40mm / 20mm (under square bar)



### FS 01-R

#### Adjustable side screen holders

- mounted on moveable rotary printing carriage
- guided in the profile of the printing axis
- alternative to the rear screen holder (standard)

Use: for lateral screen clamping and fine adjustment of the screen during flat or rotary printing

max. screen length: approx. 440 mm (flat printing) / ca.280 mm (rotary printing)

max. frame height: 40mm



### SS 01

#### Side screen holders

- not adjustable
- mounted at the printing axis
- alternative to the rear screen holder (standard)
- only in combination with KO 03

Use: for lateral screen clamping during flat printing

max. screen length: approx. 440 mm

max. frame height: 40mm

# SD 05

## Equipment



### PSK 01

#### Pneumatic screen clamping

- clamping by 4 pneumatic short-stroke cylinders
- activation by hand valve
- 2 x rear stop and 1 x side stop for screen positioning
- only in combination with SS 01, FS 01, FS 01-...

Use: for quick and easy screen positioning and clamping in case of frequent changes

Frame height: by agreement, only one frame height possible



### RD 02

#### Rotary printing system - single-color (without registration)

- incl. adjustable side screen holders **FS 01**
- rotary printing carriage and squeegee head looking
- without customized rotary printing device

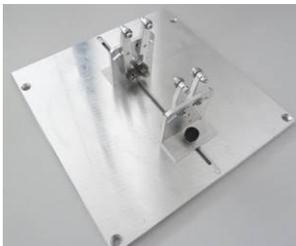
Use: for single color printing of cylindrical or slightly conical parts

max. diameter: approx. 40 mm (printing on whole circumference) or bigger diameter with a max printing length of 120 mm

max. screen length: approx. 280 mm (frame profile 20 x 20 mm)

#### optional:

- universally adjustable roller block device **RB 02**
- extended printing axis **DA 1000** for max. diameter approx. 64 mm or max. printing length approx. 192 mm



### RB 02

#### Roller block device

- universally adjustable
- base plate with slot for adjustment of component length
- 2 x roller block with bearings for adjustment of component diameter

Use: universal component holder for RD 02, for single color printing of cylindrical or slightly conical parts

#### optional:

- customized support rollers **KAR 02-KX**
- rear stop



# SD 05

## Equipment



### KAR 02-KX

#### Customized support rollers

- made of plastic (POM) or brass
- according to customers specification / drawing

Use: for roller block device RB 02, for single color printing of cylindrical or slightly conical parts



### RD 03

#### Rotary printing system - multi-color (with registration)

- incl. adjustable side screen holders **FS 01**
- rotary printing carriage and squeegee head looking
- gear and rack drive
- bearing block with rotary printing shaft
- without customized rotary printing device

Use: for multi-color printing of cylindrical or slightly conical parts with mechanical registration

max. diameter: approx. 40 mm (printing on whole circumference) or bigger diameter with a max printing length of 120 mm

max. screen length: approx. 280 mm (frame profile 20 x 20 mm)

#### optional:

- customized rotary printing device (for bearing block)
- extended printing axis **DA 1000** for max. diameter approx. 64 mm or max. printing length approx. 192 mm



### VC 01-VD

#### Vacuum system

- vacuum plate made of anodized aluminum  
plate size: (L x W x H): 350 x 260 x 45 mm  
suction area: 285 x 195 mm
- with drilled holes D = 1,5 mm / pattern 15 mm
- fixing on adjustment table KO 03 or substructure
- vacuum generation by integrated pump (compressed air)
- vacuum activation automatically with the printing cycle, or manually by hand valve

Use: for printing on flat and air-impermeable materials such as foil, plastic plates, paper, etc.

#### optional:

- vacuum plate „micropor“ fine-pored **VC 01-VD-MP**
- vacuum plate „micropor“ large-pored **VC 01-VD-MPG**



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## Equipment



### VR 280

#### Extended squeegee arm

- total length 280 mm
- with reinforced brace at printing squeegee arm

Use: for larger squeegee width or prints in the front area of the machine



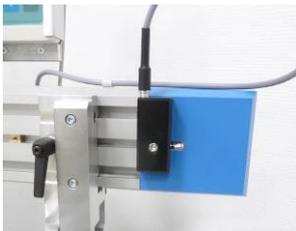
### DA 1000

#### Extended horizontal printing axis

- total length 1000 mm (outer dimension)

Use: for additional moving range during flat or rotary printing

max. screen length flat printing: approx. 620 mm (using FS 01, FS 01-VK, FS 01-R) / approx. 820 mm (using FS 01-E)

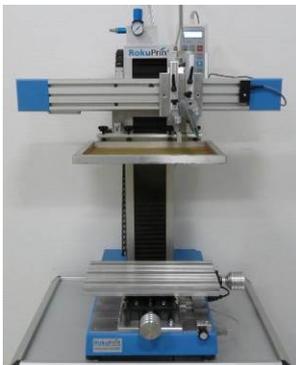


### AE 30

#### Slotted end cap

- right end cap with additional slot for reference sensor
- additional moving range of 30 mm

Use: for additional moving range during flat or rotary printing



### HA 700

#### Extended vertical axis

- length of vertical axis 700 mm (only profile)

Use: for printing on high components or more space between screen and component

max. distance: approx. 470 mm (screen to machine foot) / approx. 360 mm (screen to adjustment table KO 03)



### TT 01

#### Pneumatic turning table

- 2 positions / 180° (forward / backward)
- diameter D = 400 mm
- automatic start by foot switch (printing cycle)

Use: removing component when the other get printed (only for small parts)

# SD 05

## Special versions



**Screen printing machine SD 05 „Laboratory“**  
for flat printing, equipped with:

- **PR 01** pneumatic squeegee mechanism with programable printing axis and squeegee angle scale
- **FS 01-E** adjustable side screen holders mounted on the blue end caps of the printing axis
- **VC 01-VD** vacuum system for SD 05 incl. vacuum plate and vacuum pump (automatic activation or manually by hand valve)
- tool drawer

Use: for printing or coating thin materials in laboratory sector



**Screen printing machine SD 05 „Auto“**  
for automated flat printing, externally controllable (START / STOP), electric system in separated control cabinet and compact machine foot, equipped with:

- **PR 01** pneumatic squeegee mechanism with programable printing axis
- **FS 01-E** adjustable side screen holders mounted on the blue end caps of the printing axis

Use: for integration in an automated production line