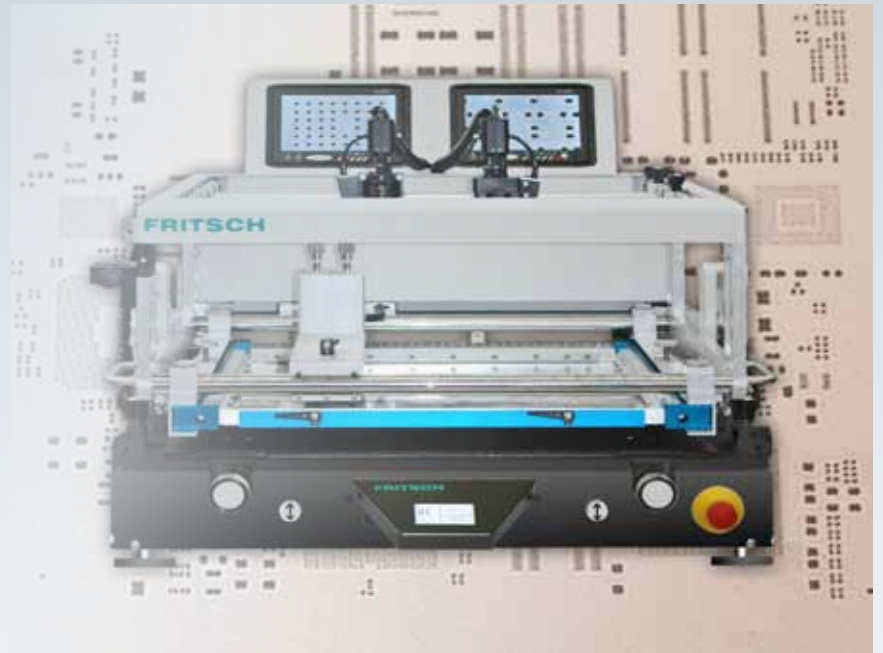


Tension frame

Double squeegee

Motor-driven print

Vision system



Stencil printer SD 903

The semi-automatic stencil printer with its easy handling provides clean and reproducible prints even in the case of fine structures. It is suitable for the production of prototypes as well as small and medium-sized series.

Quick Setup

The flexible PCB intake enables the stencil printer to be set up within only a few minutes. The adaptations to a different frame format can be made without tools. The optional test print frame reduces the minimal set up time once again.

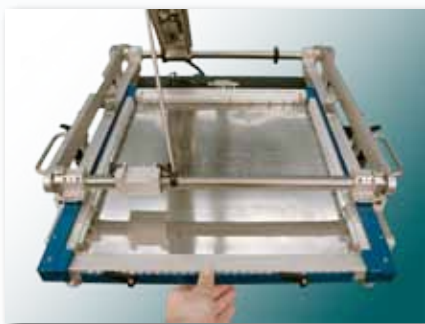
Quick change frame

Common, sturdy aluminium frames and other usual quick change systems such as Stencilman, VectorGuard™ and Zelflex or the like are used without the need for further adaptations. That enables the printing of the smallest of PCBs up to a maximum printing surface of 560 x 460 mm.

Double squeegee

The stencil printer has a double squeegee for flawless paste printing in both directions. The paste is applied within the double squeegee and is thus applicable in both directions.

The contact pressure of the squeegee can be set by a screw. The angle of the squeegee is adjustable from 45° up to 90°.



Motor-driven print



The optional microprocessor controller controls the lowering of the motoric squeegee, controls the motor-driven print and makes sure the print is even and reproducible. After printing, the table is automatically lowered over the pneumatic cylinder in a parallel position and the printer can be opened.

All processor-controlled functions of the printer are handled by an optimized intuitive Touch Display. There is also the possibility to save product-specific programs. So the production can start only by choosing the accordant program.

Flexible PCB fixture



The PCBs are fixed by easily adjustable magnet fixtures. The fixture can thus be adapted to a different PCB within a few seconds.

The fixtures and supports included in delivery enable the printing of PCBs on one or two sides.

Table lowering

The parallel table lowering ensures clean printing results even in the case of large PCBs. A smearing of the printed layout is thus part of the past.

With the optional control, the lowering automatically takes place after the PCB has been printed.

Highest precision

Its stable set up is the basis for today's requirements of fulfilling the high demands of production quality. This is also safeguarded when the smallest of chips and fine structures come into use.

Conic centering pins guarantee high repeat accuracy and also make fine pitch prints with a grid pattern of 0.5 mm possible.

The automatic top opening and closing is assisted by a gas pressure damper. Furthermore the top is fixed by two centring pins for a correct adjustment.

Maintenance and cleaning

Both the stencil and the squeegee itself can be easily cleaned by simply opening the squeegee unit.

The squeegee unit can be locked into the open position so that both hands are free for cleaning it.



Vision system

In the case of fine structures in particular, the vision system alleviates the positioning of the stencil and thus increases the accuracy of the print. The vision system has two freely adjustable cameras which are assembled above the print frame. The cameras are positioned by using one hand without tools. When removing or putting in the PCB, the camera system rotates with the tension frame. The whole vision system can be displaced for cleaning the squeegee or refill the welding paste without the need to be adjusted again.



903.210.110 Semi-automatic screen/stencil printer for prototypes and small to medium-sized series.

max. frame size 620 x 590 mm

max. printing surface 400 x 460 mm

- with:
- Double squeegee for clean printing in both directions
 - Standard squeegee 205 mm
 - Flexible LP fixture for one- and double-sides printing
 - Parallel table lowering after printing
 - Squeegee unit can be opened for easy cleaning



903.210.115 Semi-automatic screen/stencil printer for prototypes and small to medium-sized series.

max. frame size 784 x 590 mm

max. printing surface 560 x 460 mm

- with:
- Double squeegee for clean printing in both directions
 - Standard squeegee 205mm
 - Flexible LP fixture for one- and double-sides printing
 - Parallel table lowering after printing
 - Squeegee unit can be opened for easy cleaning

903.210.118 Semi-automatic screen/stencil printer for prototypes and small to medium-sized series.

max. frame size 1420 x 740 mm

max. printing surface 1200 x 630 mm

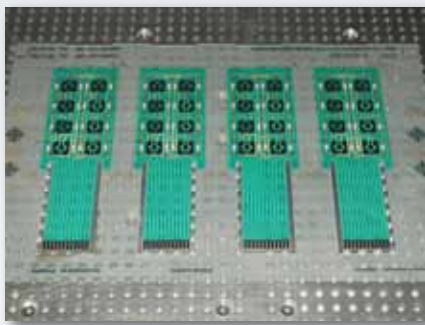
- with:
- Vision camera
 - Automatic squeegee speed
 - Pneumatic supported frame holder
 - Double squeegee for clean printing in both directions
 - Standard squeegee 375mm
 - Flexible LP fixture for one- and double-sides printing
 - Parallel table lowering after printing
 - Squeegee unit can be opened for easy cleaning



Options

903.210.120 Motor-driven squeegee speed for **SD 903.210.110**
Adjustable squeegee speed for clean and reproducible prints
Microprocessor controller

903.210.125 Motor-driven squeegee speed for **SD 903.210.115**



Dimensions refer to the Stencilman frame.

903.210.130 Vacuum table for **SD 903.210.110**
Vacuum table 460 x 400 mm for the safe intake of foils and thin PCBs.

903.210.131 Vacuum table for **SD 903.210.115**
Vacuum table 614 x 400 mm for the safe intake of foils and thin PCBs.

903.210.152 Flexible vacuum-option for SD 903.210 for safety pressing on the PCB while printing. 4 magnetic suction cups and automatic vacuum de-activation. Only in combination with Motor-driven squeegee speed



903.210.155 Pneumatically supported frame holder for opening and closing the print frame by using a pneumatic cylinder for **SD 903.210.110/115**



903.210.135 Vision camera for **SD 903.210.110**
By means of two cameras, a safe and fast alignment of the stencil is given.
The height including the camera is 560 mm

903.210.140 Vision camera for **SD 903.210.115**
The height including the camera is 560 mm



Undertable

903.210.410 Undertable for **SD 903.210.110**
with intermediary tray

903.210.415 Undertable for **SD 903.210.115**
with intermediary tray

903.210.420 Undertable for **SD 903.210.118**
with intermediary tray



Quick change system

903.200.210 Four-sided quick change system for stencil size
555.5 x 555.5 mm

903.200.211 Quick change system VectorGuard
Four-sided quick change system for stencil size
555.5 x 555.5 mm

Further systems on request.



Test print frame

903.210.215 Test print frame for semi-automatyi stencil printer
SD 903. For checking the print layout and for easy
alignment for the first print incl. a test print foil
240 x 400 mm

903.210.216 Test print foil 240 x 400 mm

Frames for prototypes

903.210.200 Prototype frame set includes:
Clamping stripe/spring mounted and clamping stripe/
fixed, 2 slim Magnetic PCB fixtures 40 mm
for thickness of PCB of 1,6 mm
Hand-scraper 110 mm

903.210.201 Magnetic PCB fixture slim 40 mm
Thickness of PCB of 1,6 mm

903.210.202 Magnetic PCB fixture wide 70 mm
Thickness of PCB of 1,6 mm

903.210.203 Magnetic PCB fixture slim 40 mm
Thickness of PCB of 1,0 mm

903.210.204 Magnetic PCB fixture slim 70 mm
Thickness of PCB of 1,0 m

PCB fixture

903.210.220 Magnetic PCB support for thickness of PCB of 1.6 mm

903.210.221 Magnetic PCB support for thickness of PCB of 1.0 mm

903.210.228 Magnetic PCB support for thickness of PCB of 0.8 mm

903.210.229 Magnetic PCB support for thickness of PCB of 2.0 mm

903.210.222 Magnetic PCB suction cups for extremely light-weight
PCBs

903.210.223 Magnetic PCB fixture small 70 x 40 mm
for thickness of PCB of 1.0 mm and 1.6 mm

903.210.224 Magnetic PCB fixture large 140 x 70 mm
for thickness of PCB of 1.0 mm and 1.6 mm

903.210.225 Magnetic PCB fixture large with fixture for test print foil
for thickness of PCB of 1.0 mm and 1.6 mm

903.210.226 Magnetic PCB fixture small 70 x 40 mm
for thickness of PCB of 0.8 mm and 2.0 mm

903.210.227 Magnetic PCB fixture large 140 x 70 mm
for thickness of PCB of 0.8 mm and 2.0 mm



Magnetic PCB support
903.210.220 - 903.210.229



Magnetic PCB suction cup
903.210.222



Magnetic PCB fixture small and large

Squeegee



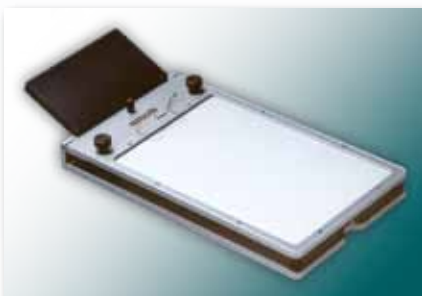
- 903.210.301** Holder with metal squeegee 205 mm
- 903.210.302** Holder with metal squeegee 290 mm
- 903.210.303** Holder with metal squeegee 375 mm
- 903.210.304** Holder with metal squeegee 460 mm
- 903.210.305** Holder with metal squeegee 420 mm
- 903.210.306** Holder with metal squeegee 545 mm
- 903.210.307** Holder with metal squeegee 630 mm
- 903.210.322** Surcharge for squeegee holder and metal squeegee 290 mm instead of standard 205 mm.*
- 903.210.323** Surcharge for squeegee holder and metal squeegee 375mm instead of standard 205 mm.*
- 903.210.324** Surcharge for squeegee holder and metal squeegee 460 mm instead of standard 205 mm.*
- 903.210.325** Surcharge for squeegee holder and metal squeegee 545 mm instead of standard 205 mm.*
- 903.210.326** Surcharge for squeegee holder and metal squeegee 630 mm instead of standard 205 mm.*
- 903.210.327** Surcharge for squeegee holder and metal squeegee 420 mm instead of standard 205 mm.*

*For double squeegee (2 pieces)

Manual stencil printer



Stencil printert
903.001



Stencil printer **903.002**

- 903.001** Stencil printer with metal squeegee
Usable size 100 x 160 mm

The PCB intake is precise and easy to adjust by means of each one micrometer screw for the X- and Y- direction and the correction of the angle.

A suction cup **903.200** can be retrofitted for thin PCBs.

The stencil is firmly fixed in a frame by means of knurled screws and can be changed fast without tools. The stencil frame can be adjusted to three heights using adjustable screws.

Solid construction made of milled aluminium sheets.

- 903.002** Stencil printer with metal squeegee 205mm
Usable size 235 x 360 mm
Technical equipment same as **903.001**

- 903.102** Universal PCB feed Suitable for processing double-sided PCBs with the stencil printer **903.002**
(no illustration)

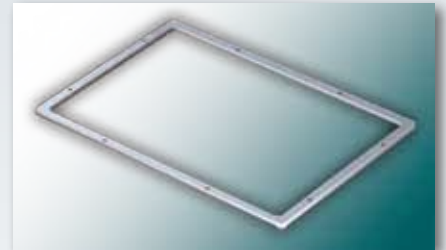
903.200 Set of retrofittable suction caps for thin PCBs



Set of retrofittable suction caps **903.200**

903.201 Stencil frame for stencil printer **903.001**

Frequently used stencils therefore need not to be fixed again each time.



Stencil frame **903.201/903.202**

903.202 Stencil frame for stencil printer **903.002**

Welding pastes

932.106 Welding paste for stencil printing, leaded 6-Sn62-277-I, Flexpak 150gr.

932.107 Welding paste for stencil printing, leaded 6-Sn62-277-D, tub 250gr.

932.110 Welding paste for stencil printing, lead-free 6-Sn96,5-277-I, Flexpak 150gr

932.111 Welding paste for stencil printing, lead-free 6-Sn96,5-277-D, tub 250gr.



Technical data

Scraper pressure force	0 - 180 N
Table pressure force.....	0 - 650 N
Scale table hub.....	0,02 mm
Adjustment range X/Y.....	+/- 12,5 mm
Theta adjustment.....	+/- 1°
Adjustment angle squeegee.....	45° - 90°
Upstroke squeegee.....	max. 25 mm
Table lowering.....	max. 5 mm
Pressurized air supply	6 bars dried, oil-free pressurized air



Model SD 903.210.110

Dimensions (B x D x H).....782 x 800 x 350 mm, closed
Base.....714 x 666 mm
Size of tension frame.....max. 620 x 590 x 30 mm
Print format.....max. 400 x 460 mm
Weight.....ca. 67 kg plus options



Model SD 903.210.115

Dimensions (B x D x H).....942 x 800 x 350 mm, closed
Base.....874 x 666 mm
Size of tension frame.....max. 784 x 590 x 33 mm
Print format.....max. 560 x 460 mm
Weight.....ca. 76 kg plus options

Model SD 903.210.118

Dimensions (B x D x H).....1580 x 1050 x 1350 mm, closed
Base.....1500 x 800 mm
Size of tension frame.....max. 1420 x 760 x 43 mm
Print format.....max. 1200 x 630 mm
Weight.....ca. 300 kg



Subject to technical modifications. 03/2014

Fritsch GmbH
Bestückungs- und Montagesysteme
Kastler Straße 11
D-92280 Kastl-Utzenhofen

Tel. +49(0) 9625-9210-0
Fax +49(0) 9625-9210-49

www.fritsch-smt.com
info@fritsch-smt.com

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