

## Metal Stencils

To soldering SMD-parts on the PCB a sufficient depot of solder must be available. The finish surface on the PCB has usually not enough for this. For this reason solder paste is brought on the pads. The solder paste is applied with a laser cut metal stencil. So that the SMD-parts are not be able to slip during the soldering process on the PCB, the parts were fixed with an adhesive. The adhesive can also be applied with a laser cut metal stencil.

We offer you  
SMD-Metal Stencils    and  
Glueing-Stencils

Developers we offer our economically ECO-Stencil.

## Technology

The Metall Stencil were made of refined steel according DIN 1.4301

There were Stencil with thicknesses of

100µm  
120µm  
150µm  
180µm  
200µm  
250µm  
300µm

available.

For the seating of the stencil in the printer, one distinguishes between stencils in a fixed frame and stencils in a self mounting system.

We deliver you Stencils  
as a rectangle sheet  
in a new frame  
in a used frame  
with a self mounting system

The screen printing frames are covered with a stainless fabric wire with 80mesh (number of wires / inch) and stuck together with an adhesive on the frame. The Metal Stencil will be stuck into the fabric wire and the printing area is cut out.

For manufacturing Stencils for self mounting systems we need once  
the type of the mounting system (manufacturer and type)  
a drawing of the perforated egde.

For positioning the Stencil on the PCB fiducials were needed.

For our Stencils 4 fiducials are inclusive.

The fiducials could be manufactured in several ways. These are

fiducial	engraved	only a part of the surface will be removed
fiducial	cutted through	a break through is made
fiducial	black filled	a break through is made and filled with a black lacquer

**Inclusives**

Our basis prices contain the following achievements

- 1000 Pads inclusive
- Modification of the Pads; procentual or absolut
- 4 engraving fiducials
- Inscription (engraved) 2 x 25 Characters

**Options**

To extend the durability of your Stencils we offer you the following options:

- Edge Protection (not on rectangle Stencils)
  - For this the edges of the Stencil is folded over.
  - This minimized the danger of injuries through sharp edges.
  - The stability of the stencil is increased considerably.
- Protective Lacquer for adhesives
  - Cleaning the Metal Stencil with aqueous or solvend based screen cleaner can damage the adhesive and thus the durability of the Metal Stencil will be reduced.
- Surface Treatment
  - The cutting process forms at the pad openings and pad walls an oxide coating and to the laser withdrawal side a burr.
  - The burr will be removed within a brushing process.
  - With several polish procedures the surface of the Metal Stencil and the pad walls will be more smoothened. Thus cleaning of the Metal Stencil will be more easily and the release behaviour of the solder paste is improved.

Mittels verschiedener Polierverfahren kann die Oberfläche der Metallschablone und die Padwandung noch mehr verfeinert werden. Dies erleichtert die Reinigung der Schablone und das Auslöseverhalten beim Drucken wird verbessert.  
Ask us fort he possibilites.

**Delivery Times**

We supply your SMD-Stencil to you with starting from 3 working days. If you had ordered in our Online-Shop also a PCB then we can deliver both products together if you like.

#### ECO Stencil

The ECO Stencil is a favourable variety for developers and individuals to give here the possibility to us Metal Stencils.

#### Style

Material	Refined Steel DIN 1.4301
Thicknesses	100µm, 120µm, 150µm, 180µm, 200µm, 250µm
Size	210 x 280mm maximum
Stencil form	only rectangular for is supported
Pads	500 Pads inclusive each further pad will calculated with 0,05€
Fiducials	4 engraved fiducials inclusive
Inscription	25 Characters maximum
Delivery Times	5 , 7 , 8 , 10 , 15 Working Days

We will do no modifications on the data.

#### Price and Delivery times for the ECO-Stencil

Basis Price	54,00€ 500 Pads inclusive each further pad will calculated with 0,05€
Delivery Times	15 Workingdays ; no surcharge 10 Workingdays ; surcharge of 10% 8 Workingdays ; surcharge of 15% 7 Workingdays ; surcharge of 20% 5 Workingdays ; surcharge of 25%