2D and 3D Insulating Moulded Components

KARL SCHUPP AG

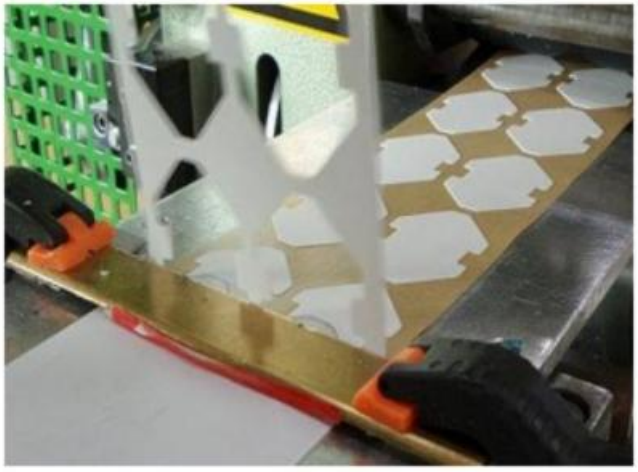
CONDUCT – PROTECT – INSULATE



We have many options for the economical production of die-cut parts, adhesive or non-adhesive from small to large quantities. Depending on the material, the material thickness can be between 5 µm (films) and around 3 mm (sheets).

Customized die-cut parts, adhesive or non-adhesive

Die-cut parts, adhesive or non-adhesive / Materials and production



The use of insulating molded and die-cut parts results in considerable material and assembly time savings in a number of assembly processes. Die-cut parts are manufactured from all film-type materials according to your specifications – on a roll, as a sheet or as a single part. Aids such as grip tabs or butterfly folding are possible. We die-cut a wide variety of materials in our company.

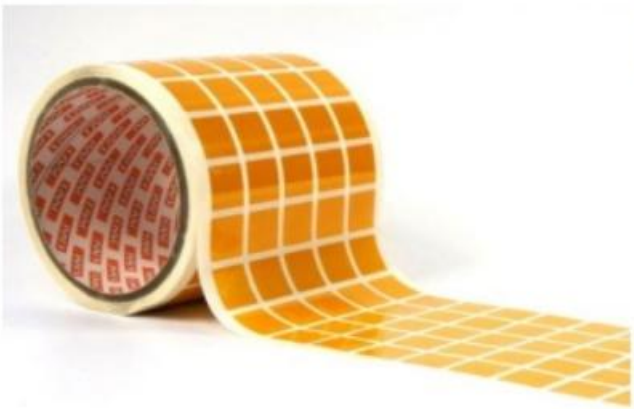
For example:

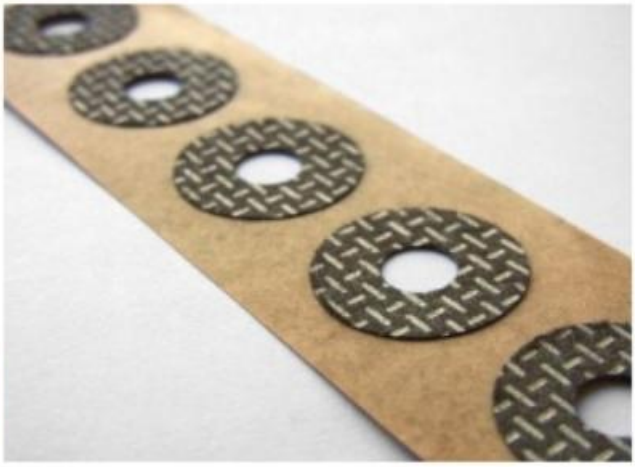
- Kapton® HN polyimide films
- Nomex® 410 aramid papers
- Mylar® A polyester films
- Hostaphan® RN polyester films
- Crepe paper adhesive tapes
- PTFE films
- Polycarbonate films
- Self-adhesive glass fabrics
- PPS, PEI, PES or PEEK high-conductivity films
- FEP films
- Acetate silk fabric
- Laminates made from different Products
- and much more

Technical production possibilities:

- Rotary punching machines for large series
- Stroke punching for parts from a few mm^2 to approx. $0.3m^2$
- Cutting plotter up to 1.3 x 2.2 m
- Printing units for UV varnish
- Laminating, cutting to length, folding
- 3D die-cut parts, customized die-cut parts
- Wage stamping

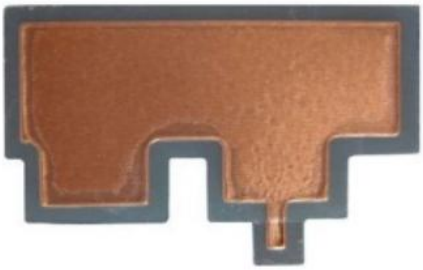
Producing non-adhesive punched parts on rolls





This kind of delivery form of die-cut parts made of non-adhesive materials is particularly suitable for industrial applications because the practical packaging type allows simple and fast further processing.

Punched parts for EMC shielding



Most electronic applications have different requirements for electromagnetic shielding. We offer a wide range of EMC shields that are precisely tailored to customer-specific requirements.

Adhesive die-cut parts made from films

The "Adhesive bonding" processing technique has many advantages compared to other types of fastening. Punched parts made from adhesive tapes (adhesive on one or both sides) are even more practical, as they ensure adhesion without the need for additional tools.

Production methods

Different tools are used for the production of die-cut parts. In most cases, a so-called **steel band tool** is used. The tool consists of a plywood plate into which steel band knives and punches are inserted. **Accuracies of up to +/- 0.2 mm** can be achieved and medium quantities of up to approx. 200,000 parts are possible. **Full-cut tools** are used when a higher number of punched parts is required, greater accuracy is required or, for example, 3D cuts or punching in hard materials are required.

A modern **cutting plotter** is used for large parts and/or smaller series (prototypes). It can be used to produce parts up to 1.3 m x 2.2 m in size.

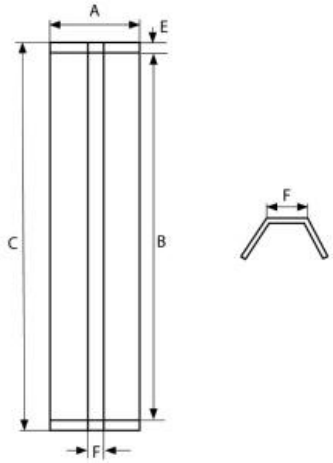


The use of pre-formed insulation parts is recommended for series of 100 pieces or more. The user saves on expensive manual production on folding and creasing devices and can be sure that all molded parts have the same dimensions.

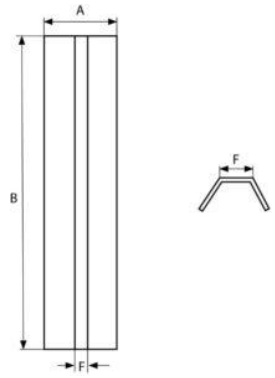
Insulating molded parts are manufactured according to the user's dimensions. We preferably require a echnical drawing in .PDF or .STP format to provide a quotation or for production.

We will be happy to help you determine the correct for Slot insulations, Slot Closures or Intermediate insulations for **electric motors**. Here you will find a form with the dimensions required for production. Copy the form, fill it in and send it to us.

DIMENSIONAL DRAWINGS FOR INSULATING MOLDED PARTS FOR ELECTRIC MOTORS



Slot insulations	
Material	
Temperature class	
Thickness	
Quantity	
Dimensions in mm	
A = Overall width	
B = Inside length	
C = Outside length	
D = Stretched length	
E = Shelf	
F = Fold (outside)	
A x B/C/D	
Fold	
Remarks	
Our Article – Nr..	
Your order Nr.	



Slot closures and intermediate insulations	
Material	
Temperature class	
Thickness	
Quantity	
Dimensions in mm	
A = Overall width	
B = Length	
F = Fold (outside)	
A x B	
Fold	
Remarks	
Our Article Nr..	
Your order Nr.	