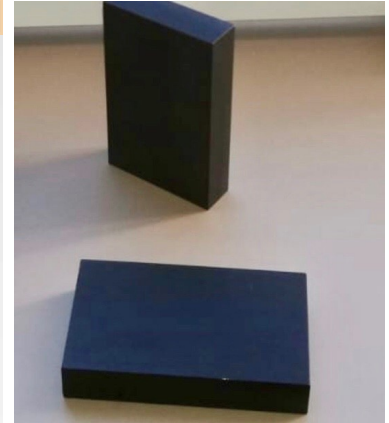


## MB-Seal® Flash free overmolding of metal inserts



## MB-Seal® Flexible sealing element for injection moulds

With MB-Seal® sealing elements it is possible to encapsulate inserts without flash or damage. Therefore our flexible plastic sealing elements fitted in an injection mould. They have proved very successful for reinforced and non-reinforced plastics (PBT 30 %GF, PA 30 %GF and TPE). The elements can be customized if necessary. Free forming by machining is possible without any problems. These sealing elements are particularly suitable for sheet inserts with thickness at and above approx. 4mm. Encapsulation of inserts with no risk of damage and flash. Your moulds work reliably and economically, thereby significantly reducing costs. Even after machining the sealing elements not only replace the conventional sheet seals they outperform by far.

### Area of application

Plastic encapsulation of metal inserts by means of injection moulding is currently common practice. It combines high performance in terms of assembly with excellent surface quality. Composite material structures (hybrid components) are used wherever metal components have to meet extreme requirements. Plastics currently provide the most cost-effective method of fusing metal and plastics. Suitable in particular for metal inserts with sensitive or painted surfaces.

### Special Features

- Prevents flash formation on plastic injection-moulded metal inserts
- Reduces unit costs
- Minimisation of rework on the moulded part
- Optimises quality of article
- Reduces scrap significantly

## Examples of Products



## MB-Seal® “highest quality in hybrid technology “

Sufficient surface pressure and flexible sealing surfaces on the injection mould are necessary for accurate injection moulding encapsulation. Previous solution: complex slide mechanisms or steel spring bearings on sealing surfaces. They are therefore not suitable for every condition of metal insert, flash formation or damage can occur.

## Special Features

- Prevents damaging of paintwork
- No pressure marks
- Holds tight
- Work reliably
- Economically

## MB-Seal® “solve your problems “

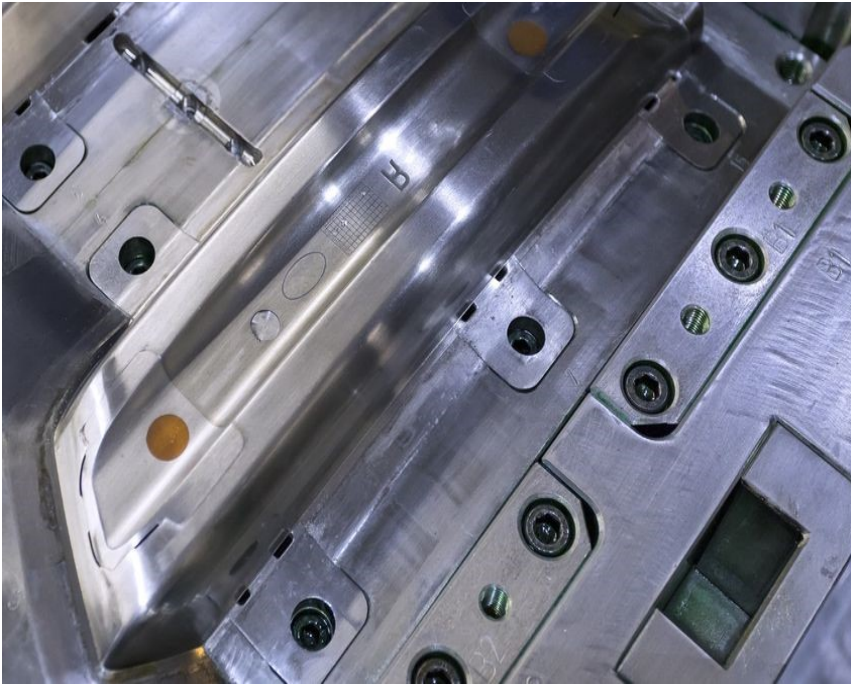
The use of MB-Seal® avoids surface damage such as abrasions or dents, also Flash formation, which is common on stampings with large fractured surfaces and stamping indents.

## MB-Seal® “holds tight”

MB-Seal® is fitted in the injection mould around the areas of the insert which need to be sealed.

Even after machining the sealing elements MB-Seal® not only replaces but far outperforms the conventional steel seals. Encapsulation of your inserts with no risk of damage and flash.

Moulds that are equipped with MB-Seal® work reliably and economically, thereby reducing your costs .



## MB-Seal® “has proved itself”

MB-Seal® has already been used in many injection moulds and have proved itself in practice. Our sealing elements are suitable for the moulding of reinforced and non-reinforced plastics e.g. PBT 30 %GF, PA 30 %GF and TPE. The sealing elements are particularly suitable for sheet thickness at and above approx. 4mm. Even inserts with 25 mm in diameter and approx. 5 kg in weight work perfectly. Tolerances can also be compensated with MB-Seal®.

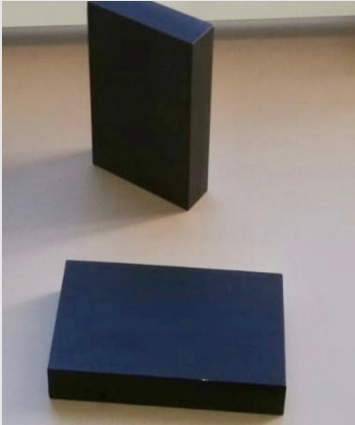
Possible tolerance compensation (irrespective of thickness)

- square inserts: 0.1 mm per side to the cutting level
- 0.1 – 0.15 mm overall crosswise
- round inserts: approx. 0.2 mm diameter

Previous experience without visible evidence of wear on the sealing element are in the region of 80,000 cycles. Machining the sealing elements couldn't be easier or can also be performed by us. The elements are fitted in the same way as mould inserts.

### Special Features

- Appr. 80.000 cycles without visible evidence of wear on the sealing element
- Tolerance compensation
- Easy assembly
- Has proved for round and square inserts
- Has proved for reinforced and non-reinforced plastics
- Machining the sealing elements couldn't be easier



## MB-Seal® Elements

**MB-Seal® Type 1** out of high abrasion-resistant special plastic  
Comprising of 2 pieces 6 +/- 0.1 mm x 50 +/- 0.1 mm x 80 +/- 0.1 mm

**MB-Seal® Type 2** out of high abrasion-resistant special plastic  
Comprising of 2 pieces 10 +/- 0.1 mm x 50 +/- 0.1 mm x 80 +/- 0.1 mm

**MB-Seal® Type 3** out of high abrasion-resistant special plastic  
Comprising of 2 pieces 15 +/- 0.1 mm x 50 +/- 0.1 mm x 80 +/- 0.1 mm

**MB-Seal® Special Types** other dimensions or based to your drawing, we look forward to your request.

If you have any questions, please do not hesitate to contact us. We look forward to your call or mail.



### Your Contact

MB-Seal®

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