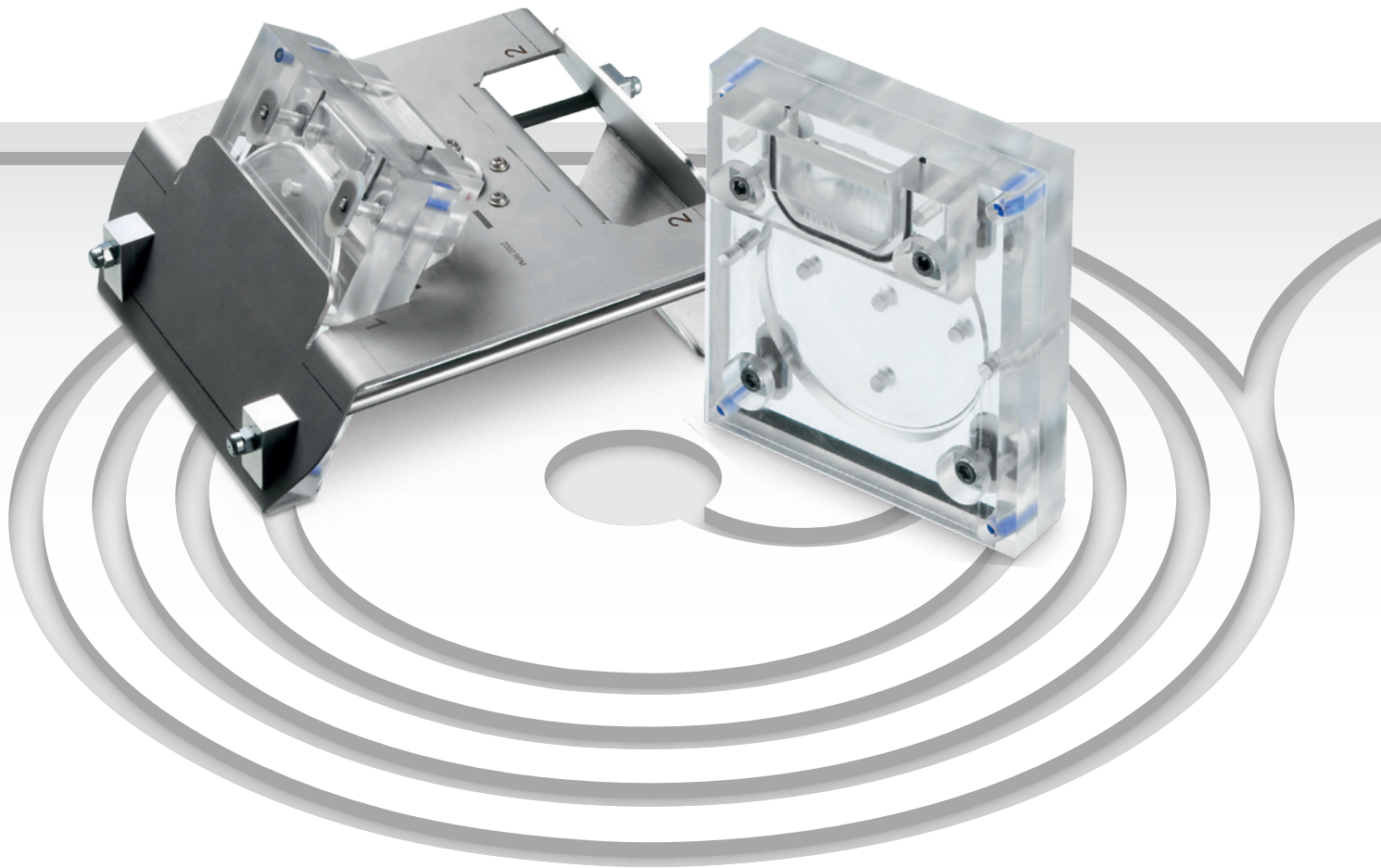


New

Rapid Prototyping for
high precision microstructures



ZentriForm

Bubble Free Silicone μ Molding.
4"/6"/3D, rapid, simple and reliable.

Centrifugal molding platform

ZentriForm: Silicone molds out of the centrifuge

ZentriForm from 3T analytik enables microstructures to be derived rapidly, simply and reliably

The removal of air bubbles in particular makes the manual production of such structures with silicone a complex process that is susceptible to errors. With the ZentriForm system air bubbles are reliably removed through centrifugation. The procedure also saves valuable time since curing and degassing are carried out at the same time. The pressure of the silicone against the insert throughout the entire curing process furthermore insures a high dimensional accuracy.

High reproducibility and a uniform thickness of the parts are the visible result!



Benefits

User-Friendliness

- Rapid production of the cast
- Degassing and cross-linking in a single step
- Simple to use

Safety

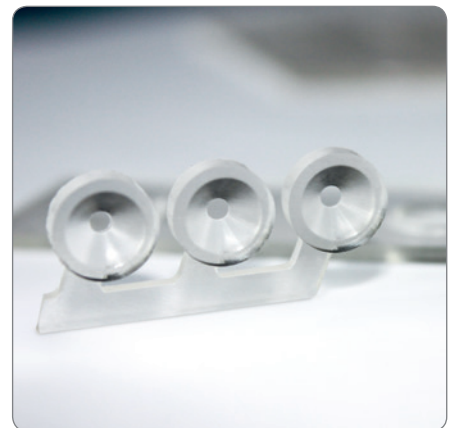
- High dimensional accuracy
- Bubble-free
- Reproducible and homogenous thickness of the manufactured parts

Option

- The application of the ZentriForm insert is not limited to silicon wafers. For small batch series or 3D structures customized steel inserts can be used

Applications

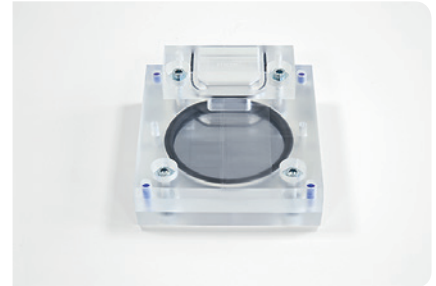
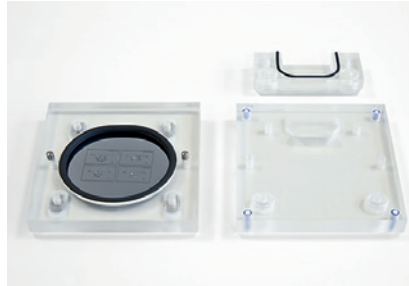
- Microfluidic structures
- Stamp for hot embossing
- Dies for blisterechnology
- Dosing valves
- Optical components
- Microoptical structures
- Prototypes and small series
- Sealings



Producing a micro structure: Procedure – rapid, simple and reliable

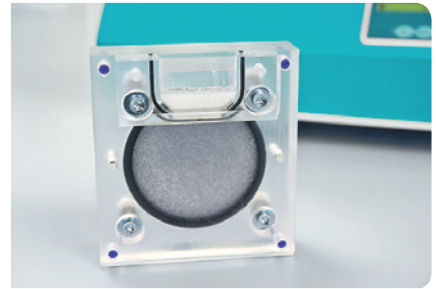
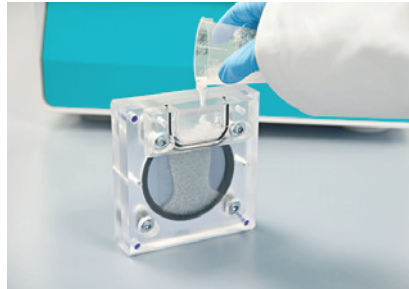


www.youtube.com/watch?v=mEfBrlc_qtQ



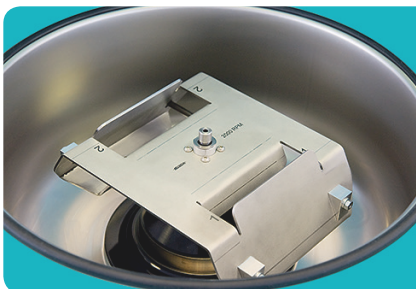
Step one

Mount the ZentriForm insert: Insert the master and O-ring and screw the mould together



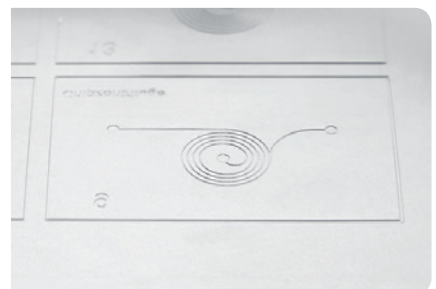
Step two

Stir the silicone and fill it into the inserts



Step three

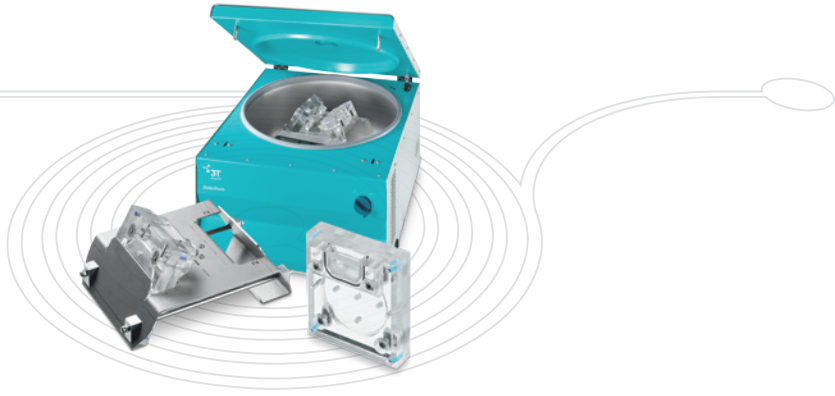
Load the rotor and start centrifugation



Step four

Once centrifugation is complete, allow the mould to cool, unscrew it and remove the finished part

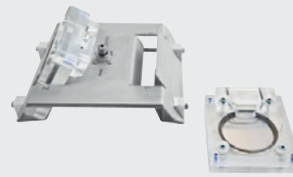
Equipment



ZentriForm 4"



Centrifuge
with heating
Dimensions (w x d x h)
538 x 647 x 345 mm³
Weight approx. 65 Kg



Rotor, 2-place
with inserts for wafers
and for milled structures
2-components-PDMS
up to 10.000 mPas

ZentriForm 6"



Centrifuge
with heating
Dimensions (w x d x h)
770 x 715 x 456 mm³
Weight approx. 160 Kg



Rotor, 2-place
with inserts for wafers
and for milled structures
2-components-PDMS
up to 10.000 mPas

Accessory



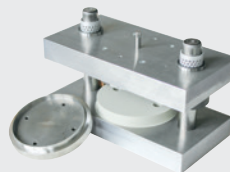
Optional
Demolding tool
Disc spacer for
different sizes and
for milled structures



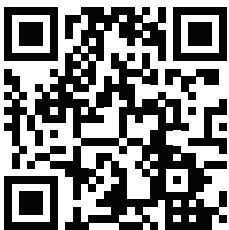
Optional
Spin coater for 4"
or for 6" wafers



On request
Customized
steel inserts
for 3D structures



On request
Customized
stamping dies
for silicone molds



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