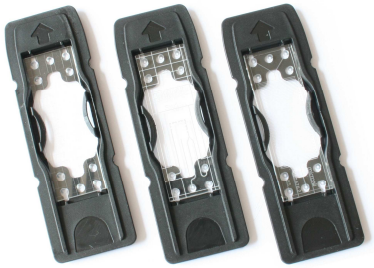
FLUIDIC PRO

BRINGING YOUR MICROFLUIDIC DESIGNS TO LIFE

Let's say you have a great idea for a microfluidic chip but don't have the time or access to a cleanroom environment to fabricate it yourself. Then Fluidic PRO is the solution for you.

The Fluidic PRO prototyping service allows your microfluidic designs to be manufactured in a class 100 cleanroom by professionals. Fluidic PRO enables you to stay focussed on your research. It saves you time both in design and lab hours, speeds up your research, makes you more productive and allows you to publish sooner.

Fluidic PRO offers maximum freedom through a wide range of possibilities.

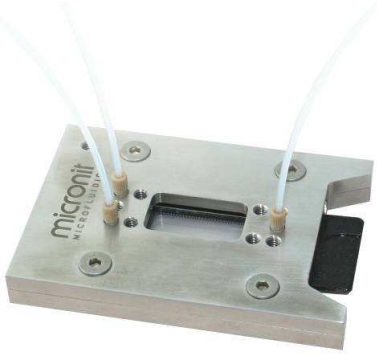


- Customized designs
- Glass or fused silica
- Wide range of channel depths and widths
- Thick- or thin-bottom chips, suitable for confocal microscopy
- Integrated electrodes
- Up to 4 different designs per batch
- Small batches starting with only 12 chips

With 10 years of experience in microfluidic chip manufacturing for science and industry, Micronit is the perfect partner to outsource your microfluidic chip needs.

FLUIDIC CONNECT

Fluidic PRO is a part of the Fluidic Connect platform which also features an easy-to-connect chipholder and a range of off-the-shelf chips including mixers, dropletgenerators and microreactors.



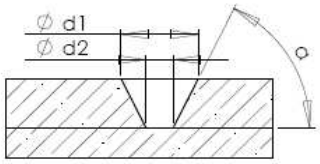
All Fluidic PRO chips are compatible with the Fluidic Connect 4515 chipholder and Fluidic Connections. Fluidic Connect is a user-friendly way of connecting your microfluidic chips to standard laboratory equipment such as syringe pumps and microscopes.

- Fast and easy fluidic and electrical connections
- Robust leak-free connections
- Large chip area to detect with microscope objective
- Compatible with upright and inverted microscopes

10 HOLE PATTERN

To make sure you can connect your chips with the Fluidic Connect 4515 chipholder there is a standard 10 hole pattern on a standard 45 x 15 mm format. You can make up to 10 connections which can be fluidic or electrical.

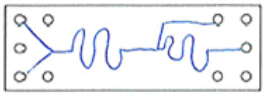
	STANDARD DIMENSIONS		TOLERANCES
x	Chip Length	15 mm	+/- 0,5 mm
y	Chip Width	45 mm	+/- 0,5 mm
d1	Top Diameter Hole	1700 µm	+/- 100 µm
d2	Bottom Diameter Hole	600 µm	+/- 125 µm
	Wall Angle Hole	68 degrees	+/- 5 degrees



PRICING

Chips are fabricated on a glass wafers. Each glass wafer contains 12 chips which also the minimum order quantity. If you need more chips just let us know. The prices mentioned include setup and one-time tooling costs. Changes in the specifications might affect pricing.

CHIP TYPE	PRICE FIRST 12 CHIPS	PRICE ADDITIONAL 12 CHIPS
Single Depth Etched	€ 3.925,-	€ 1.938,-
Single Depth Etched with Thin Bottom	€ 4.345,-	€ 2.295,-
Single Depth Etched with Electrodes	€ 5.530,-	€ 2.448,-
Double Depth Etched	€ 5.350,-	€ 2.295,-
Fused Silica Etched	€ 4.345,-	€ 2.295,-
Single Depth Powderblasted	€ 2.965,-	€ 1.122,-



+ micronit MICROFLUIDICS =

STANDARD OPTIONS: WET CHEMICAL ETCHING

Micronit offers a number of standard options. If you require different specifications please contact us to discuss the possibilities. Most of the time we can work out a way to fabricate your chips.

To fabricate the chips Micronit uses wet chemical etching. This technique allows the fabrication of very accurate structures. As a result of the process the width of the channel is at least twice the depth.

SINGLE DEPTH ETCHED

Single depth chips are widely used to study basic microfluidics such as flow behaviour, droplet generation or (bio)chemical reactions.

- Channel depth: 5-100µm
- Chip dimensions: 45 x 15 x 1.8mm

SINGLE DEPTH ETCHED WITH THIN BOTTOM

Micronit is an expert in handling thin glass. Our thin bottom chips are ideal for use in combination with confocal microscopy.

- Channel depth: 5-100µm
- 145µm thin bottom
- Chip dimensions: 45 x 15 x 1.2mm

SINGLE DEPTH ETCHED WITH ELECTRODES

Platinum electrodes can be used for various purposes such as; heating, temperature measurements, cell manipulation or conductivity measurements.

- Channel depth: 5-100µm
- Platinum (Pt) electrodes
- Chip dimensions: 45 x 15 x 1.8mm

DOUBLE DEPTH ETCHED

Double etched chips are commonly used for making cell or particle traps and droplet generators.

- Channel depths: 5-100µm
- Chip dimensions: 45 x 15 x 1.8mm

FUSED SILICA ETCHED

Fused silica is a must for applications requiring UV-transparancy or low auto-fluorescence.

- Channel depth: 1-50µm
- UV transparent, low autofluorescence
- Chip dimensions: 45 x 15 x 1.4mm

STANDARD OPTION: POWDERBLASTING

To fabricate the chips Micronit uses powderblasting technology. This technique allows the fabrication of relative large channel dimensions. As a result of the process the walls have an angle of approximately 68 degrees.

SINGLE DEPTH POWDERBLASTED

For relatively large channel dimensions and internal volumes, powderblasting is the preferred manufacturing technique. These chips are mainly used for chemical synthesis.

- Channel depth: 150-500µm
- Chip dimensions: 45 x 15 x 1.8mm

HOW TO PROCEED?

- Make up to 4 different designs of a desired channel layout. These can be presented as CAD designs but simple sketches or just wording is also fine
- Contact the Micronit sales team to discuss your requirements and receive a quotation
- After you place the order our microfluidics design experts will transform your designs to CAD designs. We will send the designs back to you for a final check, and after your approval we will start processing.
- After 3 to 4 weeks, you will receive your chips and you can start your research.

Contact Information

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