

Silicon & Germanium Technical Parts

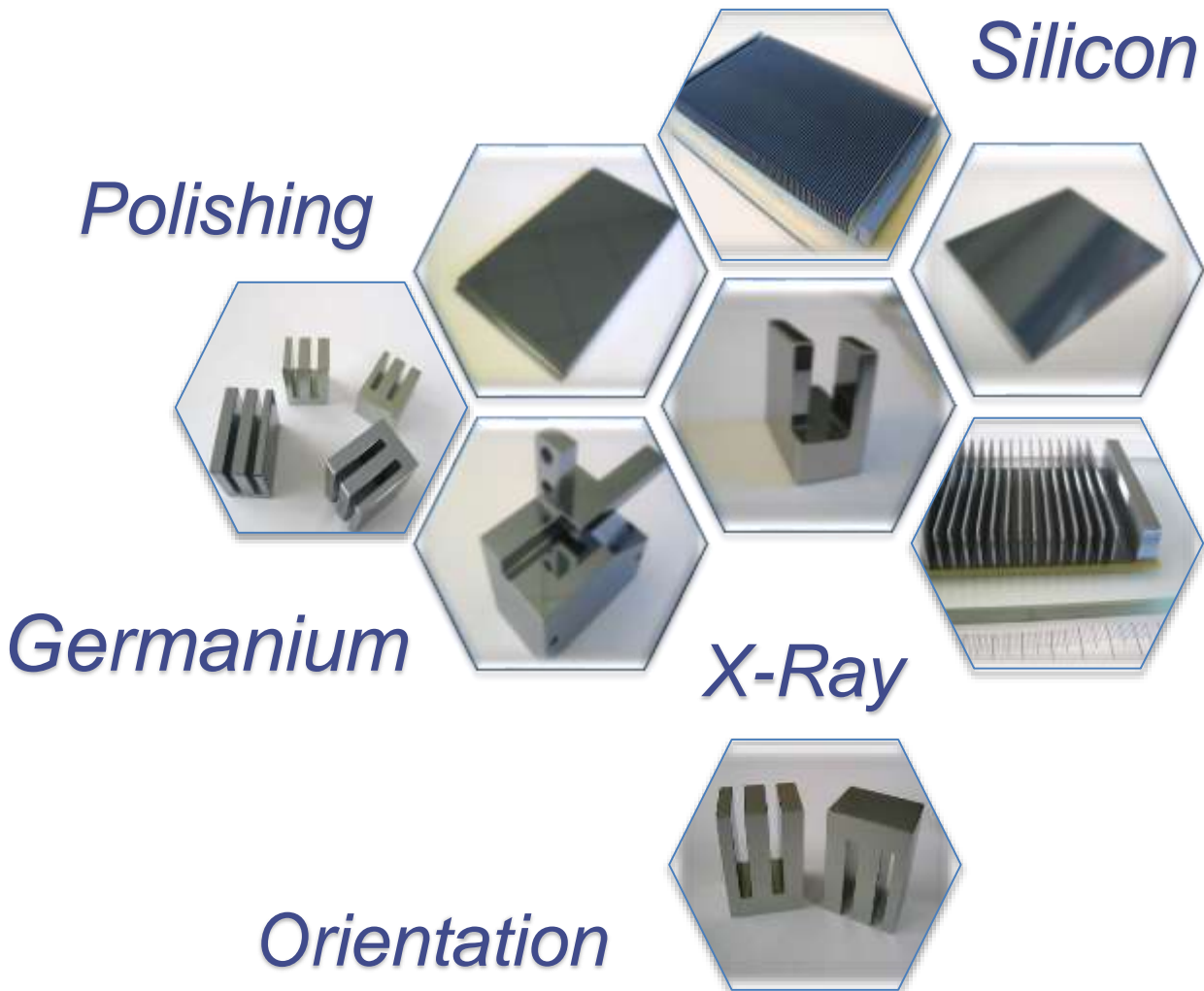


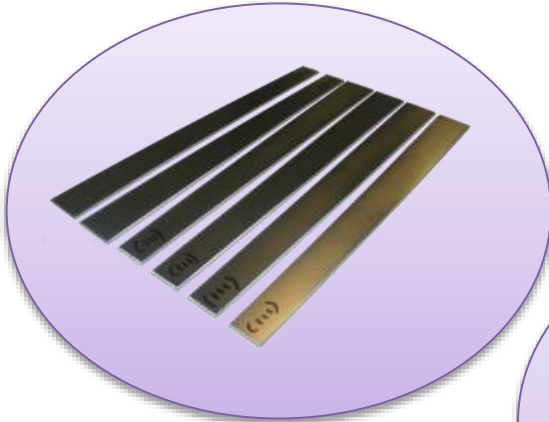
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This catalogue, serves as a reference of our range of capabilities: types of products, materials, usual specification, etc.... .

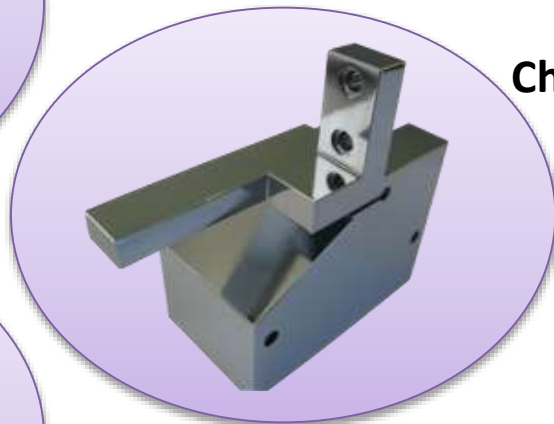
The following « product sheets » present some recent parts manufactured in Cz Silicon, FZ Silicon or Germanium.

Our experts can design new products according to your needs and specifications.

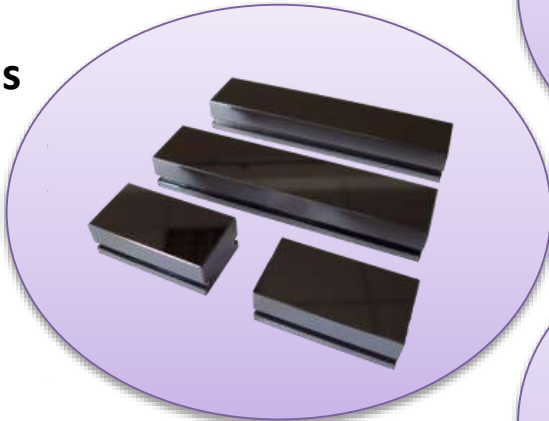
Blades



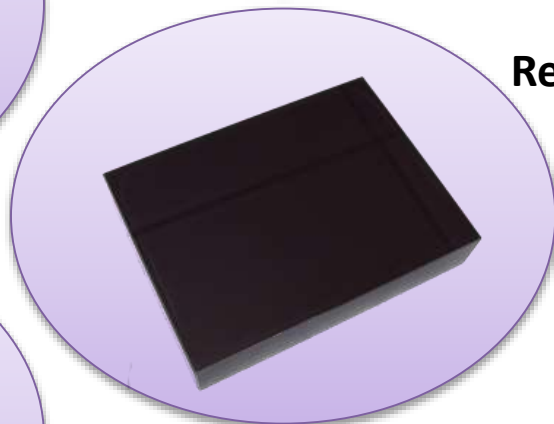
Channel-cuts



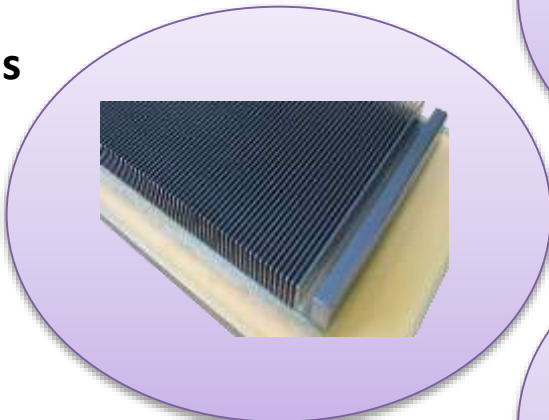
Crystals



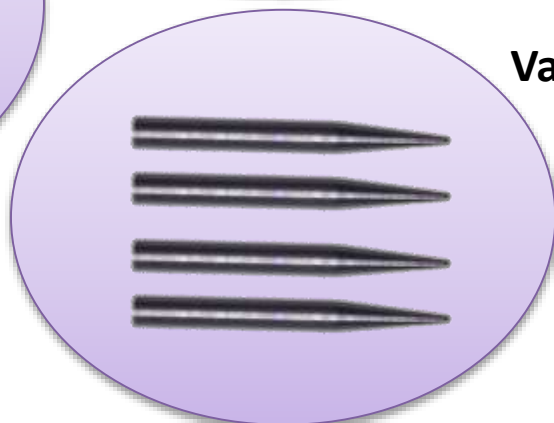
Repolishing



Crystals

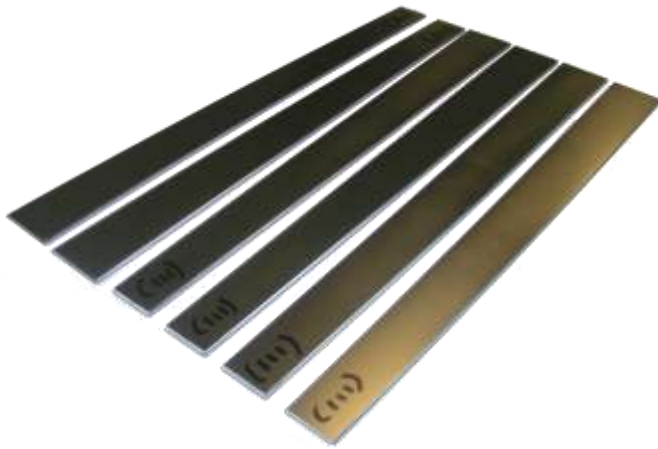


Various



Blades

Images



Product characteristics

High-precision orientation : (311) , (111) , ... at $\pm 0.01^\circ$

Optical polishing

Material : *FZ Silicon*

Maximum size to date : $320 \times 30 \times 1 \text{ mm}$

Other specs upon request and technical interaction

Channel-Cuts

Images



Product characteristics

High-precision orientation : (110) , (111) , (100) , (311) ... at $\pm 0.01^\circ$

Optical polishing

Material: *FZ Silicon, Germanium*

Manufacturing experience to date:

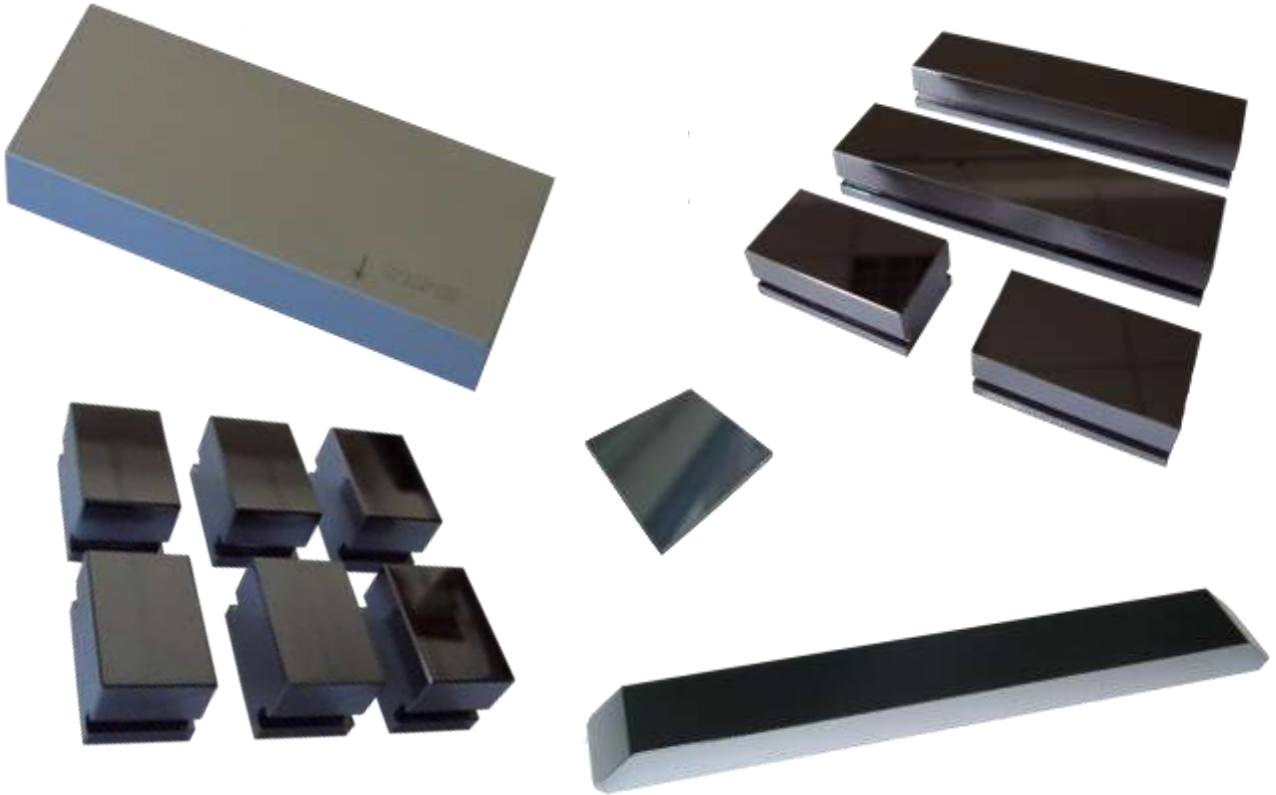
Minimum : 24 x 22 x 14 mm

Maximum : 130 x 112 x 55 mm

Other specs upon request and technical interaction

Si & Ge Crystals

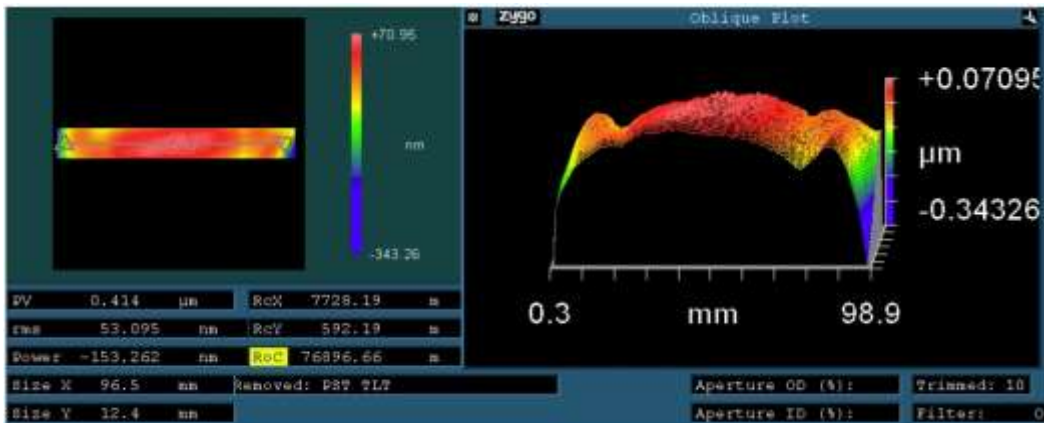
Product Image



Product characteristics

High-precision orientation : $\pm 0,01^\circ$
Optical polishing

Roughness: $< 3 \text{ \AA}$
Material: *FZ Silicon , Germanium*



Fizeau
interferometer
measurement
results

The instrument used is a ZYGO VeriFire AT+ with an aperture of 150mm allowing the measurement of the whole optical surface. (Same scale on left and right plots)

Si & Ge Block Repolishing

Product Image



Product characteristics

Roughness: $< 3 \text{ \AA}$

Material: *FZ Silicon , Cz Silicon ,Germanium*

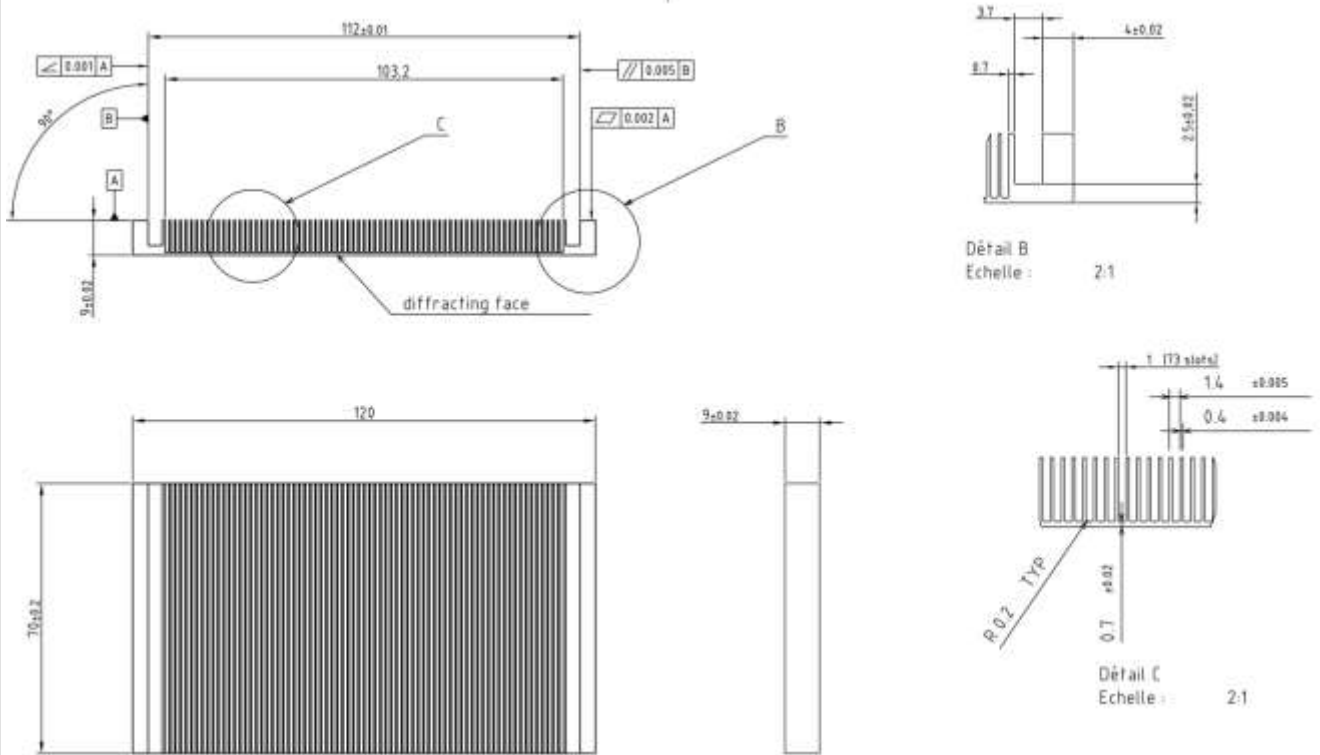
Maximum realized : *100 x 60 x 15 mm*

Minimum realized : *10 x 10 x 1 mm*

Other specs upon request and technical interaction

Sagittal Focusing Crystals

Diagram



Product characteristics and Product Image

High-precision orientation: $\pm 0,01^\circ$

Precision Machining

Bright etching

Optical polishing

CMP polishing

Roughness: $< 3\text{\AA}$

Material: *FZ Silicon*



Our Synchrotron clients

SOLEIL

ESRF

Paul Scherrer Institut

CHESS

Argonne National Laboratory

Our Neutron and IR sources clients

ILL

Helmholtz-Zentrum

IESL Forth

TU Delft

Universities of Copenhagen, Upsula,
Lund, Wageningen, Twente

...