MICROSTRUCTURES & GRADUATED FILTERS

TOP QUALITY, AFFORDABLE TECHNOLOGY

SWISSOPTIC
A member of the JENOPTIK Group

MICROSTRUCTURES & GRADUATED FILTERS

SwissOptic AG – a Jenoptik Group company – is your partner for the development and manufacturing of customized microstructured optics.

Microstructured optics have been produced at SwissOptic AG in the highest quality for decades now. Three reasons why you should choose a collaboration with SwissOptic AG:

1. Speed and flexibility
2. Broad production technology enables a wide range of products
3. Complete in-house processing chain for the production of high-precision optics

SPEED & FLEXIBILITY

We flexibly adapt to your individual requirements, and have a very fast development process. We guarantee the prototype production for coated sheets within three weeks. Our semi-automated production in the microstructures is ideal for the production of low and medium quantities up to 5,000 pieces quickly and cost-effectively.

PRODUCTION TECHNOLOGY

In addition to the classical contact lithography with a modern 8"-mask aligner and the contactless exposure by means of a projection imaging system, the exposure and processing of plastic films by laser is also applied at SwissOptic AG. Glass etching, impregnation with fluorescent color and painting complete the range of the production methods.

COMPLETE IN-HOUSE PROCESSING CHAIN

We provide everything from one source. We have complete in-house manufacturing capability from glass processing, microstructuring and coating to the subassembly.

SPECIFICATIONS

Materials

Optical glass, quartz glass, Zerodur®, crystalline materials, ceramics

Products

Incremental and absolutely coded circles and linear scales	for high-precision rotary encoders and length measuring units
Gray graduated filters	linear or rotary graduated filters on glass substrates or plastic films
Coated sheets	front and back-side alignment possible
Fluorescent structures in glass	inlaid structures in the µm range
Multilayer dielectric coatings	for imaging opto-electronic applications, various geometries and colored gradient filters

Microstructuring

Minimum structures size	1 µm
Accuracy	0.2 µm
Substrate size	up to 8 inches

Coatings

Black chromium coatings	high optic densities zp to OD7
Filter layers	mosaic and line filters, color filters, any geometrical structures
Beam splitters	chromatic, polarizing, non-polarizing, intensity divider
Mirror coatings	highly reflective metallic and dichroic layers from 120 nm to 12 µm R_{abs} @ λ > 0.08 %
ITO coatings	structured, transparent, electrically conducting coatings: $\sigma < 17$ Ω/cm2 for protection against EMI T > 80 % in the visible range, > 40 % at 1,550 nm

SwissOptic AG
Heinrich-Wild-Strasse, 9435 Heerbrugg, Schweiz, Telefon +41 71 727 30 74
swissoptic@swissoptic.com, www.swissoptic.ag

SWISSOPTIC
A member of the JENOPTIK Group