

# Research & Industrial Optics ( Products summary)

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## Components:

- ▶ Windows (detector's, Brewster)
- ▶ Lenses: spherical, cylindrical
- ▶ Prisms
- ▶ Beam-splitters
- ▶ Shaped sapphire rods and tubes
- ▶ The entire spectrum of ZnSe optics for IR applications, including CO<sub>2</sub>-laser
- ▶ Glass mirrors: flat, high precision flat, spherical, off-axis parabolic, diagonal
- ▶ ATR prisms
- ▶ Notch filters
- ▶ IR polarisers
- ▶ THz components: windows, lenses, prisms, polarisers, beamsplitters, filters, waveplates.

## Materials used for transmission optics:

- ▶ CaF<sub>2</sub>
- ▶ BaF<sub>2</sub>
- ▶ UV Fused Silica (analogue of Suprasil)
- ▶ UV-IR High Purity Synthetic Fused Silica
- ▶ NaCl
- ▶ KCl
- ▶ KBr
- ▶ K8 glass (analogue of BK7)
- ▶ Other optical glasses
- ▶ Crystal quartz
- ▶ Sapphire
- ▶ Silicon (including High-Resistivity FZ-Silicon for THz applications and EMI grade)
- ▶ Germanium (optical as well as EMI grade)
- ▶ GaAs
- ▶ ZnSe
- ▶ ZnS
- ▶ TPX
- ▶ Polyethylene

## Materials used for mirrors:

- ▶ K8 glass
- ▶ LK7 glass (analogue of Pyrex)
- ▶ Sitalt (analogue of Zerodur) and Zerodur
- ▶ Fused Silica
- ▶ Silicon



**TYDEX**<sup>®</sup>  
J.S.C.O.

Domostroitelnaya str. 16, 194292 St.Petersburg, RUSSIA  
Tel: 7-812-3346701, -3318702; Fax: 7-812-3346702  
E-mail: tydex@tydex.ru, URL: <http://www.tydex.ru>

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## Coatings:

- ▶ Anti-reflection coatings
- ▶ High-reflection (HR) dielectric mirror coatings
- ▶ Partial reflecting (PR) dielectric coatings
- ▶ Wavelength Separating/Combining Coatings
- ▶ Hot/Cold mirrors
- ▶ Metallic coatings
- ▶ Hard carbon coating (DLC: "Diamond-Like Coating")

## Sizes:

- ▶ From 2 mm to 1.3 m

## Surface Accuracy:

- ▶ To L/16-L/20@0.63 m

## Opto-electronic products:

- ▶ Golay cells



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