

He-Ne LASER MONOBLOCKS

FIELD OF APPLICATION:

Pieces of optical materials (monoblocks) with complex structure of grooves and holes forming electrode system and resonator channels of linear and ring He-Ne lasers.

TECHNOLOGIES USED:

- High-precision optical surface grinding and polishing with free abrasive based on optical contact.
- High-precision speed drilling of holes and grooves using tubular diamond instrument with lubricating fluid supply.
- High-precision chemical polishing of cavities and holes with environmentally safe solution.

SPECIFICATIONS:

Materials: CO115M glass ceramics, Zerodur, etc.

Accuracy of functional channel linear parameters:

- Misalignment of channel axis relative to reference plane ≤ 0.01 mm
- Channel axes nonintersection ≤ 0.01 mm
- Channel diameter difference ≤ 0.01 mm
- Accuracy of monoblock surface angular parameters $\leq \pm 3$ arc sec

