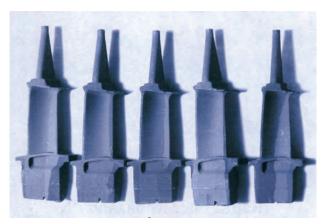
SEEDS FOR SINGLE-CRYSTAL BLADES OF GAS TURBINE ENGINES



Single crystal seeds



Single crystal blades

Areas of Application

The seeds are to be used for manufacturing blades of gas turbine engines (GTE) operating at a high temperature, under mechanical loads and corrosion impact, for needs of aerospace engineering, shipbuilding, and power engineering

Specification

Crystallographic orientation [100]; deviation from crystallographic orientation [100] is 5 degrees, maximally; a high perfection of microstructure

Advantages

The use of seeds with a perfect microstructure eliminates defects of casting the single crystal GTE blades, increases the blade service life and long-term heat resistance 1.5 – 2 times

Stage of Development. Suggestions for Commercialization

IRL7, TRL8 Manufactured, upon request. Production output is up to 3000 pcs monthly

IPR Protection

IPR3

Contact Information

Sergii G. Pugach, National Science Center "Kharkov Institute of Physics and Technology"; +38 057 335 68 43, +38 057 349 10 49, e-mail: pugach@kipt.kharkov.ua