



PRODUCTION OF TECHNICAL CERAMICS



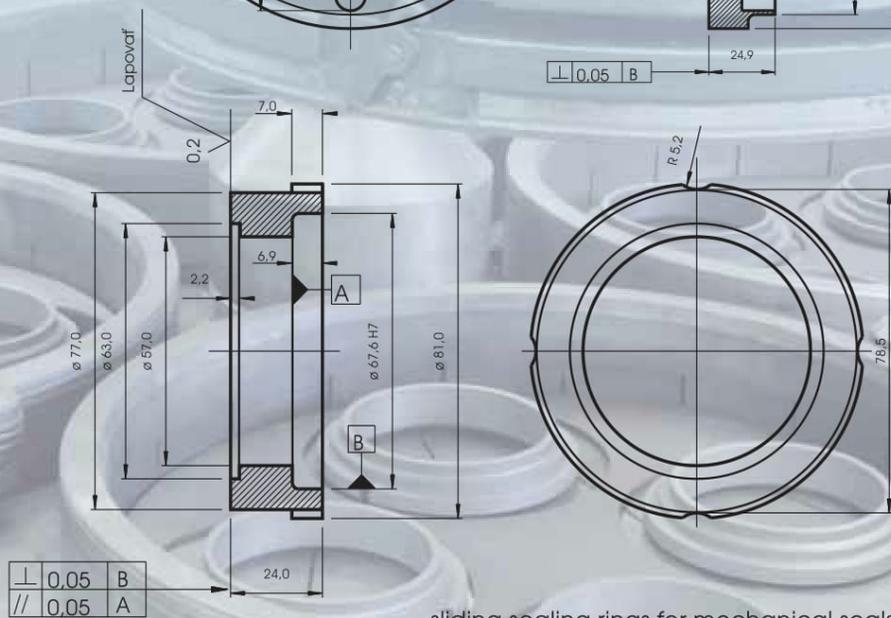
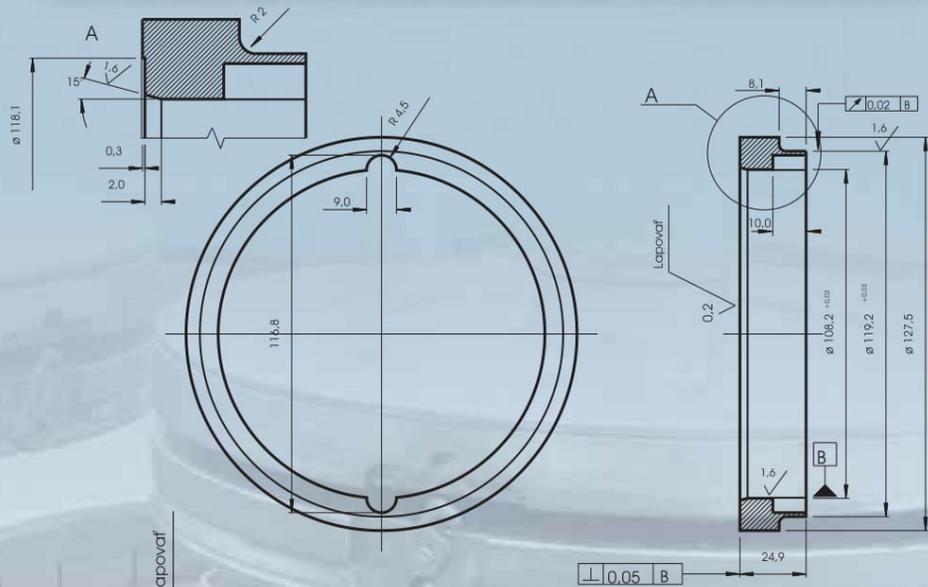


Company ROTANEO s.r.o. is producer of technical ceramics and was founded in year 2006 (its predecessor was company Borstela s.r.o. - years 2000 – 2006)

Our **production portfolio** consists from

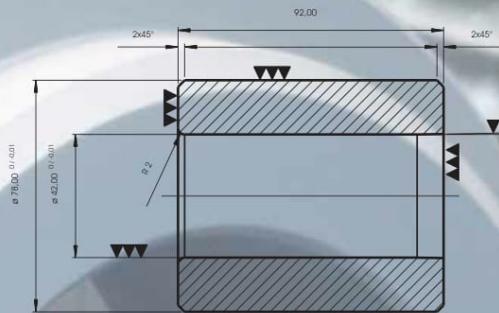
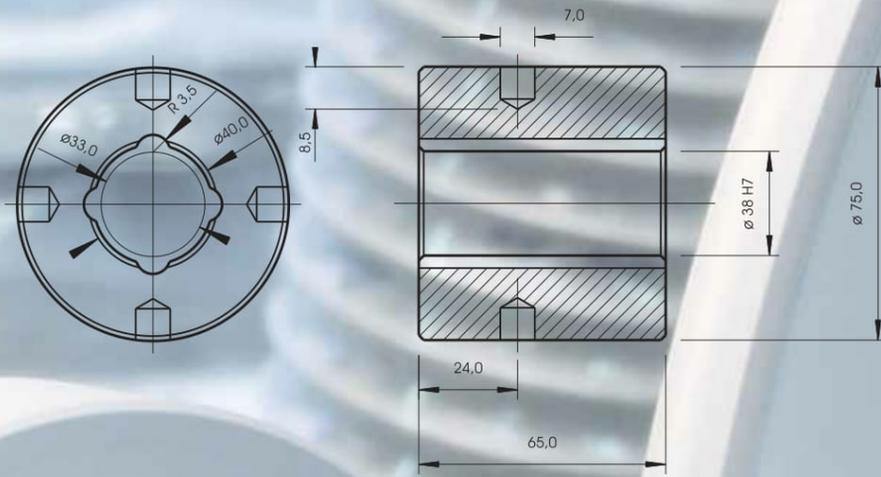
- siliciumcarbide sealing rings
- other siliciumcarbide sealing elements
- siliciumcarbide axial and radial sliding bearings
- siliciumcarbide components for pumps, vacuum pumps, autoclaves and mixers
- siliciumcarbide burners and nozzles for power plants
- siliciumcarbide sorting and grinding wheels
- atypical components for mechanical seals



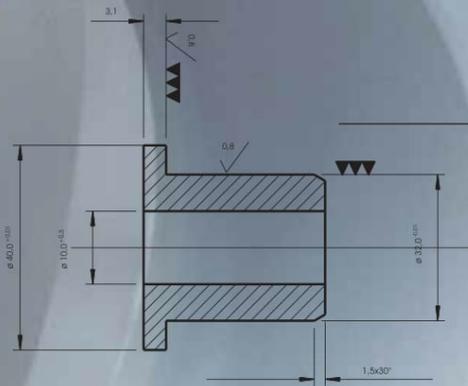


⊥	0,05	B
//	0,05	A

sliding sealing rings for mechanical seals
 material SiSiC (Siliciumcarbide)

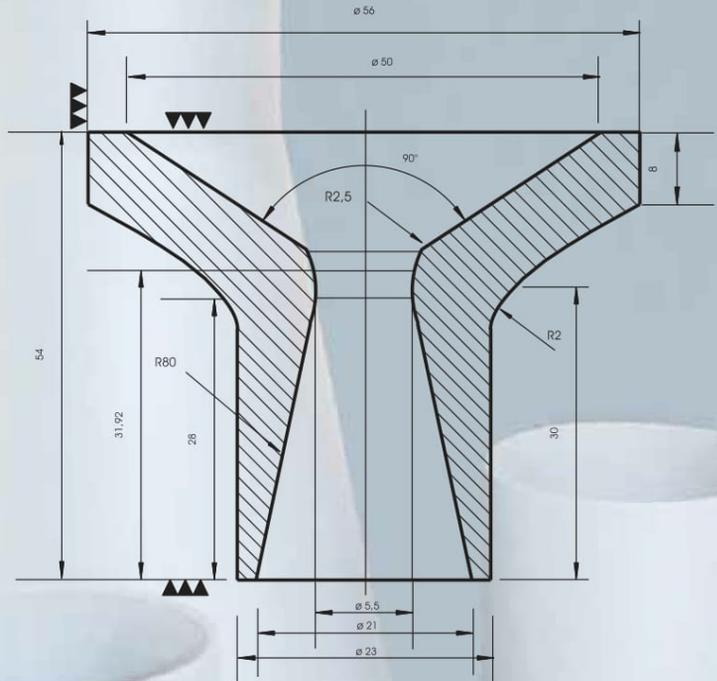
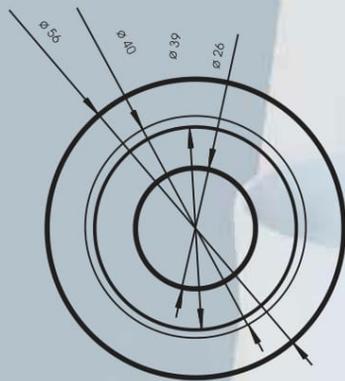


bearings for pumps
material SiSiC (Siliciumcarbide)

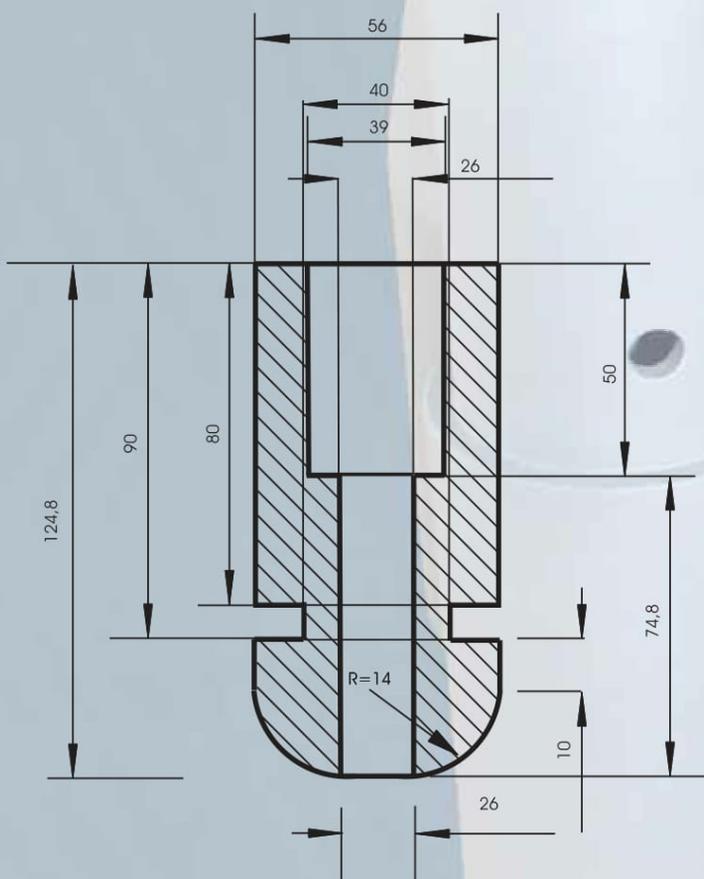


radial - axial bearings for pumps
material SiSiC (Siliciumcarbide)





nozzles for power plants
material SiSiC (Siliciumcarbide)



burners for power plants
material SiSiC (Siliciumcarbide)



Rotaneo s.r.o. is only producer of products from **reaction bonded siliciumcarbide (SiSiC)** in Slovakia

Physical properties of SiSiC

Density	3,05	g/cm ³
Porosity	0,01	%
Hardness – SiC	2690	HV 0,2
Hardness – Si	1250	HV 0,2
Compressive strength	3500	MPa
Bending strength (4 point method)	440	MPa
Modulus of elasticity (dynamic)	325	GPa
Thermal conductivity	120	W/mK
Thermal diffusivity	55	10 ⁻⁶ m ² /s
Thermal expansion (20 – 200 0C)	3,4	10 ⁻⁶ /K
Temperature resistivity in oxidizing atmosphere	1350	°C
Temperature resistivity in non oxidizing atmosphere	1350	°C

Siliciumcarbide is one of the best ceramic material available, some of its properties are

- high hardness
- wear resistance
- chemical resistivity
- low thermal expansion
- resistivity to corrosion
- high temperature resistivity
- low density
- excellent sliding properties
- impermeability to gasses and liquids
- chemical properties do not cause corrosion in aggressive mediums such as acids, alkali, vapors and gasses
- wear resistance in abrasive environment

Our unique technology of reaction bonding of siliciumcarbide products allows us to produce more complicated shapes compared to other types of ceramic.

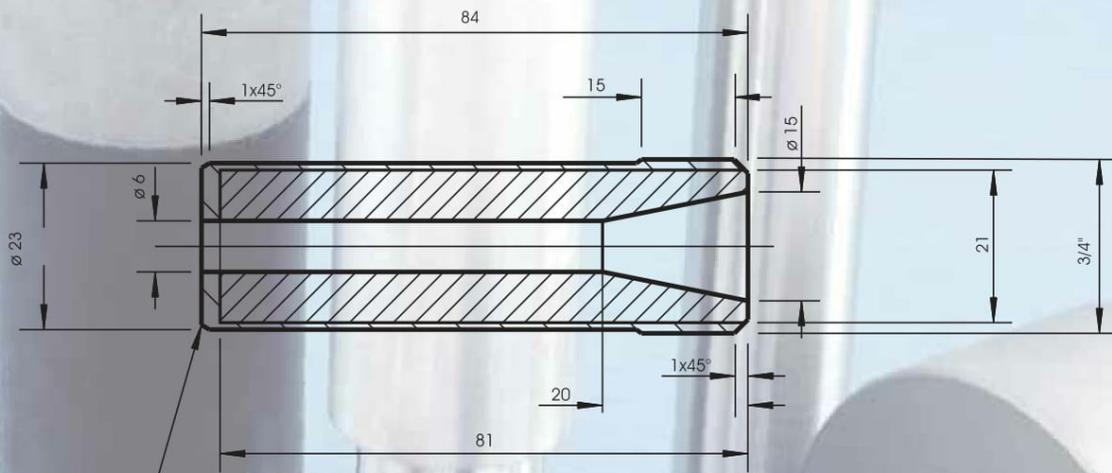
Siliciumcarbide products are used in various industries where high demands for quality of material are required.

Sealing rings and sliding bearings are used in these industries

- chemical industry – chemically aggressive mediums
- petrochemical industry – refineries, oil rigs
- food industry
- pharmaceutical industry
- in nuclear plants – circulation pumps
- pumps, sewage plants

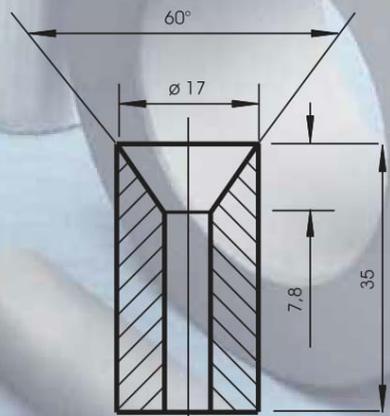
Our company have these products in its **business portfolio**

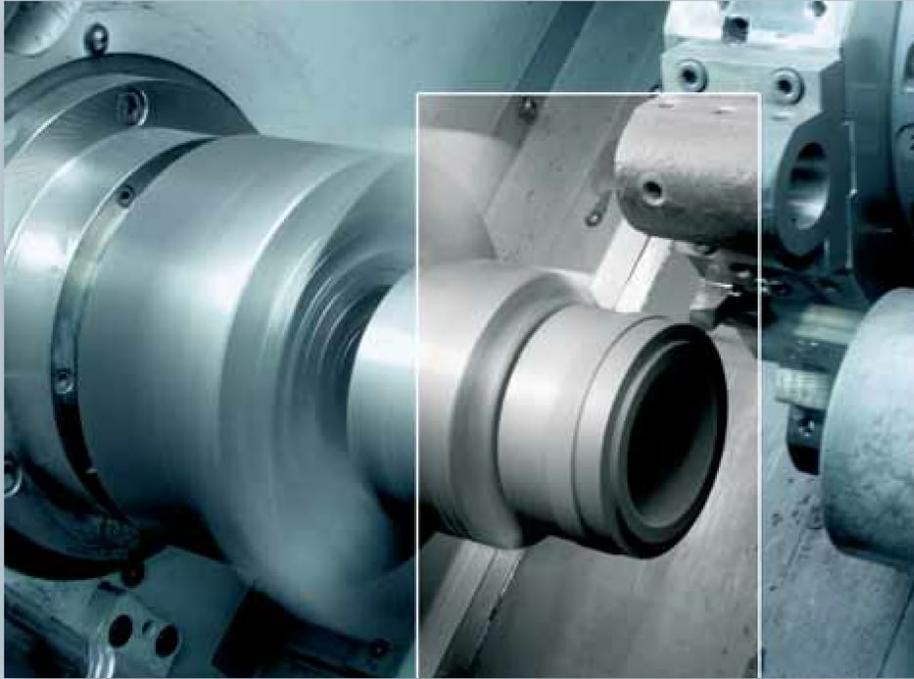
- blasting nozzles for sandblasting from materials boroncarbide (B4C), tungstencarbide (TC) and siliciumcarbide (SiC)
- tungstencarbide sealing rings and bearings
- spraying, desulfurizing and spiral nozzles
- mechanical seals and other sealing elements
- secondary sealing elements (o-rings, rubber sleeves)
NBR, FPM, EPDM, TEFLON



aluminium

nozzles for sandblasting
material B4C (Boroncarbide)





Company Rotaneo s.r.o. have its own production plant with office. In production part of our facility we have sintering and heat treating furnaces, machines for processing siliciumcarbide material – lathes, milling, grinding machines, sandblasting devices, cutters and others machines used for material processing.

We are responsible partners for each of our clients; we offer flexible approach, short delivery terms (in individual cases production within 48 hours) and competitive prices.

We offer fast and good service for our clients, consult with them their needs, we always try to find best solutions. We put products into production according to orders from our customers.

In our company we do final inspection for each order and at the end of production process measuring protocol is added to production documentation.

ROTANEO s.r.o.

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