



**TRANSCERAM**

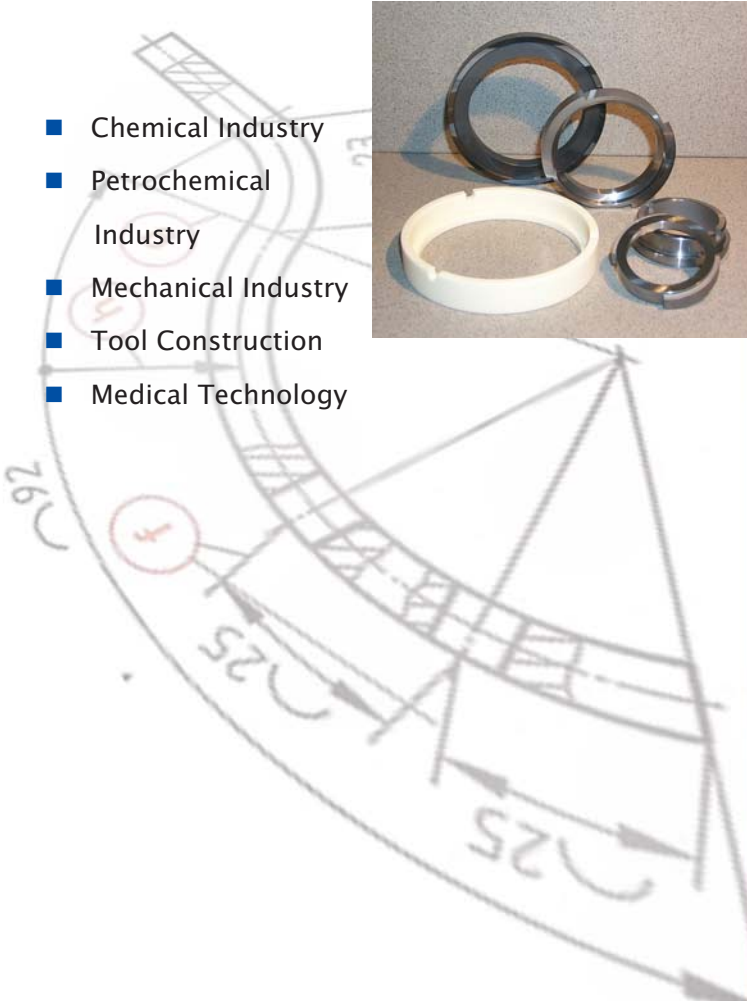
# Innovation

to meet customer expectations

In the **25** year history of the company we have changed from being purely a specialist for ceramics to becoming innovative experts of a diversity of materials.

Over the years we have developed our extensive know-how in corrosion protection and protection against wear and tear. Today we offer a wide range of modern products and materials. This means we are internationally operational in a variety of industries in particular in the following:

- Chemical Industry
- Petrochemical Industry
- Mechanical Industry
- Tool Construction
- Medical Technology



CERAMICS

# Precision on time

Our manufacturing plant has grown continually since 1987 offering our customers not only quality but highest precision. Our CNC controlled machinery allows series production and the production of single pieces and prototypes.



Round and flat grinding, honing, turning, drilling, lapping and polishing in  $\mu\text{m}$  and  $\text{mm}$  – you will be impressed by the results.



Our lean organisational structure enables us to work specifically to your requested delivery dates. Delivery times for blanks of two weeks and four weeks for completely finished parts based on your drawings is standard at Transceram.



- Sliding bearings
- Axial bearings
- Sleeves or Bushings
- Sealrings
- Rings for Shrinkfittings
- Shrinkrings/Ferrules
- Pistons/plungers
- Valve seats
- Poppets
- Precision balls
- Precision parts



CARBIDES

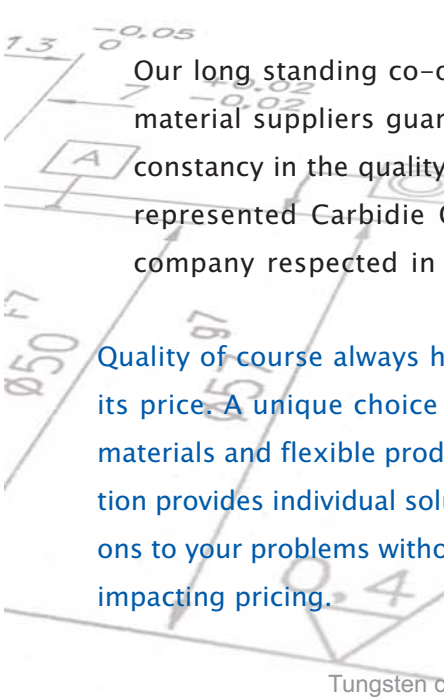
# Quality

at reasonable prices

Our reputation as a reliable partner is put to the test on a daily basis when supplying not only the original equipment but also spare parts to manufacturers of pumps, manufacturers of chemicals, service companies for seal technology and tool makers.

Our long standing co-operation with leading material suppliers guarantees our customers constancy in the quality of materials. We have represented Carbidie Corp. for 20 years, a company respected in the field of carbides.

Quality of course always has its price. A unique choice of materials and flexible production provides individual solutions to your problems without impacting pricing.



Tungsten carbide blanks

Tungsten carbide semi-finished material

Precision parts

Capacitors/Condensers

Feedthroughs/Channels

Parts for vacuumtubes/Tube construction units

Vacuum chamber parts

Insulation parts

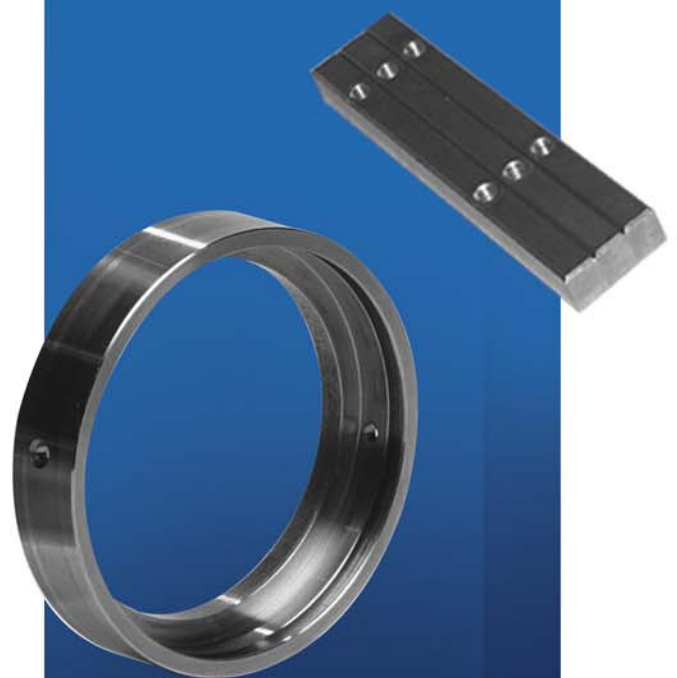
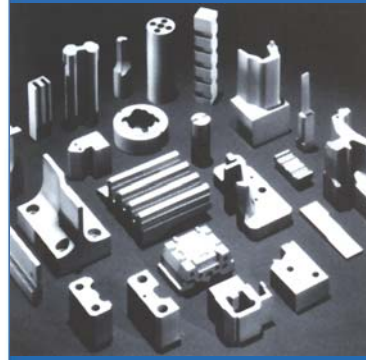
Sleeves and ferrules

Stellite

Molybdenum

Tungsten

Tantulum



SPECIAL ALLOYS

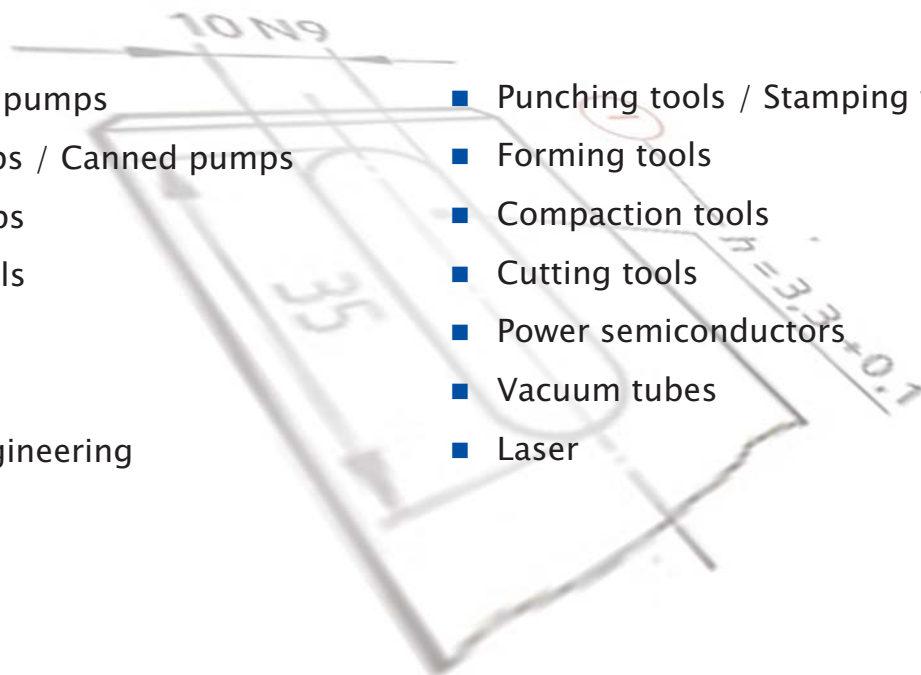
# Materials

Specifications (average values)

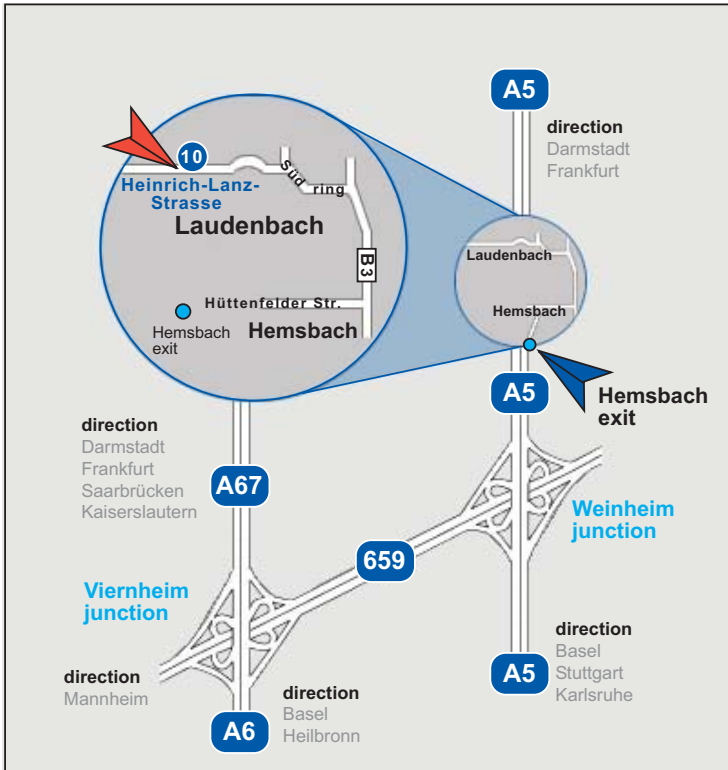
Material		Alumina	Silicon-carbide	Silicon-nitride	Zirconia	Tungstencarb. cobalt binder	Tungstencarb. nickel binder
TRANSCERAM-CODE		Al <sub>2</sub> O <sub>3</sub> (99,7%)	SSiC	Si <sub>3</sub> N <sub>4</sub>	ZrO <sub>2</sub>	CD-650	TC-6N
PROPERTY	UNIT						
Density	[g/cm <sup>3</sup> ]	3,9	3,1	3,2	6,0	14,0	14,9
Porosity	[%]	0	0	0	0	0	0
Hardness	[GPa]	22	26	16	13	15	17
Pressure resistance	[MPa]	2800	2400	3000	2200	4480	4200
Bending strength	[MPa]	340	450	750	810	3450	1800
Modulus of elasticity	[GPa]	380	420	300	200	550	610
Thermal conductivity	[W/m <sup>-1</sup> K <sup>-1</sup> ]	25	100	35	2	45	50
Thermal expansion	[10 <sup>-6</sup> K <sup>-1</sup> ]	8,1	4,1	3,2	9,1	5,5	5,2
Thermal shock parameter	[K]	200	320	450	300	400	400
Max. application temperature	• Air [°C]	1700	1450	1400	1200	900	900
	• Inert gas [°C]	1700	1650	1450	1400	1000	1000
Electrical resistivity	[Ωcm]	10 <sup>14</sup>	10 <sup>4</sup>	10 <sup>11</sup>	10 <sup>9</sup>	10 <sup>-2</sup>	10 <sup>-2</sup>

A few applications for our products:

- Dosing pumps
- High-pressure pumps
- Magnetic pumps / Canned pumps
- Chemical pumps
- Mechanical seals
- Agitators
- Valves
- Mechanical engineering
- Punching tools / Stamping tools
- Forming tools
- Compaction tools
- Cutting tools
- Power semiconductors
- Vacuum tubes
- Laser







Use our experience



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