



SAAR-HARTMETALL UND WERKZEUGE

GMBH



POWDER METALLURGY

Tungsten Carbide

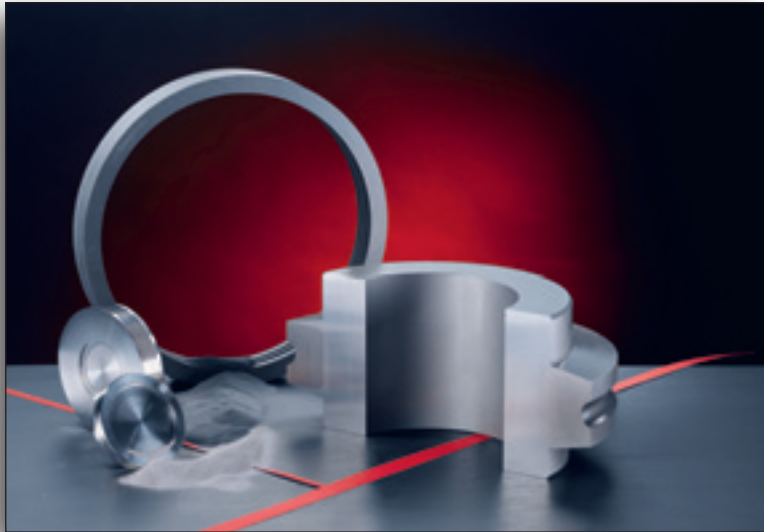
- Co-binder grades
- Ni-binder grades
- Ni/Co-binder grades

PM-Alloy

- Steels
- Stellites
- Superalloys

SARACOM

- Steel/Tungsten Carbide
- Steel/PM-Steel
- Steel/Stellite
- Steel/Superalloy



Manufacturing size: • max. sinter-/HIP- \varnothing : 530 mm
• max. HIP-length: 750 mm
• max. sintering length: 1300 mm

Applications:

- Wear protection parts (plates, strips)
- Forming tools (mandrels, punches, cores, dies)
- Circular knives, shear blades, cutting-off blades
- Cutting tools

- Hot forming tools for the glass industry
- Hot pressing dies for nonferrous metals
- Fittings for power plants

For further information please contact:

phone: ++49 6806/3089-265 Powder Metallurgical applications
phone: ++49 6806/3089-200 Tungsten Carbide applications

ROLL RINGS

Roll rings and composite rolls for wire rod mills, bar and section mills and hot reducing tube mills

- Roll rings made of Tungsten Carbide and of PM-Steel
Manufacturing size: up to \varnothing 530 mm
Condition: grooved or smooth as required
- Tungsten Carbide – steel compound rolls (Saracom)
- Composite rolls with Tungsten Carbide rings or PM high speed steel rings for intermediate stand (SARAMAX)
- Pinch rolls and guide rolls made of Tungsten Carbide and PM-Steel

For further information please contact:

phone: ++49 6806/3089-242
fax: ++49 6806/3089-259
rolls@saar-hartmetall.de



WEAR TOOLS AND FORMING TOOLS

Special Tools made of Tungsten Carbide, steel, composite materials and cobalt-, nickel-, and iron-base powder metallurgical alloys

- Cold heading tools (dies, cores)
- Massive forming tools (dies, cores, punches)
- Drawing tools (pressure pads, cutting rings, drawing dies, cupping mandrels)
- Boring- and forming tools
- Plasticizing cylinders, solid carbide feed screws and accessories
- Extrusion tools made of Tungsten Carbide and of composite materials
- Hot cutting tools
- Pressing rings, pressing moulds, punches and dies for the manufacture of diamond tools
- Cutting knives and cutting disks for the glass industry
- Shear blades for slitting sheet metal and for cutting paper
- Circular knives



For further information please contact:
phone: ++49 6806/3089-263
fax: ++49 6806/3089-279
wear@saar-hartmetall.de

TOOLS FOR THE PRODUCTION OF BRIGHT STEELS

Complete tool systems and wear parts for peeling machines of different types and dimensions, tools for the production of drawn- and ground bright steels, tools for machining bar ends

- Coated solid carbide inserts and brazed inserts
- Tool holders and cassettes
- Cutting heads
- Feed rolls, guide rolls
- Holders for rolls, bolts
- Guide strips
- Straightening rolls, calibrating rolls, measuring rolls
- Chamfering-, facing- and centering tools
- Bar supports
- Polishing disks
- Jaws

For further information please contact:
phone: ++49 6806/3089-280
fax: ++49 6806/3089-299
peeling@saar-hartmetall.de



TUBE TOOLS

Tools for inside- and outside deburring of longitudinally welded tubes, I.D. 14 – 600 mm, as well as tools for the manufacture and machining of tubes



- Mounting units
- Towbars and impeters
- Notching carriers with notching roll
- Inside deburring tools with cutting ring holders
- Holders, inserts and blades for outside deburring
- Special tools for inside- and outside deburring
- Cutting-off blades

Tools for machining tube ends (chamfering, facing etc.)

- Special tube rolls
- Special welding rolls
- as well as tools for the spring industry

For further information please contact:

phone: ++49 6806/3089-300

fax: ++49 6806/3089-319

tube@saar-hartmetall.de

CUTTING TOOLS

Standard- and special cutting tools made of Tungsten Carbide and rapid steel as well as carbide-tipped tools with the matched holder

- Standard cutting inserts (DIN) and special cutting inserts
- Turning- and milling tools for rough machining
- Special shaping tools
- Standard- and special holders for turning inserts
- Drill bits with holder
- Standard toolbits (DIN) and special toolbits
- Cutting blades for the plastic industry
- Drills for the mining industry
- Carbide-tipped milling disks for road work
- Milling inserts for cleaning foundry ladles
- Tungsten Carbide blanks

For further information please contact:

phone: ++49 6806/3089-326

fax: ++49 6806/3089-339

cutting@saar-hartmetall.de



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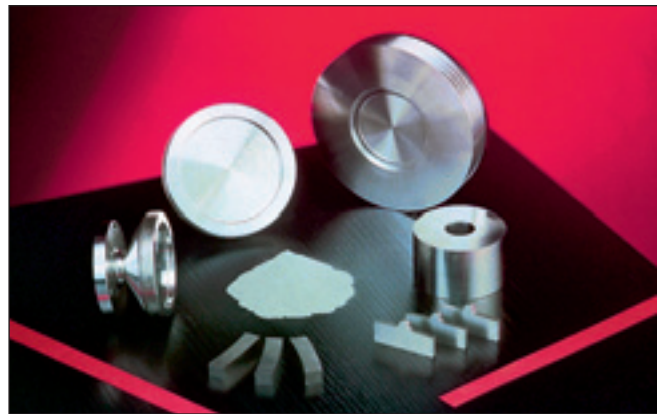


Near net shape products PM



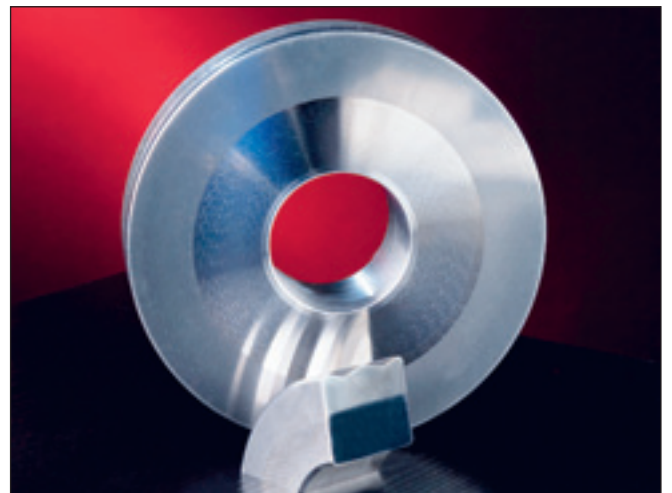
Near net shape products TC

Cold working materials and tools



Hot working and high temperature resisting materials and tools

Composite materials for different manufacturing branches





**SAAR-HARTMETALL
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