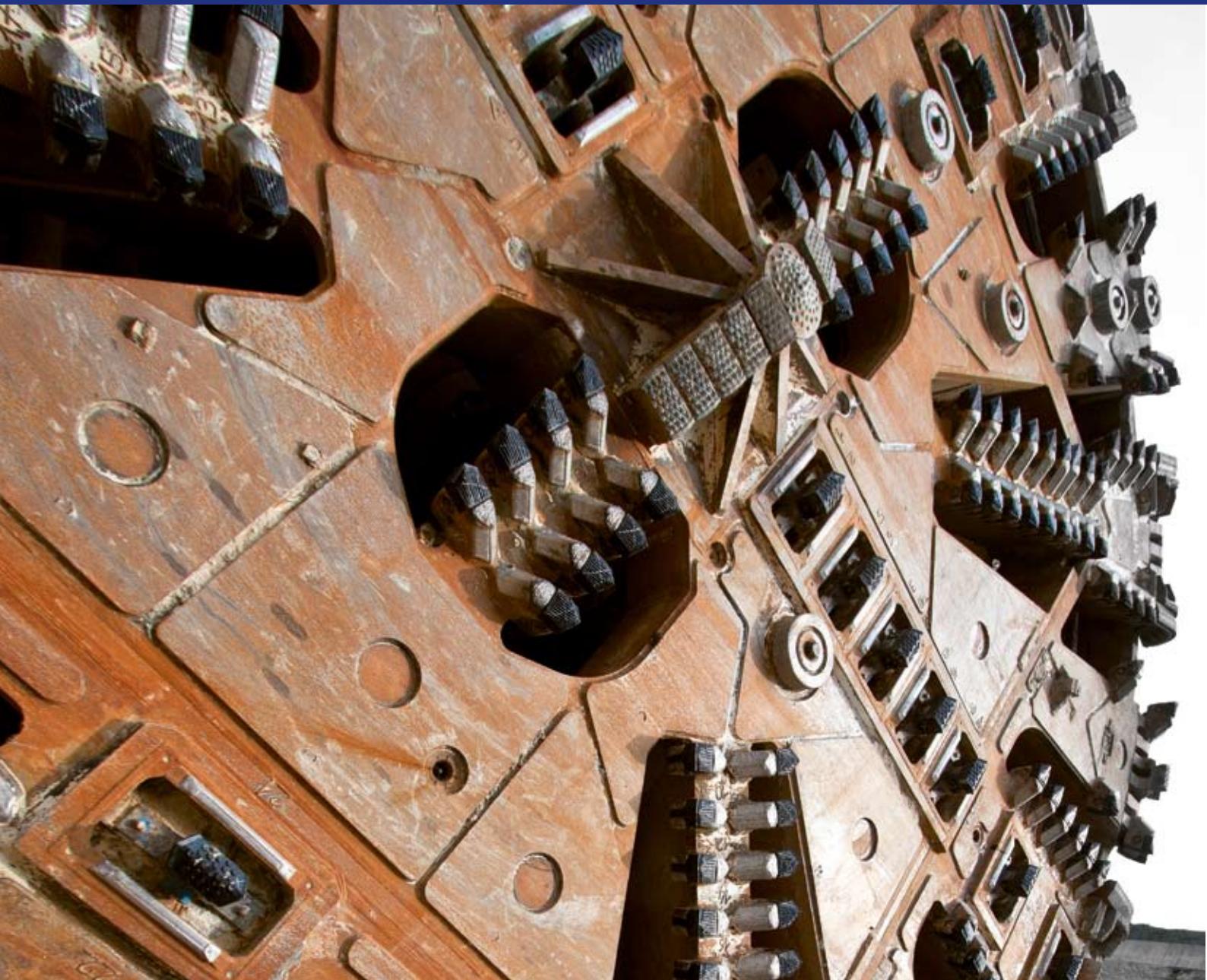


## COROCARB FOR EXTREME WEAR PROTECTION

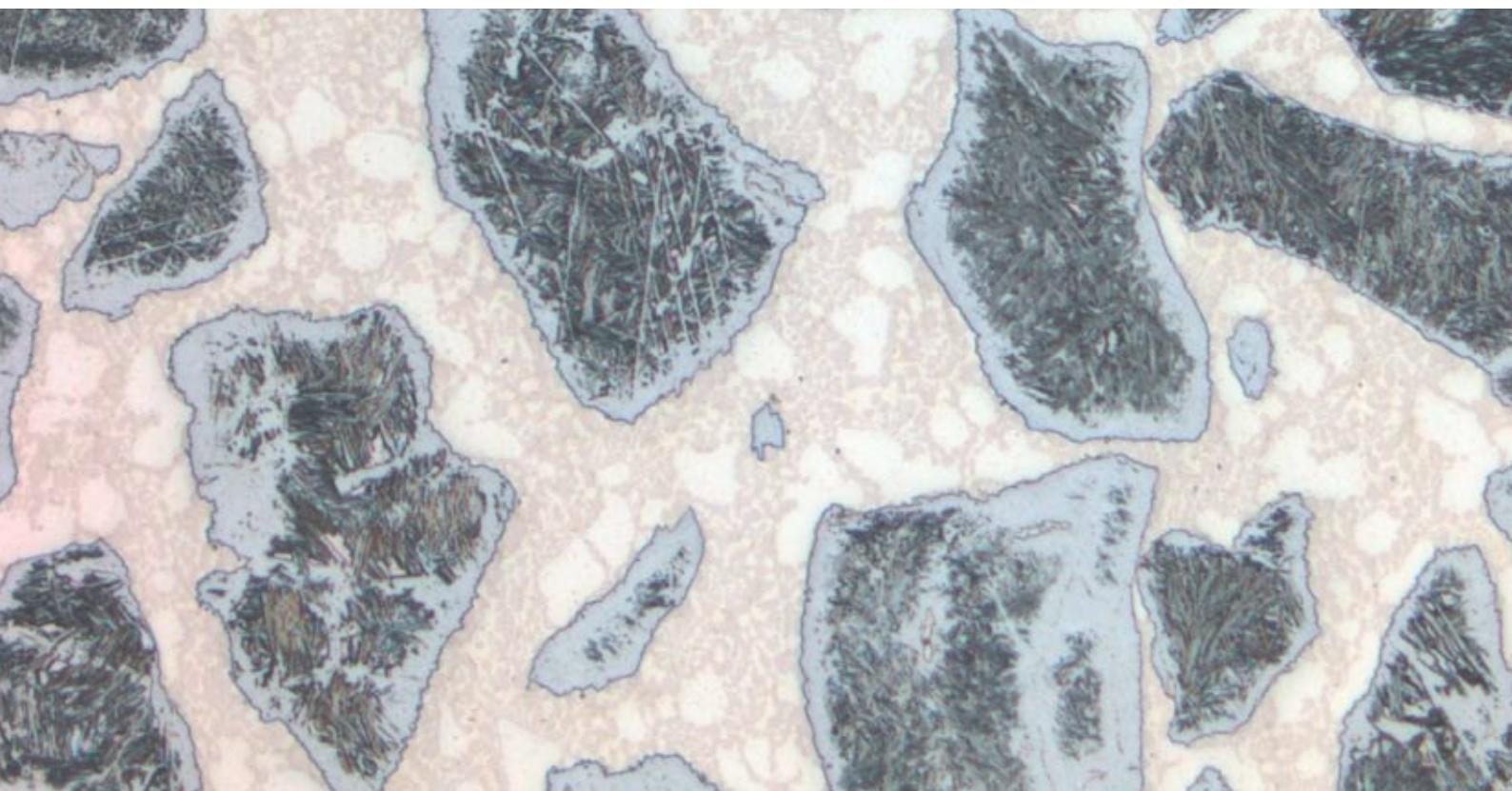


# COROCARB FOR EXTREME WEAR PROTECTION

Corodur Fülldraht has been an industry leader in the area of wear protection for 35 years.

We specialise in the manufacture of high quality consumables for arc-welding and for thermal spraying. The product range includes flux-cored wires for OPEN ARC (FCAW), MIG (MGAW) and submerged arc (SAW) welding. We also supply stick electrodes of equivalent composition as well as a range of tungsten carbide products for the most extreme wear conditions.

FLAME SPRAY POWDERS Grain size	Chemical composition		Wear resistant factor	General characteristics
	COROLOY FS 60	FTC		
<b>COROCARB FS 30</b> -106+38µm	70%	30%	+	
<b>COROCARB FS 40</b> -106+38µm	60%	40%	++	NiBSi-Matrix blended with fused Tungsten Carbides
<b>COROCARB FS 50</b> -106+38µm	50%	50%	+++	For rust and acid resistant, resistant to strong abrasion and heat.
<b>COROCARB FS 60</b> -106+38µm	40%	60%	++++	Mechanical engineering, pump and mill construction, petrochemical, etc.
<b>COROCARB FS 70</b> -106+38µm	30%	70%	+++++	
<b>COROCARB FS 80</b> -106+38µm	20%	80%	++++++	



# COROCARB FOR EXTREME WEAR PROTECTION

FLUX CORED WIRES	TYPICAL ALL WELD METAL ANALYSIS (%)	APPLICATION
<b>COROCARB FE 40</b>	Fe- C- Co- W – Matrix + 40% FTC (2400 HV <sub>0,2</sub> )	
<b>COROCARB FE 40 +</b>	Special alloyed Fe-Matrix + 40% FTC (2400 HV <sub>0,2</sub> )	Mining, Excavation, Earth Moving, Tunneling Shields, Road Construction, Well Drilling and Deep Drilling.
<b>COROCARB FE 60</b>	Fe- C- Co- W – Matrix + 60% FTC (2400 HV <sub>0,2</sub> )	
<b>COROCARB FE 42 +</b>	Corrosion resistant Fe-Matrix + 40 % FTC (2400 HV <sub>0,2</sub> )	Mining, Excavation, Earth Moving, Tunneling Shields, Road Construction, Well Drilling and Deep Drilling. The matrix is highly resistant against corrosive media.
<b>COROCARB NI 40</b>	Ni-B-Si-Matrix + 40% FTC (2400 HV <sub>0,2</sub> )	Mining, Excavation, Earth Moving, Tunneling Shields, Road Construction, Well Drilling and Deep Drilling. The matrix is highly resistant against corrosive media.
<b>COROCARB NI 40 +</b>	Special alloyed Ni-Matrix + 40% FTC (2400 HV <sub>0,2</sub> )	Repairing & hardfacing ferritic and austenitic steel tools and machine parts (steel castings). Specially developed for welding on tool joints and stabilizers in the petroleum industry. The matrix is highly resistant against corrosive media.
<b>COROCARB NI 60</b>	Ni-B-Si-Matrix + 60% FTC (2400 HV <sub>0,2</sub> )	Mining, Excavation, Earth Moving, Tunneling Shields, Road Construction, Well Drilling and Deep Drilling. The matrix is highly resistant against corrosive media.

SPRAYING WIRES	HARDNESS	GENERAL CHARACTERISTIC
<b>COROCARB SP 400</b> Nickel Base + FTC	FTC 2400 HV <sub>0,1</sub> Matrix 540 HV <sub>0,1</sub>	COROCARB SP 400 is a cored metal wire filled with fused tungsten carbides (FTC) embedded in a Ni- B- Si- matrix. Highly wear-loaded surfaces and cutting edges.
<b>COROCARB SP 402</b> Fe Base + FTC	FTC 2400 HV <sub>0,1</sub>	COROCARB SP 402 is a cored metal wire filled with fused tungsten carbides (FTC) embedded in a Fe- C- W- matrix. Highly wear loaded surfaces.

PTA POWDERS	TYPICAL ALL WELD METAL ANALYSIS (%)	APPLICATION
<b>COROCARB 610 PTA</b> grain size -180 +53µm	38-40 % COROLOY 60 PTA + FTC	Particularly high content of highly wear-resistant fused tungsten carbides (FTC). Tools for deep drilling and mining, excavator parts, scrap presses, extremely wear-resistant cutting edges in recycling technology, screw bars as well as components from agricultural engineering.
<b>COROCARB 611 PTA</b> grain size -180 +53µm	38-40 % COROLOY 60 PTA + FTC	Crack-resistant alloy with a high proportion of wear-resistant fused tungsten carbides (FTC). Tools for deep drilling and mining, excavator parts, scrap presses, extremely wear-resistant cutting edges in recycling technology, screw bars as well as components from agricultural engineering.
<b>COROCARB 616 PTA</b> grain size -180 +53µm	38-40 % COROLOY 60 PTA + 60-62 % cFTC	The alloy has a high content of thermodynamically stabilized FTC, which is characterized by a very high hardness, with comparatively high toughness. Tools for deep drilling and petroleum industry.
<b>COROCARB 620 PTA</b> grain size -180 +53µm	38-40 % COROLOY 60 PTA + 60-62 % sFTC	High content of spherical tungsten carbides (sFTC). Tools for deep drilling and mining, excavator parts, scrap presses, extremely wear-resistant cutting edges in recycling technology, screw flights and components from agricultural engineering.

# WHY COROCARB



## COROCARB

Wear forces encountered during the extraction process cause extreme degradation of buckets, teeth, blades and transporting equipment, chutes, and more. Long downtimes for machinery repairs can cause unexpected costs. Corodur's specially developed tungsten carbide series called "COROCARB" are able to minimize this wear and reduce downtime. Understanding the effects of variable soil and rock compositions requires special geological and metallurgical skills. Our experts can analyze wear situations and recommend the right products from our wide range of Tungsten Carbide products.

PRODUCT	DESCRIPTION	GENERAL CHARACTERISTICS
<b>COROCARB A</b>	COROCARB A is a composition of a special pre-alloyed tube filled with coarsely grained Fused Tungsten Carbide (FTC).	For hardfacing and repairing tools and machine parts exposed to wear in: Mining, Road Construction, Ceramic, Petroleum and Excavation and Dredging.
<b>COROCARB NIA</b>	COROCARB-NIA is a cold rolled, formed, closed seam nickel tube filled with fused tungsten carbide (FTC) and Cr, B and Si for oxyacetylene application.	Hardfacing on ferritic and austenitic steels (steel casings), overlaying mixer blades and conveyors and screws in: chemical & dye industry and food industry. Recommended for hardfacing rock bits and stabilizers in the petroleum industry.
<b>COROCARB NISE</b>	COROCARB-NISE is a tubular electrode filled with fused tungsten carbide and a special nickel alloy for manual welding	Repairing and hardfacing ferritic and austenitic steels (steel castings), stabilizer blades, conveyor screws, milling plates, deep drilling tools, mixer blades.

PRODUCT	DESCRIPTION	GENERAL CHARACTERISTICS
<b>COROCARB B</b>	COROCARB B is a nickel core flexible rod coated with both fused tungsten carbide (FTC) and Ni-Cr-B-Si developed for oxyacetylene welding	Hard facing of ferritic and austenitic steels (steel casings), applied for overlaying mixer blades, screws and conveyors in chemical and dye industry, food industry. Specially recommended for stabilizer blades in the petroleum industry.
<b>COROCARB BK</b>	Special alloy with Ni-Cr-B-Si and a high content of spherical tungsten carbides (SFTC). Flexible rod for oxyacetylene application.	Similar to COROCARB B, but filled with spherical tungsten carbides.

Other standard Tungsten carbide products available on request.



**CORODUR**  
FÜLLDRAHT GMBH  
*Das Original*

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