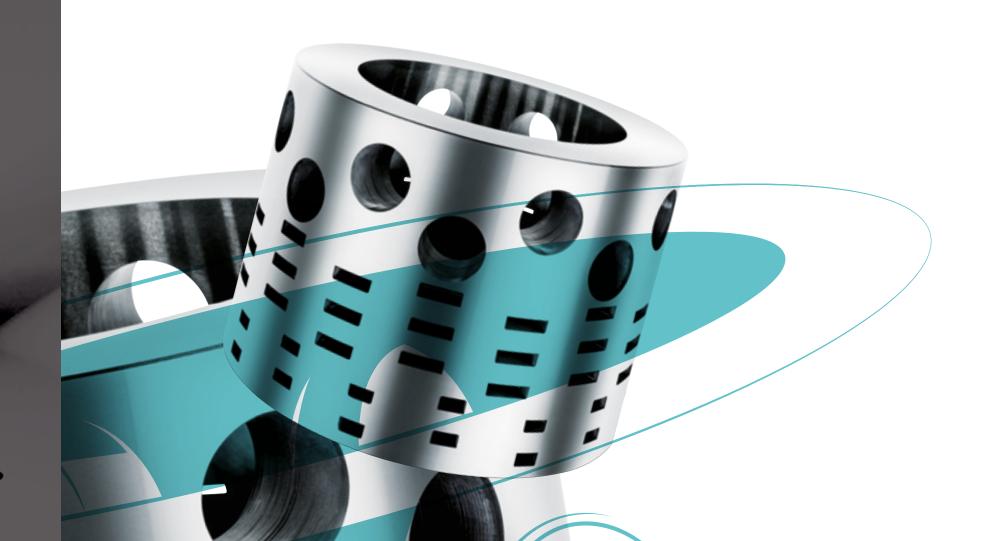
» CARBIDE AND COATINGS

OIL GAS PETROCHEMICALS Enduring. Corrosion-proof.





» CARBIDE TECHNOLOGY

Parts, tools and components made of cemented carbide are the ultimate in wear resistance and longevity and ensure utmost versatility. DURIT carbide solutions stand up to the toughest demands.

» DEDICATED TO CARBIDE

Carbide from a single source—from blanks to high-precision final products.



» WEAR PROTECTION FOR OIL, GAS AND PETROCHEMICALS

Erosion, abrasion, corrosion: DURIT products outperform throughout all areas of **offshore technology, exploration technology, drilling technology and power generation**—applications in which cemented carbide is the perfect solution.

» WE SOLVE WEAR PROBLEMS

Abrasive solids, sand and liquids cause enormous wear in production and processing operations. DURIT realizes **first-grade carbide and coating solutions for all these applications.**

» WITHSTANDS MOST EXTREME DEMANDS

Products:

disc stacks • valve inserts • bearing sleeves • pistons • balls and seats • sleeves • nozzles • complex components for extreme applications

Typical applications::

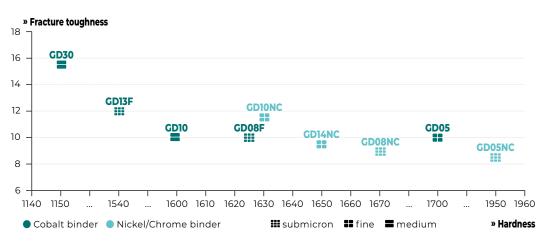
control valves • drill drives • check valves • choke valves • shut-off valves • processing systems • onshore • offshore





Selection of application-specific carbide grades ::

	GRADE	Composition	Binder (%)	Grain size	Hardness (HV30)	Fracture toughness (MPa * m ^{1/2})
	GD08F	WC-Co	8,00	submicron	1625	10
	GD13F	WC-Co	10,00	submicron	1540	12
	GD05	WC-Co	5,50	fine	1700	10
	GD10	WC-Co	6,00	medium	1600	10
	GD30	WC-Co	15,00	medium	1150	15,5
	GD05NC	WC-Co/Ni/Cr	5,80	submicron	1950	8,5
	GD08NC	WC-Ni/Cr	8,80	submicron	1670	9
	GD10NC	WC-Ni/Cr	6,80	fine	1630	11,5
	GD14NC	WC-Co/Ni/Cr	7,60	fine	1650	9,5





» COATING TECHNOLOGY

DURIT coatings **distinctly increase resistance** of tools, components and parts. Our experts realize **high-tech solutions** that stand out through highly specific properties.

» MORE EFFECTIVE AGAINST WEAR

In addition to solid cemented carbide, advanced coatings achieve optimized results, especially on large-volume parts. **Thermal spray coatings, laser cladding** and **PVD coatings** perfect various high-precision components. In many cases DURIT coatings are the perfect choice to **increase productivity.**

» TARGETED IMPROVEMENT OF PRODUCTIVITY

LASER CLADDING

» Alloys

Weldable powders (carbides, metals) comparable with Stellite, Triballoy, Colmoloy, Hastalloy, Inconel or similar

HVOF

High Velocity Oxygen Fuel

» Carbides

wc/co wc/c

WC/Co-Cr

WC/N

WC/NiCrBSiFe

Cr₂C₃/NiCr

PVD

Physical Vapour Deposition PVD represents protection, optimization and refinement for targeted efficiency **MegaTiN®**

HardTiL ULTRA

DuraLub[®]

HardSilk®

Ultraimpact EXCELL®



» HVOF WC/Co

» CRC-MAX

» PVD UltraImpact EXCELL®



» DURIT BRASIL LTDA

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