

» CARBIDE AND COATINGS

POWDER PRESSING AND TABLETING

Wear-resistant. Pressure-resistant. Efficient.

DURIT



HARDFACTS

» DURIT HARTMETALL

» SINCE 1982

Successful and solution-oriented

» OVER 500 EMPLOYEES

Worldwide

» MORE THAN 60 CARBIDE GRADES

For wear protection and metal forming

» 100 % COATING EXPERTISE

HVOF, APS, EAWS,
Laser Cladding, PVD and CVD

» CARBIDE TECHNOLOGY

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. DURIT produces **customized parts** and realizes **individual shapes** as well as **complex geometries**.

» WE OFFER FULL-SERVICE CARBIDE





» WEAR PROTECTION FOR POWDER PRESSING AND TABLETING

Substances and mixtures with abrasive components often play a role in powder pressing and tableting processes. The use of cemented carbide achieves **permanent contour accuracy** and a **significantly longer service life**.

» WE SOLVE WEAR PROBLEMS

Compared to steel tools, cemented carbide **increases the service life by up to 50 times**. In the chemical and pharmaceutical industries, but also in the automotive sector, DURIT's **high-tech solutions** have been tried and tested for years.

» WITHSTANDS MOST EXTREME DEMANDS

Products ::

tableting tools · dies · punches ·
punch inserts · centering pins · arbors ·
sleeves · carbide-faced press molds ·
press mold linings · filling and feed table
plates · individual pressing tools

Typical applications ::

chemical industry · automotive industry ·
pharmaceutical industry · sintered metal
production · magnet production ·
dental technology · industrial and technical
tableting · refractory industry



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
GD10	WC-Co	6,00	medium	1600	10
GD15	WC-Co	8,00	medium	1460	12
GD20	WC-Co	10,00	medium	1350	15
GD30	WC-Co	15,00	medium	1150	15,5
GD10N	WC-Ni	7,00	fine	1530	10
BD20	WC-Co	10,00	coarse	1215	19

» 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



» PVD MegaTiN®

LASER CLADDING

» Alloys

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

HVOF

High Velocity Oxygen Fuel

» Carbides

WC/Co WC/Co-Cr WC/Ni

WC/NiCrBSiFe Cr₂C₃/NiCr

PVD

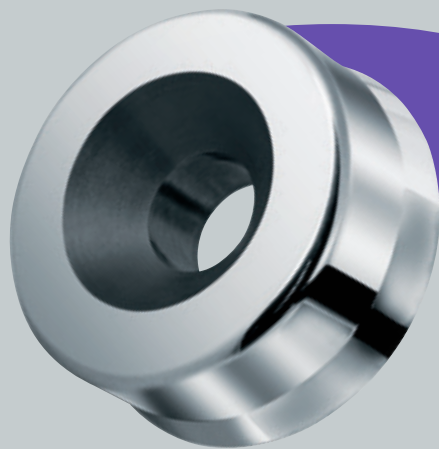
Physical Vapour Deposition
PVD represents protection, optimization and refinement—for targeted efficiency

MegaTiN® HardTiL ULTRA® DuraLub®

HardSilk® UltraImpact EXCELL®



» HVOF WC/Co



» **DURIT HARTMETALL GMBH**

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takes you to EXTREMES    