Grade specification HB10F(E)

DA 142 Version 1 vom 23.11.2012
Dokumenteneigner: Metallurgisches Labor

BOEHLERIT

Chemical composition in weight per cent:

WC	Balance
TiC + Ta(Nb)C	-
Co	6,0

Physical properties:

Hardness HV30		1825
Density	**g/cm³**	14,85
WC-Grain size	**µm**	0,8
Transverse rupture strength	**N/mm²**	3400
Compressive strength	**N/mm²**	6000
Young´s modulus	**KN/mm²**	630
Fracture toughness K_{IC}	**MNm $^{-3/2}$**	9,2

Application:

Cutting: Application according to ISO: K05–K15

Exceptional high demand of wear resistance.
Plastics, Al-Si alloys, composite materials, plastic-Al-Si alloys, materials which are hard to machine (titanium-nickel-cobalt alloys), case-hardened steels pared by roll milling.
Protection against wear and forming techniques: Pressing dies for abrasive powders, drawing tools, plungers.
Saw teeth for the machining of wood and wood composite.

Typical microstructure:

Magn. 1000x

Porosity: <A02

HIP-sintered