

## MATERIAL NO.:

CF-H25S+

### DESIGNATION:

**ISO:** K20/K30  
**US Industry:** C10/C13

### TECHNICAL TIP:

- » Alternative to CF-H40S+ for abrasive wear
- » After wire cutting, dry the parts for approx. 2-3 hours in a furnace at max. 100-110 °C to remove the liquid from the binder

### CHEMICAL COMPOSITION (%):

WC	90.3
Co	8.5
Other	1.2

### PHYSICAL AND MECHANICAL CHARACTERISTICS:

- » Average WC grit size: very fine to fine
- » Density (ISO 3369): 14.55 g / cm<sup>3</sup>
- » Hardness (ISO 3878): 1680 HV10
- » Flexural strength (ISO 3327): 3600 MPa
- » Compressive strength: 6500 MPa
- » Elastic modulus: 592 GPa
- » Fracture toughness: 10.3 MPa m<sup>1/2</sup>
- » Thermal conductivity at 100 °C: 90 W/mK
- » Coefficient of thermal expansion (20-400 °C): 5.1 10<sup>-6</sup>/ K
- » Corrosion resistance: yes

### CHARACTER:

- » Very fine/fine grain grade with good edge stability despite high hardness

### APPLICATION:

- » Cutting punches and dies for abrasive materials and materials prone to welding

### TREATMENT BY:

- » Polishing: highly suitable
- » EDM: suitable
- » Coating: suitable
- » Laser cutting: suitable

### TYPICAL MICROSTRUCTURE VIEW:

