

Cermet spray coated roll

DHF has been supplying cermet coated rolls sprayed by various types of HVOF systems to meet customer's needs. Typical cermet composite coatings are WC-Co, WC-NiCr, Cr₂C₂-NiCr and so forth.

Surface roughness of the rolls can be controlled to fit the customer's application which requires no sipping rolling plate.

Product size capacity

Max. dia	1500mm
Max. length	3500mm
Max.weight	5000kg

Applications and advantage of DHF's rolls

DHF's cermet coated rolls are used and highly evaluated by the customers in the steel, aluminum, and various industries.

DHF's coherent production system from heat treatment by IH, machining, to thermal spraying and finish machining secures to produce high and consistent quality rolls. (QC system certified by ISO9001)



Spraying process



Spraying process

Advantages of DHF's cermet sprayed coatings by HVOF

- Applicable to various kinds of base material, such as steel, stainless steel, cast iron, copper, aluminum, and their alloys and so forth
- Extremely low oxidation
- Low porosity
- High density (almost 100%)
- Substantially fewer pores and less gas permeation
- Increased adhesion strength
- Strong bonding
- Low residual stress
- Welding can be performed after spraying

Characteristics of each HVOF systems

	HS-HVOF	JP5000	DJ
Combustion type	Internal two-stage	Internal	External
Powder charging position	Gun internal flame core	Gun internal flame periphery	Gun external flame core
Combustion system	Propane,etc	Kerosene	Propylene
	Air	OXYGEN	OXYGEN
Cooling method	Air-cooling	Water cooling	Air-cooling
Particle temperature(°C)	1000-1450	1550-2200	1850-2500
Powder trajectory speed (m/sec)	600-800	550-700	500-650