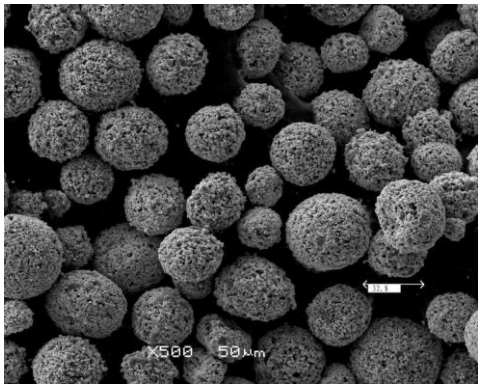
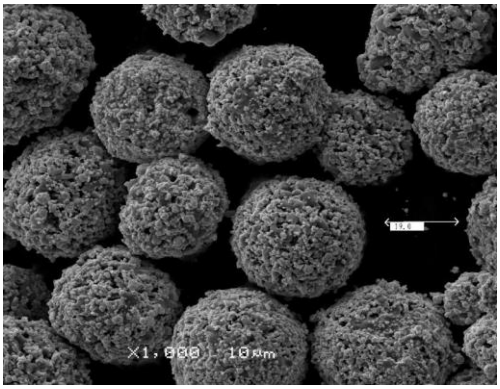
INDURATE ALLOYS LTD
9863–33 Avenue
Edmonton, Alberta T6N 1B6

Indurate Alloys Ltd HVOF Powder Product Data Sheet

73/20/7, WC/Cr/Ni HVOF Powder

Included powders: IA- 73/20/7 HVOF, -45/+15 or -38/+10-micron size.





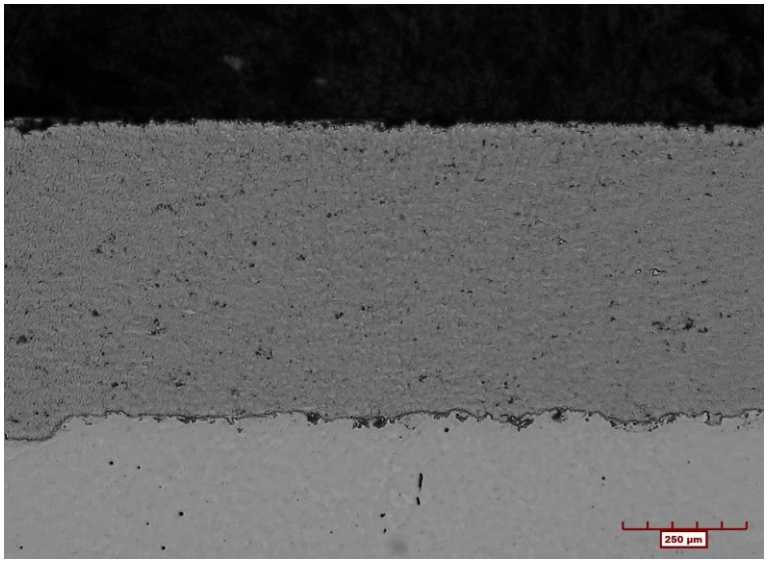
As applied, Indurate Alloys Ltd. IA-73/20/7 WC/Cr/Ni HVOF powders are designed and manufactured to produce wear and corrosion resistant coatings that are dense and hard, with low levels of porosity.

IA-73/20/7 HVOF powder is a spheroidal, spray dried and sintered powder for thermal spray applications containing 73% Tungsten Carbide in a 20% Chromium and 4% Nickel (nominal) matrix alloy binder.

Our attention to particle shape and sizing, allows for higher deposit efficiencies and continual use of parameter sets from one lot to the next. This is especially important to applicators who are looking for powders that will allow them to change powder lots, without changing their parameter set. Applicators will also find the IA-73/20/7 material will produce very smooth coatings allowing for shorter grinding times.

Our attention to detail in terms of the chemistry and our commitment to use only the finest constituents, assists our users in producing coatings with high hardness, offers exceptional corrosion resistance as well as a resistance to fracture due to flexing and torsional stresses.

As an alternative to Hard Chrome Plating, IA-73/20/7 can be super finished to smoothness levels similar to hard chrome plating. In situations where finishing is not required or is not practical, our powders produce coatings that can be use for resistance to corrosion and abrasion wear.



Bond strengths and densities are dependent on the method of application and the parameters used when spraying the material.

Physical Properties of IA-73/20/7 Powders	
Classification	Tungsten Carbide Based
Manufacturing Method	Spray Dried and Sintered
Morphology	Spheroidal
Apparent Density	3.25 – 4.5 Grams per cubic centimeter typical
Flowability	Free Flowing
Service Temperature	500 °C Maximum

Typical Chemical Composition of IA-73/20/7, WC/CrNi HVOF Powder

Product Designation	Typical Alloy Composition		
IA-73/20/7	Tungsten Carbide	Chromium	Nickel
Target %	73%	20%	7%

Typical applications for IA-73/20/7 HVOF powders would be, seal areas on shafts, hydraulic rams, mud motor rotors and industrial applications where parts are subjected to torque and flexing.

For more information on Indurate Alloys Ltd powders, please contact us at 780/439-8099.