

Hard Surface Processing

Johnson Enterprises is one of the leaders in hard surface processing. With years of expertise using these applications this is what sets Johnson aside from others and allows us to offer solutions to clients that can save time and money.



...We can save you money.

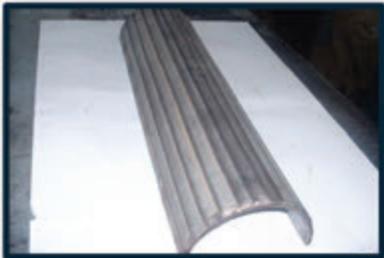


HVOF (High Velocity Oxygen Fuel)

HVOF is today's standard for applying carbide and metals coatings. High velocity coatings process produces the highest quality carbide and metals coatings available in the industry today!

Jet Kote System (Cold Process)

Our experience with this process has proven to have a superior bond compared to chrome (25 thousands of an inch of thickness compared to 10 thousands). The process for Jet Kote is to apply special powders for hard surfacing and build up application. Due to the extreme pressure, it impregnates the powder into the material. It is a cold process, allowing no distortion whatsoever. Some typical applications are hard surfacing pumps, pump castings, chipper parts, planner rolls, built up stainless steel shafting, bearing journals, and many more.



Robotic PTA Welding (Hot Process)

This specialized Plasma Transfer Arc welding unit is used in the application of a hard surfacing with a variety of different powders. The ID torch enables us to weld inside bushings of all types to increase endurance and acid resistance. Some typical applications are spiral rollers, anvils, pump castings, pump covers, hardface inside housings, piping, valve stem, valve seats, and many more.

Extreme Carbide

This Carbide system is applied by the use of a mig welder hooked up to a carbide canister vibrator. This allows us to rebuild worn parts and at the same time overlay with carbide particles, at desired thickness. These particles come in different sizes from fine to extra coarse, which allow us to apply the size that is needed for the application. This system is applied where there is a lot of abrasive wear. It can be applied on hog hammers, auger blades, etc.



Spray Fusion Welding

Johnson Enterprises uses a specially designed Oxy Acetylene torch for powder welding. The work piece is heated with the torch. The powder is introduced into the gas stream from the integral powder hopper and then transferred to the work piece through a flame.

This process is similar to the Oxy Acetylene process with the exception that the hard facing takes place at lower temperatures. This minimizes oxidation and distortion of the work piece and enables easy surfacing of edges.