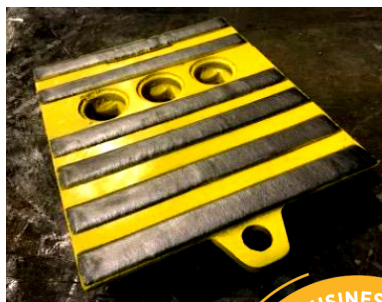
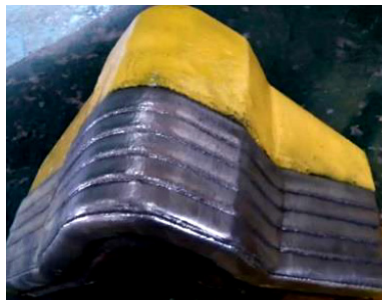


THE PLASMA TRANSFER ARC (PTA) surface treatment process plays an important role in the coating of metal surfaces with metallic powder. PTA surfacing is a process that deposits coating of controlled alloys on mechanical components that are subject to severe wear and/or corrosion, thus extending their service life.

DGC AFRICA applies PTA welding to new parts to extend the service life. Experience shows an increase in service life by 3 to 10 times is commonly achieved when parts are properly overlaid. PTA can also be used to repair or refurbish a worn parts.

OVERLAY MATERIAL

A wide range of overlay materials are available depending on customer requirements; however, these are typically classified as Nickel based alloys, Cobalt based alloys or Iron based alloys. These base alloys are often blended with WC to increase wear resistance. Additionally, alloys are available for applications where high impact as well as abrasive wear are experienced.



BENEFITS & ADVANTAGES

The **PTA** process offers a combination of advantages that is not matched by any other welding method for applying wear and corrosion resistant coating.

- The ability to apply tailor made metal alloys.
- Low dilution and penetration.
- A weld quality with homogeneous and pore free microstructure.
- A smooth surface finish that requires little post machining.
- The ability to provide close control of weld profiles

TYPICAL APPLICATIONS

- Ground Engaging Tools
 - Teeth
 - Dozer blades & End bits
 - Lip shrouds – above ground and underground
- Heel blocks
- Mixer Paddles
- Drilling Parts – Drill and blast equipment
- Oil & Gas Drilling parts
- Liner Plates
- Extruders

Technical Data Sheet available upon request.