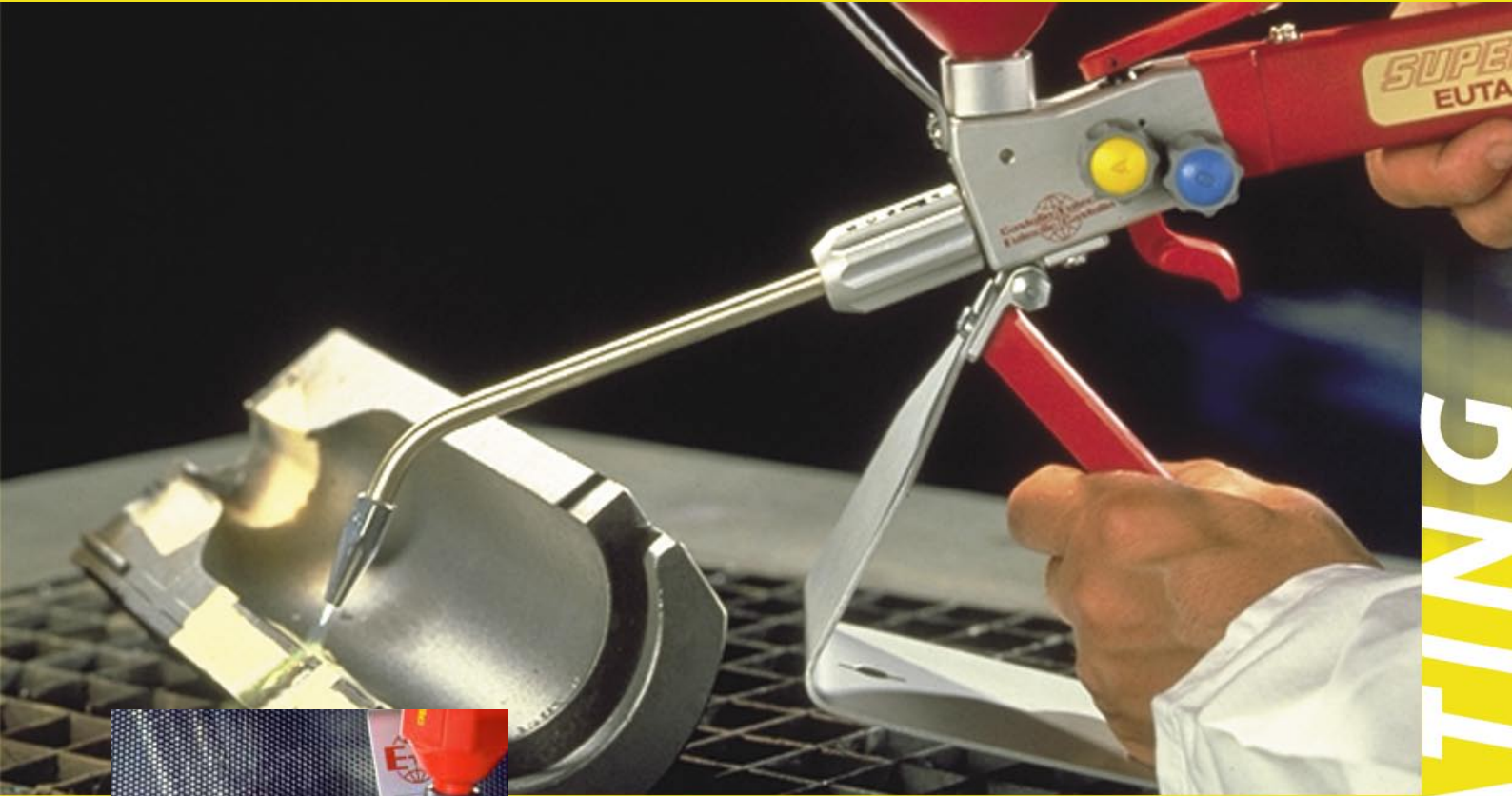


Surface Engineering Solutions  
for glass mould manufacture

# GlassTec



- A very wide range of processes and products
- Rapid repairs with high precision
- Protective coatings with extended service life
- Products tailored to different materials
- A complete range for all standard hardness needs
- A superior service based on extensive experience








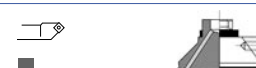

COATING









Wide range of powders for a flexible, modular system specially developed for surface coating applications in the glass industry. The **SUPERJET - S - EUTALLOY** delivery system ensures enhanced quality deposits thanks to its consistent service performance using long life parts for highest operational safety. The rapid shut-off trigger, protective heat shield, low weight and advanced ergonomic design promote both fast deposition speeds for series production and on-the-spot repairs. This universal system is a must for all workshops dealing with applications requiring great precision, both along a path and for a desired thickness.

## Self-fluxing, nickel-boron-silicon alloys for regular work on cast iron and steel parts






Powders	Properties	Usage and alternatives	Typical application
Water atomized powders			
<b>PE 1202</b>	Hardness: ~240 HV <sub>30</sub> Grain size -125 µm Absence of overspray	Coating of blank moulds, edges and baffles.	
<b>PE 3306</b>	Hardness: ~240 HV <sub>30</sub> Grain size -90 µm Repair or buffer layer	Repair of cast iron bottom plates.	
<b>PE 1204</b>	Hardness: ~325 HV <sub>30</sub> Grain size -125 µm Oxidation resistance, uniform hardness	Hard coatings of controlled thickness on blow heads, guide rings, neck rings	
<b>PE 3305</b>	Hardness: ~380 HV <sub>30</sub> Grain size -125 µm High abrasion resistance	Coating and repair of neck ring edges and support.	

Gas atomised powders			
<b>PE 8980</b>	Hardness: ~270 HV <sub>30</sub> Grain size -106 µm Ideal for thin coatings	Repair or protection of mould components: seams, neck.	
<b>PE 8981</b>	Hardness: ~280 HV <sub>30</sub> Grain size -125 µm No oxidation at high temperature	Extensive repairs and preventive coatings on mould seams and edges and baffles.	
<b>PE 8928</b>	Hardness: ~27 HRC (~300 HV <sub>30</sub> ) Grain size -125 µm Ease of machining the coating	Edges and corners of moulds, bottom plates, guide rings.	

## EUTALLOY LT Self-fluxing, nickel base alloys with low energy input for rapid mould work

Gas atomised powders			
<b>PE 8418</b>	Hardness: ~ 240 HV <sub>30</sub> (~18 HRC) Grain size -106 µm Spot repairs	Repair of mould damage on the seams or edges. Easy to machine or file.	
<b>PE 8422</b>	Hardness: ~ 270 HV <sub>30</sub> (~22 HRC) Grain size -106 µm Small to medium repairs	Repair or protection of mould components: seams, blow heads, guide rings.	
<b>PE 8426</b>	Hardness: ~26 HRC (~300 HV <sub>30</sub> ) Grain size -106 µm Fast deposition	Extensive repairs and preventive coatings on seams, edges and guides	
<b>PE 8431</b>	Hardness: ~31 HRC Grain size -106 µm Good wetting properties and fast	Fast repairs and extensive preventive coatings on mould edges and guides.	
<b>PE 8435</b>	Hardness: ~35 HRC Grain size -106 µm Enhanced fluidity and fast	Extensive repairs and preventive coatings on neck rings or blow head.	
<b>PE 8440</b>	Hardness: ~40 HRC Grain size -106 µm Fast deposition with enhanced fluidity	Enhanced weldability at high hardness level on bottom plates, baffles and guide plates.	

## Self-fluxing, nickel-chromium-boron-silicon alloys for regular work on cast iron and steel parts






Powders	Properties	Usage and alternatives	Typical application
Gas atomized powders			
<b>PE 5404</b>	Hardness: ~34 HRC Grain size -125 µm No oxidation even at high temperature	Protective coating of mould: edges and corners.	
<b>PE 5435</b>	Hardness: ~35 HRC Grain size -75 µm Fluid deposit	Protective coating of mould: edges and corners.	
<b>PE 5436</b>	Hardness: ~36 HRC Grain size -106 µm Excellent build-up capability	Protective coating of mould: neck and match.	
<b>PE 5400</b>	Hardness ~37 HRC Grain size -125 µm Long service life and high deposition rate	Protective coating of mould: edges and corners.	
<b>PE 8985</b>	Hardness ~40 HRC Grain size -125 µm High crack resistance for this hardness level	Protective coating of mould: edges and corners.	

## EUTALLOY RW

Self-fluxing, nickel-chromium-boron-silicon alloy powders developed for a spraying procedure followed by fusing normally with a flame torch or occasionally in a furnace. The advanced **CASTODYN DS 8000** system incorporates the latest technological know-how in thermal spraying: modularity, precise parameters adjustment with easy settings, reliable components. The ideal choice for smooth, even coatings on large areas, flat or in rotation.



## Self-fluxing, nickel-chromium-boron-silicon alloy powders for the spray and fuse procedure on rotating parts



Water atomized powders			
<b>PE 3307</b>	Hardness: ~308 HV <sub>30</sub> Grain size +38 -150 µm Water atomised powder	For plungers and other rotating parts.	
Gas atomised powders			
<b>PE 8033</b>	Hardness: ~31 HRC Grain size +32 -125 µm Gas atomised powder	Superior crack resistance, easy to machine. For plungers or rotating parts.	
<b>PE 8040</b>	Hardness: ~40 HRC Grain size +45 -125 µm Gas atomised powder	For plungers and other rotating parts Alternative <b>PE 8040.02</b> : +45 -125 µm	
<b>PE 8045</b>	Hardness: ~40 HRC Grain size +32 -125 µm Gas atomised powder	For plungers and other rotating parts Alternative <b>PE 8045.02</b> : +45 -125 µm	
<b>PE 8050</b>	Hardness: ~51 HRC Grain size +32 -125 µm Gas atomised powder	For plungers and other rotating parts Alternative <b>PE 8050.02</b> : +45 -125 µm	

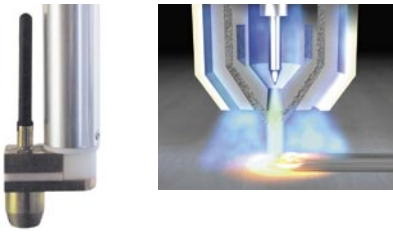
## SF LANCE

Nickel based alloy powders specially developed for high performance, thicker coatings. They are used with the exclusive **CASTODYN SF Lance** process which combines the advantages of simultaneous spray and fuse operations with the high power and high deposition rate of **CDS 8000** for the automation of coating circular or cylindrical parts.









## Self-fluxing, nickel based gas atomised powders for automated applications on cast iron or steel parts.

Gas atomised powders			
<b>PE 8225</b>	Hardness: ~25 HRC Grain size +32 -125 µm Adapted for automated coatings	Protective coating on guide rings or mould seams.	
<b>PE 8235</b>	Hardness ~34 HRC Grain size +32 -125 µm No oxidation even at high temperature	Protective coating on mould bases or rotating parts.	








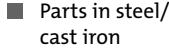

The complete range of nickel-chromium and nickel-copper alloy powders, specially formulated for the Plasma Transferred Arc process **EUTRONIC GAP** with maximum concentration of energy, provides top quality coatings without affecting the base metal. The ideal process for total automation of coating applications particularly on moulds or rotating parts.

## Nickel-chromium powders for automated applications using the Plasma Transferred Arc process

Powders	Properties	Usage and alternatives	Typical application
Gas atomised powders			
<b>16221.04</b>	Hardness : ~30 HRC Grain size +53 -150 µm No oxidation even at high temperature	Protective coating of pre-forming moulds, baffles, moulds.	  
<b>16223.04</b>	Hardness : ~35 HRC Grain size +53 -150 µm No oxidation even at high temperature	Protective coating of neck rings, baffles and finishing mould bases.	  

## Nickel-copper alloy powders with low melting temperature for application using the Plasma Transferred Arc process

Gas atomised powders			
<b>PG 6572</b>	Hardness : ~ 270 HV <sub>30</sub> (~22 HRC) Grain size +32 -150 µm Easy to machine deposit by filing	Protective coating of cast iron or aluminium bronze moulds.	 

 Machinable by filing    
  by cutting tools    
  by grinding    
  Parts in steel/cast iron    
  in Al-bronze

Note : alloy properties are measured on coatings with no dilution.

## Integrated Production performance

The complete control of powder production within its own manufacturing plants, ensures highest quality products to precisely meet user needs. A proficient research centre combining skilled technicians in daily contact with glass mould producers and industrial users around the world, enables the powder plants to respond exactly to specific customer requests.

The various powder production technologies are perfectly integrated into the logistic chain for assuring the best service to customers.



## Stringent Quality Controls



From raw material selection to the final sieving operations, passing through ingredient preparations and the atomisation process, every single stage of powder production is subject to stringent quality assurance procedures. All the group plants are ISO 9000 certified and participate in a centralised Total Quality program with the primary aim of achieving complete customer satisfaction.

Only under these strict conditions can the finished product conform regularly to the highest demands of the glass industry.

## Your resource for protection, repair and joining solutions