

# *LINKAGE*

Material:- Mild Steel.

This linkage is for the turbo unit in small passenger cars with the requirement of the following properties:-

- Wear resistance at elevated temperatures (300-500°C)
- Corrosion resistance
- Dimensional control
- Aesthetic finish

The original process route to produce the linkages was to case harden followed by zinc plating.

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## ***LINKAGE (cont)***

The problem encountered was wear and corrosion experienced at the elevated operating temperatures. Traditional case hardening tends to soften at around 200°C and also zinc electroplating loses its passivation and corrosion resistance. Since the epsilon iron nitride layer is stable up to temperatures of 500°C, thus, maintaining the surface hardness. The Nitrotec treatment provided an excellent remedy and still having sufficient corrosion resistance to maintain the product requirements.

