



**servis**  
heat treatment

## **Data Sheet - Alpha PNC20** <sup>TM</sup>

### **Description:**

A low temperature pit furnace orientated nitrocarburising process which offers the engineer a viable alternative to classical gaseous nitriding.

### **Application:**

The process is applied to alloy steel components which would normally be nitrided. It should be noted that the process has two main advantages over the traditional process:-

1. The process replaces the brittle and undesirable 'white layer' associated with nitriding with a more flexible compound layer which does not need to be removed before going into service.
2. Process turn-round time is reduced by some 60%

Typical components: crankshafts, gears, camshafts, cylinders, seat slides.

### **Metallurgical Aspects:**

Compound layer depth: 0.025 - 0.05 mm.

Surface hardness: Material dependant

