Hard Chrome Plate was the traditional choice for Hydraulic Rods, Pistons, Plungers and Rams. In industrial applications, hard-chromium plating is increasingly being replaced with HVOF-applied, carbide-containing materials.

While these coatings have good wear protection properties, many Industry standard hard-chrome replacement applications also require corrosion protection.

At Asco we have developed coatings that offer both wear and corrosion protection. In such coating systems, the carbide provides wear protection, and the metallic matrix has been formulated to provide corrosion protection.

**HVOF VS HARD-CHROME**

- Significantly higher wear resistance
- Improved wear resistance
- Thicker layers can be applied for repair components
- No hydrogen embrittlement of high strength steels
- No size limitation
- Greater coating thickness uniformity
- Enhanced corrosion protection
- REACH regulations will severely restrict use of HCP

---

**ASTM B117-90 and DIN ISO 9227 Salt Spray Test**

![Graph showing comparison between AST 8900, AST 8120, AST 8700, and EHC in terms of survival of coating](image)

**Graph showing comparison between AST 8900, AST 8120, AST 8700, and EHC in terms of abrasion energy density**

---

**ASCO ENGINEERING LTD**
9 Paddock Road, Skelmersdale, Lancashire, WN8 9PL, UK
Tel: +44 1695 559595
Email: info@asco-engineering.co.uk

**ASCO FZCO**
Jebel Ali Free Zone South
Dubai, UAE. PO Box 261590
Tel: +971 4889 4844
Email: sales@asco-fzco.com

**ASCO ARABIA**
PO Box 751
Al-Jubail 31951
Tel: +966 3340 0962
Email: sales@asco-fzco.com