BluCr[®] Trivalent hard chrome technology





A big step towards the future sustainability of hard chrome plating



An alternative to hexavalent hard chrome plating

MKS' Atotech trivalent chromium BluCr[®] process eliminates hexavalent chromium and toxic lead anodes therefore making hard chrome plating significantly less hazardous and safer for platers and the environment.

The low friction and good wear resistance properties of BluCr[®] make it simple to replace hexavalent hard chrome coatings for many applications. Utilizing a nickel underlayer BluCr[®] easily outperforms the corrosion resistance of single layer hexavalent hard chrome coatings. The nickel layer provides excellent corrosion protection of the substrate and the superior chloride resistance of the BluCr[®] layer gives coated parts a superior class of corrosion resistance.



Breaking new grounds with BluCr[®] trivalent hard chrome technology

A new chapter in hard chrome history

The success of hard chrome plating since the 1920s is unquestioned. However, the latest legislations restricting the use of hexavalent chromium substances puts the future of the current processes in jeopardy. Atotech is proud to release a functional trivalent hard chrome process that can replace hexavalent processes for a large range of applications.

Features and benefits

- Cr(VI)-free formulation
- Pb-free anodes
- Low friction coating
- Excellent wear resistance
- Superior class of corrosion resistance (with underlayer)

Plating speed comparisons



