

**Table 6.4.2 A: Functional Advantages and Disadvantages of Hard Chrome Electroplating**

Advantages/Strengths	Disadvantages/Limitations
Deposit is extremely hard and wear resistant	Slow rate of deposition; multiple coats often needed
Thick deposits can be machined for repair/tolerance applications	Machining needed to get uniform thickness
Simple, well-understood technology	Susceptible to hydrogen embrittlement
Wide range of applications	Exhibits brittleness, leading to micro-cracking and reduced corrosion resistance
Surface offers good lubricity characteristics	Decontamination of plating solutions is difficult
In combination with nickel underplating, it can offer good corrosion resistance	