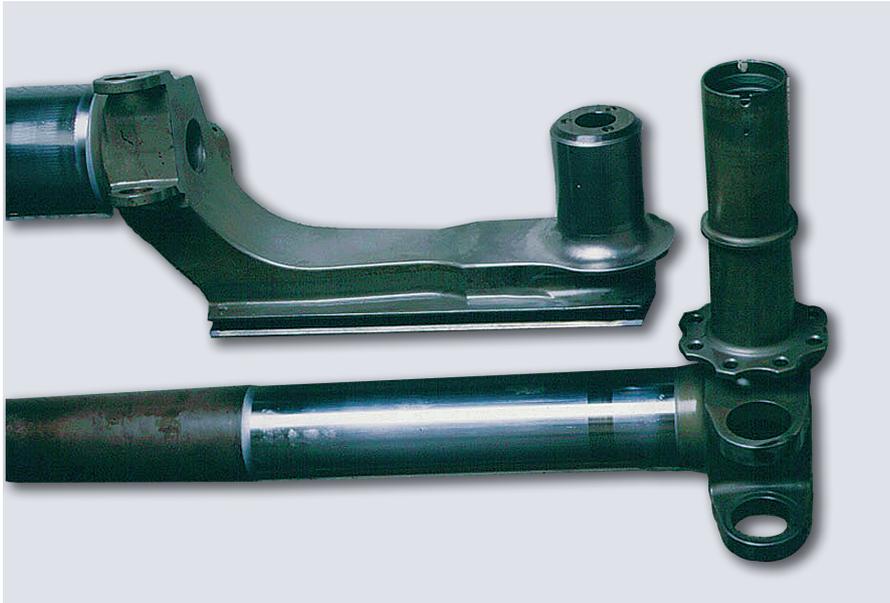




## Shot peening and plating



### Hard plating and metal spray coating

Chrome, nickel and other hard plating layers are very hard and brittle. Hence their resistance to wear and corrosion is high, but the fatigue strength of the base material is extremely reduced. Dynamic stress creates cracks in this hard layer, which propagate into the base material until failure occurs.

**Shot peening before plating induces high compressive residual stress in the surface layer of the base material and prevents the propagation of cracks into the part from the plating layer.**

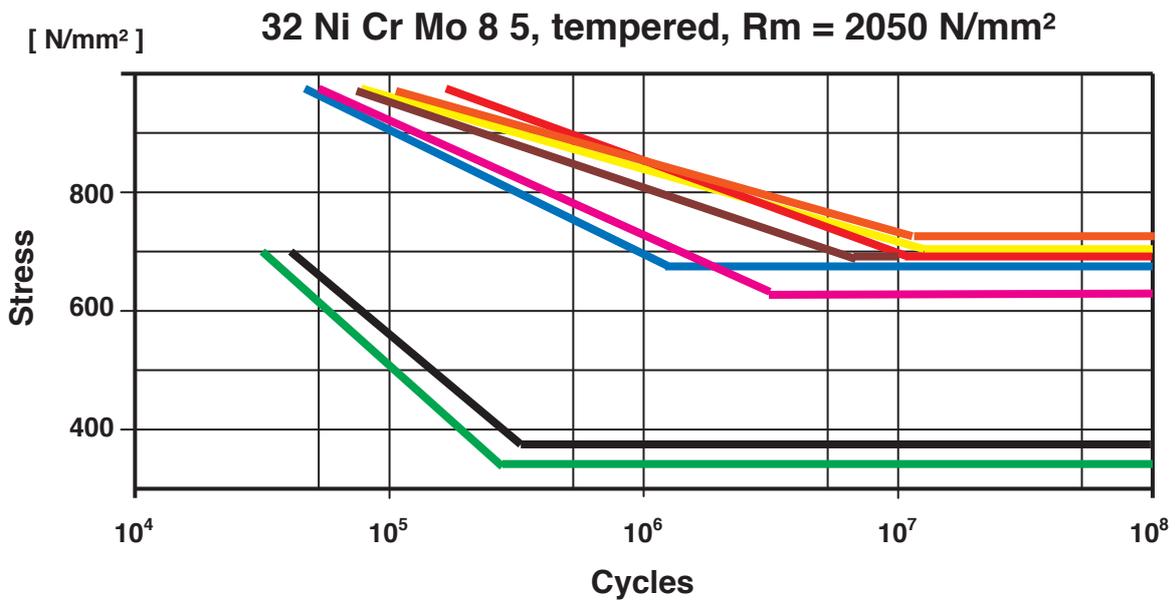
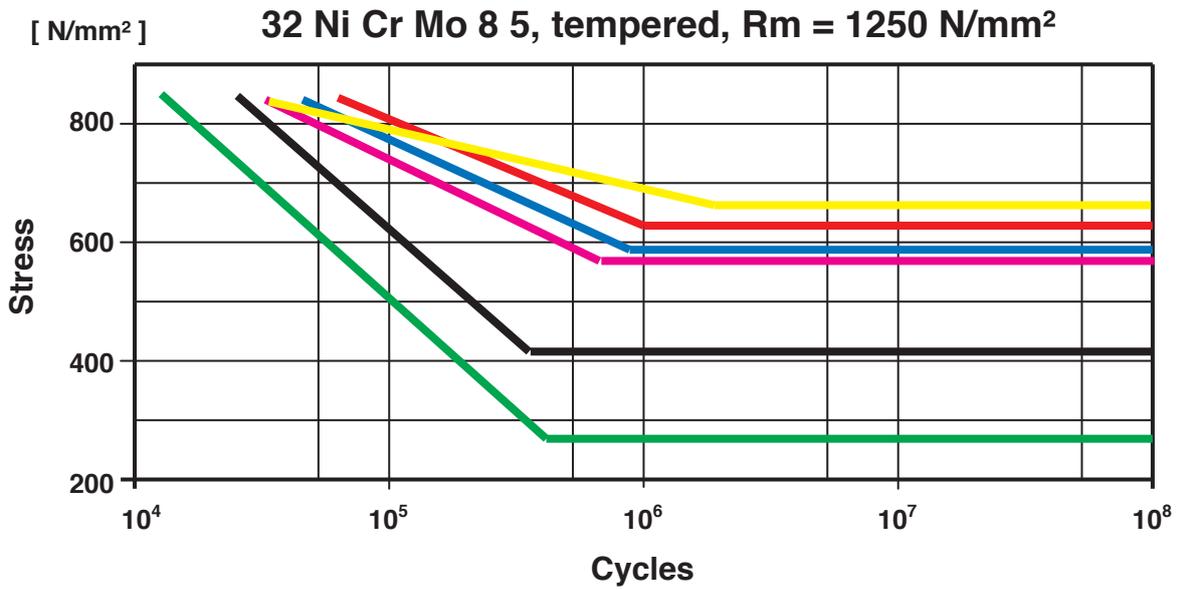
Several specifications require shot peening before plating for parts which will operate under dynamic load.

Metal spray coatings are also very hard and often porous and rough.

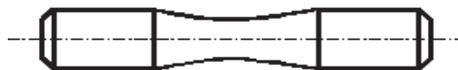
**Shot peening after metal spray coating reduces the porosity in the metal spray coating layer and improves the surface finish.**



# Shot peening and plating



	= polished
	= shot peened
	= hard plated
	= hard plated and tempered
	= shot peened and hard plated
	= shot peened, hard plated and tempered
	= hard plated and shot peened
	= hard plated, shot peened and tempered



Specimen