

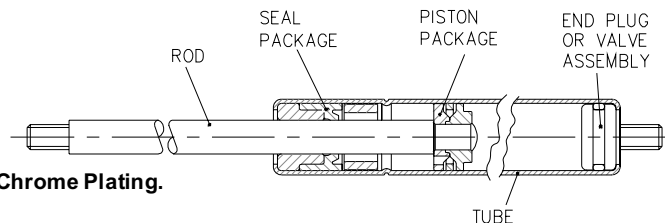
Gas Springs

General Overview - Standard



GENERAL OVERVIEW-STANDARD GAS SPRING RANGE

Rod:	All rods are made from a low alloy steel bar, ground to give the required surface texture and finished with a protective corrosion surface treatment
Tube:	All tubes are made from low alloy welded precision steel tube
Paint:	Exposed steel surfaces are epoxy powder coated to give enhanced resistance to abrasion and corrosion. (Black is the standard colour).
Oil:	Lubrication and damping is achieved with a commercial grade mineral oil
Gas:	The power behind the gas spring is provided by a charge of high purity nitrogen.
End Connectors:	Low alloy steel end connectors are generally zinc plated with a yellow passivate finish.
	Plastic end connectors are moulded with glass-filled nylon.
	Zinc Eyes are produced from commercial grade die cast Zinc.



Comparison of Nitriding Rod Surfaces vs. Chrome Plating.

HARDNESS:

Nitriding is a thermal diffusion process which forms an iron nitride layer which is extremely hard (typically 1000HV) whereas hard chrome plating produces a typical surface hardness of 700 to 900HV.

FRICION:

The nature of the final surface of a Nitrided rod is such that, unlubricated, it has a lower coefficient of friction than a hard chrome plated version. The Nitrided rod surface also retains oil better meaning that in the event of the lubrication system failing the nitrotec rod maintains a lower coefficient of friction, than the same rod with a hard chrome finish.

WEAR RESISTANCE:

The Nitrided rod does less damage to a seal than a hard chromed rod. The Nitrided rod has better wear resistance with a seal than a hard chromed rod.

CORROSION RESISTANCE:

In a Neutral Salt Spray test a Nitrided rod will survive 400 hours undamaged. In comparison a hard chrome plated rod (18 micron plating thickness), will only survive 24 hours.

ENVIRONMENTALLY:

The rods are treated by a gaseous thermal diffusion process to create the Nitrided finish. This process has the following advantages over hard chrome plating or nitrocarburising;

- a) no water waste or treatment is required
 - b) no disposable solid waste is generated
- Therefore there is no possibility of water contamination.
The treated rods are readily recyclable.

EU Directive 2000/53/EC:

This directive concerning end of life for vehicles means that automotive manufacturers must state the percentage contents of their products with regard to certain metals, including hexavalent chromium which is used in some chrome plating. They will then be required to contribute financially to the safe removal and disposal of these metals. The resulting probable reduction in the requirement for this type of plating will increase the unit cost for chrome plating.

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