



# Prince 3000 PSI Tie-Rod Cylinder With 3/7 Warranty

What can Prince quality do for you? **Three-year** warranty on all standard products means you can confidently utilize your equipment year after year. To back that up, Prince has included these features in its newest line of tie-rod cylinders.

## Outstanding Piston Rod Plating

- *Royal Plate Plus<sup>®</sup> will prevent rust and corrosion more than twice as long as hard chrome plating and gas nitride treated steel bar.*
- *All Royal Plate Plus<sup>®</sup> rods are warranted against rust and corrosion for **7 years**.*



## Exceptional Paint Performance

- *Aircraft quality two-part chemical cure polyester urethane paint will not fade.*
- *Outperforms powder coating for the life of the cylinder.*

## Superior Materials and Workmanship

- *Highly engineered designs and processes mean unquestionable quality.*
- *Higher quality seals mean less maintenance.*
- *Higher quality steel and iron, and simply more of it, mean a more durable cylinder with less downtime.*
- *Made In The U.S.A.*

## Flexible Configurations

- *Port size*
- *Port location*
- *Stroke length*
- *Pin size*
- *Paint color*



**PRINCE MANUFACTURING CORPORATION**

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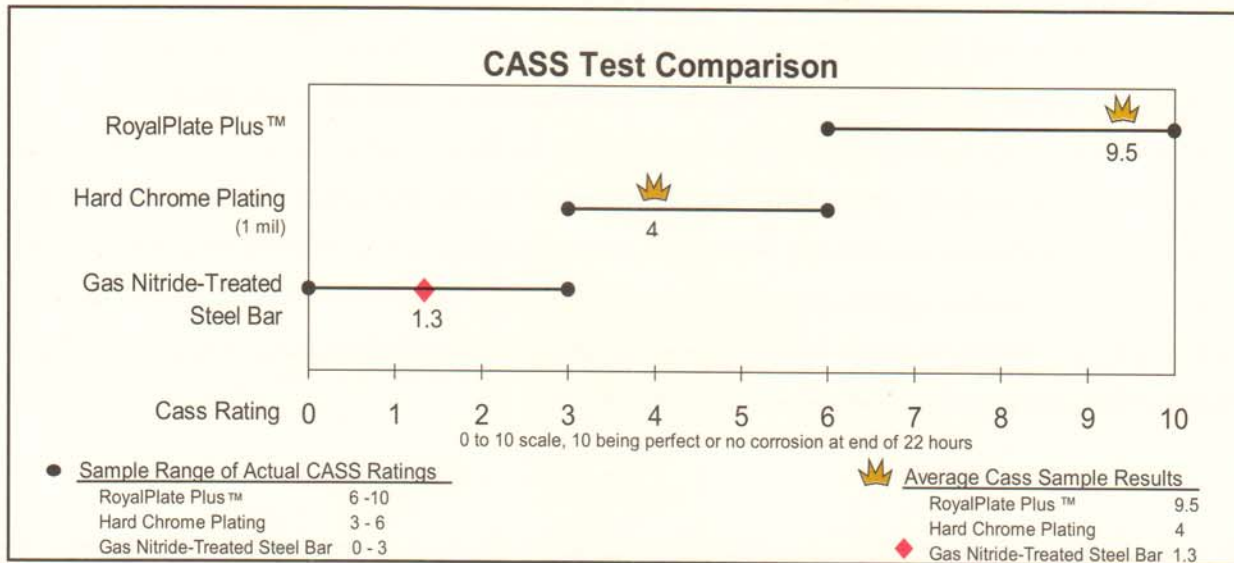
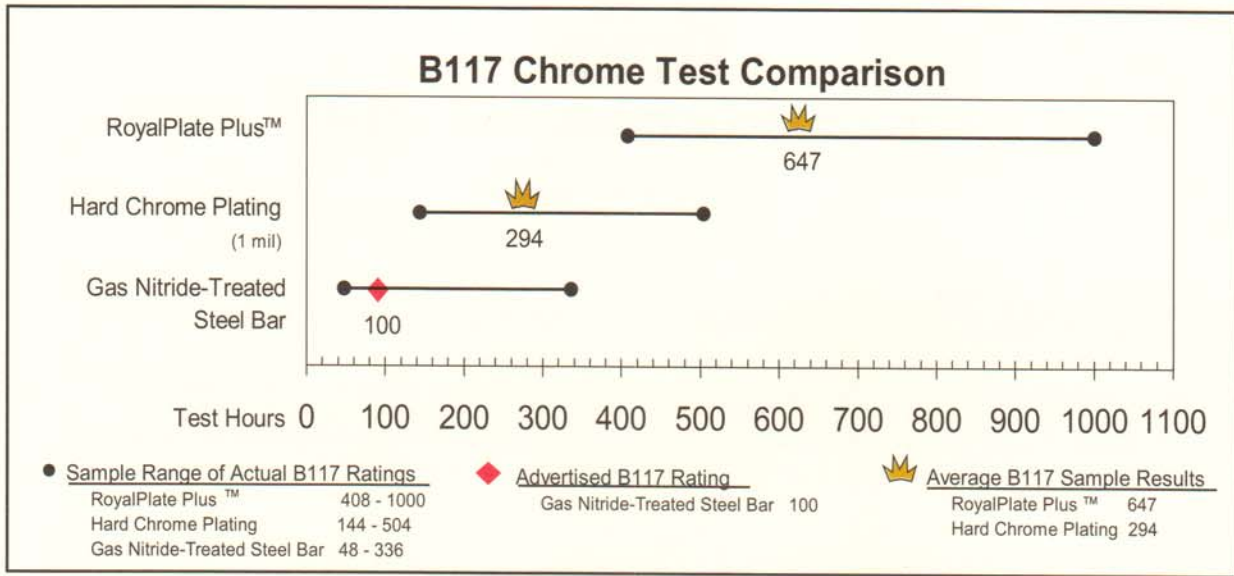
**RoyalPlate Plus**<sup>™</sup> is the unique result of combining two very functional coatings in an extremely controlled environment. The combination provides the excellent wear, hardness, and lubricity characteristics of hard chrome, with the outstanding corrosion protection & ductility of Nickel plating.

Because of its hardness, anti-galling characteristics, and low coefficient of friction, hard chrome has long been the preferred coating for the piston rods of hydraulic cylinders. It is also used in shock rods, valve stems and piston rings. While best known for its excellent wear characteristics, hard chrome is not always the best choice for long lasting corrosion protection. Its susceptibility to corrosion is due to the natural characteristics of chrome. Chrome by its very nature is micro-cracked. Under microscopic examination, you will find spider webs of cracks that make the substrate material susceptible to corrosion. In contrast, Nickel is a barrier coating, which exhibits superior corrosion protection, and is used in applications that are highly corrosive in nature or require superior ductility such as engine valves. Through unique process control and application technologies, RoyalPlate Plus<sup>™</sup> offers substantial performance enhancements.

The combination of Nickel as an undercoating & Hard Chrome as the topcoat has become the coating of choice for parts that require superior corrosion protection and outstanding wear characteristics. Excellent corrosion test results have been recorded when these two coatings are used in combination.

There are two tests commonly used to measure corrosion resistance on chrome plated piston rods. They are the ASTM B117 salt spray test and the ASTM B368 copper-accelerated acetic acid (or CASS) salt spray test. Both tests are used by Prince to measure corrosion resistance. A comparison is shown on the reverse side.





These are results of actual tests performed by both Prince and outside testing facilities on materials used in Prince product. Future tests may vary.

Both the B117 and CASS salt spray tests are useful tools for comparing corrosion resistance of various materials and coatings. Neither test is intended to simulate any specific field environment you should expect to encounter. The true test of RoyalPlate Plus™ will be how it works in your most demanding application. We challenge you to put it to the test. We are confident you will be impressed by its outstanding performance.

