

NitroSteel

distributed by

Division of
THE TUBE GROUP  **quanex**



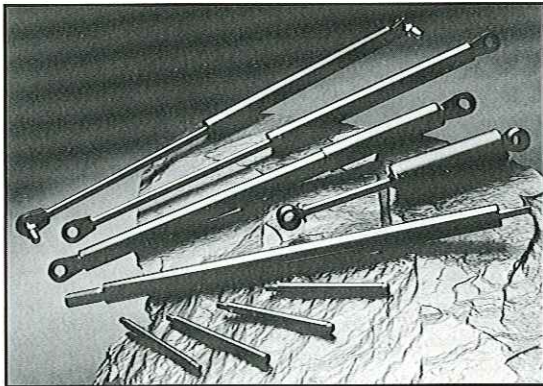
**PACIFIC MACHINERY
& TOOL STEEL CO.**

**THE PROOF IS IN
THE PRODUCT**

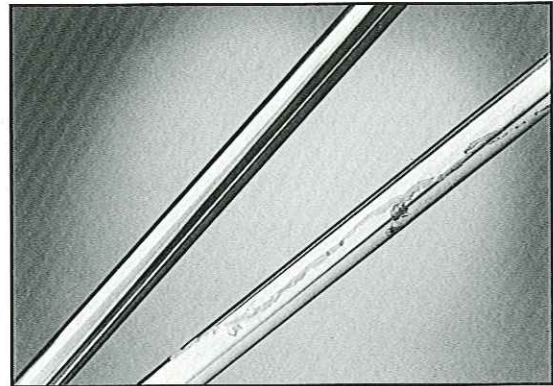
— A superior alternative to hard chrome plating

— A proven product in rough service applications

1045 NitroSteel is produced through a patented process combining nitro carburizing and surface oxidizing to produce a hard and corrosion resistant surface layer.



NitroSteel improved piston rods and cylinder barrels extend actuator service life.



NitroSteel compared to chrome after salt spray testing shows superior corrosion resistance.

This process produces a hard, thin, oxygen-enriched iron nitride layer at the surface of the steel (64/RCmin.) with a nitrogen-hardened zone underneath.

The Results — LONGER SERVICE LIFE:

- ◆ Higher Corrosion Resistance
- ◆ Better Lubrication Retention
- ◆ Improved Wear Resistance
- ◆ Increased Dent Resistance
- ◆ Uniform Size End to End
- ◆ Consistent Wear Layer Thickness
- ◆ Non-toxic Alternative to Metal Plating
- ◆ No Surface Pitting, Flaking or Hydrogen Embrittlement

NitroSteel offers superior performance because it is not plated or coated but STEEL itself!

**PACIFIC MACHINERY
& TOOL STEEL CO.**

**503-226-7656
800-547-1091**

 **CARBON,
ALLOY AND
SPECIAL STEELS
FOR THE WEST**

PACIFIC NitroSteel simply outperforms hard chrome plated products!

A.I.S.I. 1045 micro-alloyed to achieve 75,000 PSI min. yield

THE HARD FACTS

- ◆ SURFACE HARDNESS 64 RC min. to 71 RC max.
- ◆ WEAR LAYER 001" thickness per side
- ◆ HARDENED DIFFUSION ZONE . . . 015"/.020" depth
- ◆ SURFACE FINISH 16 RMS max.
- ◆ APPEARANCE black lustre
- ◆ CORROSION RESISTANCE 100 hrs. min. (per accelerated salt spray testing)

Standard Tolerances

Bar Diameter	Size Tolerance
1/2" to 1-1/2" inclusive	+.000/- .001"
over 1-1/2" to less than 2-1/2"	+.000/- .0015"
2-1/2" to 3" inclusive	+.000/- .002"
over 3" to 4" inclusive	+.000/- .003"
over 4"	+.000/- .004"

Stock Sizes/Lengths

1/2" RD x 12' R/L	1-1/2" RD x 24' R/L
5/8" RD x 12' R/L	1-3/4" RD x 24' R/L
3/4" RD x 12' R/L	2" RD x 24' R/L
1" RD x 12' R/L	2-1/2" RD x 24' R/L
1-1/8" RD x 12' R/L	3" RD x 24' R/L
1-1/4" RD x 12' R/L	(other sizes available from millstock)



PACIFIC MACHINERY & TOOL STEEL CO.
 3445 N.W. Luzon St. • Portland, OR 97210-1694
 503-226-7656 • 800-547-1091 • Fax 503-226-7588