

# NASS 45<sup>®</sup> SLEEVE STOCK Heavy Hollow, Non-Galling, Stainless



## Advantages of Nass 45 Sleeve Stock

- EXCELLENT CORROSION RESISTANT
- HIGH PHYSICAL STRENGTH
- NON-GALLING
- HIGH AND LOW TEMPERATURE SERVICE
- DOUBLE STRESS RELIEVED
- BETTER MACHINABILITY – NOT GUMMY

**Nass 45** is a field proven alternative to most Austenitic Stainless grades. Commercial Austenitic Stainless may provide excellent corrosion resistance but lacks strength. Ferritic, or Martensitic stainless grades may provide adequate strength, but fail due to insufficient corrosion resistance. **Nass 45 provides both excellent corrosion resistance and high strength.**

To maintain the unusually high degree of toughness, service temperature should be limited to 800°F, although **Nass 45** exhibits excellent oxidation resistance to 1200°F.

**Hardness and Strength – Nass 45** exhibits mechanical properties similar to 4140 and 4340 materials, but with the corrosion resistance of a 316 stainless. This is a compatible material for use with most steel and stainless steel products that are encountered in maintenance applications.

**Non-Galling – Nass 45** is not gummy. It will hold a bright finish and parts will come apart easily after substantial time in severe service applications. Consider **Nass 45** as a superior replacement for worn OEM parts made from 304, 316, 410, 416 and other grades of stainless and alloy steel.

**Nass 45** is a field proven product for applications including: bushings, collars, hex nuts, sleeves, and wear rings.

**Past Protected Trade Name Of Pyramid Steel Company – Petro Chem<sup>®</sup>**

## Available Sizes

O.D.	I.D.	O.D.	I.D.
2-1/2"	1"	5"	3"
3"	1-1/2"	5-1/2"	3"
3-1/2"	1-1/2"	6"	3"
4"	2"	6-1/2"	3"
4-1/2"	2-1/2"		

## Stock Lengths\*

Standard 18" Lengths

\*Rough Machined with Allowance For Final Clean-Up

## Typical Physical Properties\*

Hardness.....	258/294 BHN
Tensile Strength.....	140,000 P.S.I.
Yield Strength.....	108,000 P.S.I.
Charpy "V" Notch Impact.....	105 @ 70°F
Elongation .....	24%
Reduction of Area.....	65%

\*Based on 1/2" Diameter Specimen

## Agency Compliance

NACE MR-01-75-97 Rev.	FDA
API-6A	USDA
AMS-5763 (chemistry only)	