



Serving the Fluid Power Industry Since 1951!

**Nitro-tuff Tubes Replace C.P.I.D. and C.P.O.D. Tubing!**

- Better Corrosion Resistance
- Environmentally Friendly
- Superior Wear Surface
- Time Tested in the Field

Commercial Fluid Power has launched a new **Greener** stock product as an alternative to Chrome Plated Interior Diameter (CPID) and Chrome Plated Outside Diameter (CPOD) tubing.

**Nitro-tuff Tubes** have superior corrosion resistance compared to standard CPID and CPOD products. All materials are tested to ASTM B117 Neutral Salt Spray Testing parameters and are evaluated to a No Corrosion to the unaided eye rating of 10 per ASTM B537 for **150 Hours!**

**Nitro-tuff Tubes** are processed and manufactured here in the United States. This is an environmentally friendly process with minimal impact on the Environment. The waste product produced from processing **Nitro-tuff Tubes** is **WATER!** Visit our web site at <http://www.CommercialFluidPower> to read the 2008 Presidential Green Chemistry and Engineering Award Abstract.

**Nitro-tuff Tubes** are designed to retain oil at the surface with a controlled columnular porosity offering a superior seal friendly surface that will never flake or peel. **Nitro-tuff Tubes** have a comparable hardness and surface finish of industrial hard chrome plating with a surface hardness of 64 to 71 Hrc converted from Knoop Hardness and a maximum 16 Ra micro finish. **Nitro-tuff Tubes** have a diffusion zone offering additional wear resistance with a hardness layer of 40 to 50 Hrc to a depth of 0.015".

**Nitro-tuff Tubes** employ the same technology used by MacSteel NitroSteel Division that produces NitroBar. NitroSteel bars have become the bar of choice for many Original Equipment Manufacturers because of the Superior Time Tested Corrosion resistance this process offers. Many OEM's have tested and publicly advertise the superiority of this product and processing.

**Nitro-tuff Tubes** standard material base is St52.3 SRA DOM produced to ASTM A513 Type 5. Additional grades can be quoted such as our High Strength Ductile 4130 Q&T Tubing.

If you want the **BEST**, Better corrosion resistance, Environmentally friendly, Superior wear surface and Time tested in the field ask for and specify **Nitro-tuff Tubes** and bars. Please call your nearest Commercial Fluid Power location for more information.



**Pneumatic Cylinder Tubing**



**Nitro-tuff tubes can replace CPID.**  
 ID Surface Hardness 64-71 HRC  
 16 Ra surface finish  
 40-50 HRC Diffusion zone 0.015"  
 to 0.020" depth  
 Base Material St52.3 SRA DOM  
 Standard Sizes-Other Sizes Available

Item	OD	ID	Wt/Ft
1	1.750	1.500/1.503	2.17
2	2.250	2.000/2.003	2.84
3	2.740	2.500/2.503	3.36
4	3.240	3.000/3.003	4.00
5	3.500	3.250/3.253	4.51
6	3.740	3.500/3.503	4.64
7	4.236	4.000/4.003	5.19
8	5.235	5.000/5.003	6.45
9	6.250	6.000/6.003	8.18
10	7.450	7.000/7.003	17.36
11	8.450	8.000/8.005	19.76
12	10.450	10.000/10.005	24.57

Commercial Fluid Power is a tubing and bar distributor with OD and ID finishing capabilities.

Honing from 0.480" to 42.000" ID  
 Skiving from 1.500" to 12.000" ID  
 Turning up to 60" Diameters  
 Boring up to 60" ID x 144"  
 Trepan up to 32" Rd & 20" Square

**CALL Toll Free**

- Chicago Area (800) 358-8466
- Ohio Area (800) 346-2601
- Atlanta Area (800) 766-6066
- North East Area (800) 458-3847
- Los Angeles Area (888) 324-2102

For More Product Information  
 Visit our Web Site at:

<http://www.CommercialFluidPower.com>

