

<u>1 (800) 263-9966</u> sales@uniondrawn.com Union Drawn Steel II LP

Strong, Tough and Precise, <u>Century</u> has it all! Guaranteed 100 Ksi (690 MPa) minimum Yield strength. Stress relieving process increases strength and improves ductility. Re-Sulphurized steel for improved machinability.

| CHEMISTRY  |               |  |
|------------|---------------|--|
| Carbon     | 0.40% - 0.48% |  |
| Manganese  | 1.35% - 1.65% |  |
| Phosphorus | 0.40% max     |  |
| Sulfur     | 0.24% - 0.33% |  |
| Silicon    | 0.15% - 0.35% |  |

| MECHANICAL PROPERTIES |                          |  |
|-----------------------|--------------------------|--|
| Tensile (UTS)         | 115,000 PSI<br>(795 MPA) |  |
| <u>Minimum</u> Yield  | 100,000 PSI<br>(690 MPA) |  |
| Elongation            | 8%                       |  |
| Reduction in Area     | 20%                      |  |
| Hardness              | 240 HB                   |  |

Numbers reflect typical results; final product may vary Mechanical properties recorded on all test certificates.

## CAPABILITIES

Full range Cold Drawn round bar:

| Size (inches)           | Tolerance (inches)         |
|-------------------------|----------------------------|
| 1/2 to 1-1/2            | (+0 / -0.004)              |
| Over 1-1/2 to 2-1/2     | (+0 / -0.005)              |
| Over 2-1/2 to 3         | (+0 / -0.006)              |
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Recommended stock removal 2.4% Dia. (resuphurized)

Lengths: 20ft / 22ft standard 10ft min. to 24ft max. (+2" / -0") tolerance

## Additional finishes available:

| Finish                | Size (inches) |
|-----------------------|---------------|
| Turn & Polish         | 1/2 to 2-1/2  |
| Ground                | 1 to 3        |
| Turn, Ground & Polish | 1 to 2-1/2    |
|                       |               |

## **TYPICAL APPLICATIONS**

Pins:

High strength material ideal for pins used in high stress environments. Additional finishes can provide precise size control and chemistry will enhance machinability.

## **Machined & Fittings:**

High machinability allows for competitive cycle time when machining complex parts. For many applications Century material can also eliminate the need for heat treating after machining.