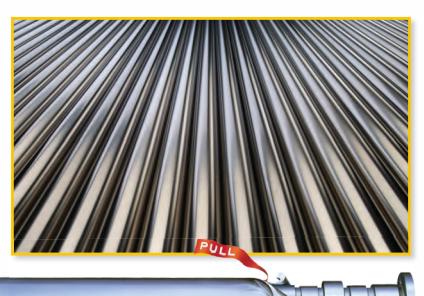
# MACPLUS® COLD FINISHED STEEL BARS



## MACPLUS® STEEL BARS ARE ENGINEERED TO IMPROVE YOUR BOTTOM LINE



| DIMENSIONAL TOLOERANCES (All Minus) |                                   |  |  |  |
|-------------------------------------|-----------------------------------|--|--|--|
| Size in Inches                      | C to 0.28%<br>Carbon/Alloy Inches | C to 0.28% to 0.55%<br>Carbon/Alloy Inches | Any Heat Treat and/<br>or C>0.55%<br>Carbon/Alloy Inches |  |
| To 1 ½ incl.                        | .002/.003                         | .003/.004                                  | .005/.006  |  |
| >1 ½ to 2 ½                         | .003/.004                         | .004/.005                                  | .006/.007  |  |
| >2 ½ to 4                           | .004/.005                         | .005/.006                                  | .007/.008  |  |
| >4 to 5 incl.                       | .005/.006                         | .006/.007                                  | .008/.009  |  |

### MACPLUS® Cold Finished Steel Bars Size and Length Range

**Rounds:** 0.625" to 5" (16 mm to 127 mm) **Lengths:** 15 through 32 feet (4.57m to 9.75m)

#### **MACPLUS® Advantages**

- Defect-Free Surface
- Decarb-Free Surface
- Scale-Free Surface
- Improved Machinability
- Tighter Size Tolerances and Concentricity

MACPLUS® steel bars are unique from other cold finished steel bars because they combine the advantages of Gerdau's production and technical expertise with superior dimensional accuracy. The uniform chemistry and microstructure along with a defect free surface may improve machinability up to 30%.



These exceptional cold finished steel bars are available in all carbon and alloy grades, including micro-alloyed and quench and tempered steels. MACPLUS® bars can be metallurgically tailored to suit your demanding requirements. Also, with Gerdau's historic leadership in ladle metallurgy and vacuum arc degassing we can offer alloy steels that are among the cleanest in the world.

| DEVIATION FROM STRAIGHTNESS IN 10FT., IN INCHES |                  |                               |  |  |
|---|------------------|-------------------------------|--|--|
| Length, Feet                                    | <i>C</i> ≤ 0.28% | C>0.28% and<br>all Heat Treat |  |  |
| <15   | 1/16             | 1/8                           |  |  |
| 15 and Over                                     | 1/8              | 3∕16                          |  |  |

#### **MACPLUS® Surface Quality**

Surface Finish: 25 microinches RA max.

**Decarburization:** None **Defect Depth:** None

Surface Appearance: Shiny, clean

Residual Stress, Warp Factor: -0.020" to -0.030"

#### **Typical Customer Yield Improvement**

Carbon and Alloy: 6 to 8% Resulfurized: 9 to 11%