

INQUIRIES AND ORDERS

When inquiring about or ordering Gerdau bars, please have the following information in as much detail as possible. Sufficient information will better enable Gerdau to meet your requirements to your complete satisfaction.

- Steel Grade Specification
- Quality Level
- Diameter and Length
- Size Tolerances (other than standard)
- Packaging Requirements
- Delivery Requirements
- End Use or Application
- End User
- Your Production Process
- Any other information useful in supplying the most suitable product

AVAILABLE GRADES

- Bearing Steels to ASTM A295, A485, A534 and A866 (e.g. 1053, 1070, 4118, 4320, 4820, 5120, 8620)
- Aircraft Quality Steel to AMS 2301 and AMS 2304
- All ASTM A-29 and SAE Carbon, Resulfurized and Rephosphorized Steels (1008 to 1095, 11xx, 12xx, 15xx)
- All ASTM A-29 and SAE Alloy Steels (13xx, 40xx, 41xx, 43xx, 44x, 46xx, 47xx, 48xx, 50xx, 51xx, 61xx, 81xx, 86xx, 87xx, 92xx, 93xx, 94xx, and EX or PS grades)
- Boron Steels, Micro-alloyed and Calcium Treated Steels
- German (DIN), Japanese (JAS & JIS), and International Standards (ISO)
- Restrictive and special chemistries are welcomed. Please inquire.

HEAT SIZE

90–100 Ton Heats (85–90 Metric Tons)

40–50 Ton Heats (35–45 Metric Tons)

GERDAU IN-HOUSE VALUE ADDED CAPABILITIES

- MACPLUS® Cold Finished Turning and Polishing
- MACPRIME® Automatic Precision Cutting and Gage Inspecting
- Automatic Ultrasonic and Flux Leakage Testing Lines
 - Magnetic Flux Leakage Surface Inspection
 - Automatic Ultrasonic Internal Core Inspection
 - Automatic Ultrasonic Subsurface Shear-wave Inspection
- Machine Straightening
- Circograph Cold Finished Bar Surface Inspection
- Heat Treatments
 - Cold Shear Anneal
 - Stress Relieving
 - Normalizing
 - Lamellar Pearlitic Annealing
 - Spheroidizing
 - Quench and Tempering

BAR SIZE & LENGTH RANGE

MACPLUS® Bright Cold Finished Bar Size Ranges

<i>Diameter</i>	7/8"–5"
<i>Lengths</i>	15'–32' (Inquire for shorter or longer lengths)
Precision Hot Rolled Bar Size Ranges	
<i>Diameter</i>	1"–5"
<i>Lengths</i>	15'–40' (Inquire for shorter or longer lengths)
Hot Rolled Bar Size Ranges	
<i>Diameter</i>	5/8"–6 1/16"
<i>Lengths</i>	15'–40' (Inquire for shorter or longer lengths)
Semi-Finished Bar Size Ranges	
<i>Diameter</i>	6"–9 1/4" (152 mm to 235 mm)
<i>Lengths</i>	12'–32'

QUALITY

Hot Rolled Bars

<i>Total Decarburization</i>	0.008" to 0.012" Max. (0.2 mm to 0.3 mm) Max.
<i>Defect Depth</i>	MFLT* Verification
<i>Size Tolerance</i>	50% ASTM A-29
<i>Macro ASTM E381</i>	S1-R1-C2
<i>Micro ASTM E45</i>	A295, A485, A534 and A866

Precision Hot Rolled Bars

<i>Total Decarburization</i>	0.008" to 0.012" Max. (0.2 mm to 0.3 mm) Max.
<i>Size Tolerance</i>	25% AISI and ASTM A-29
<i>Defect Depth</i>	MFLT* Verification

MACPLUS® Bright Cold Finished Bars

<i>Total Decarburization</i>	None
<i>Size Tolerance</i>	see Macplus® insert
<i>Defect Depth</i>	None
<i>Finish</i>	25 Microinches Ra Max.
<i>Quality</i>	Defect, scale and decarb free surface, offers better machinability, low residual stress and meets or exceeds SAE specifications for cold drawn bars

* Magnetic Flux Leakage Test

