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REMINGTON ARMS COMPANY, INC.
ILLION, N. Y.

Material Specification #155

- Material : Hot Rolled Basic Open Hearth - Barrel Steel
- Analysis : The analysis of this material shall check within the tolerances listed below, subject to AISI Standard Limits for Check Analysis.
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|-----------------|-----------|
| Carbon..... | .50-.60 |
| Manganese..... | 1.30-1.65 |
| Phosphorus..... | .04 Max. |
| Sulfur..... | .06-.10 |
| Silicon..... | .20-.35 |
| Molybdenum..... | .10-.20 |
- Certification : The vendor shall send one copy of certified analysis for each heat of material to the Chem. & Met. Control Department. 83
- Quality : All material shall be of rifle barrel quality and as such, shall be sound, of uniform quality and condition, and shall be free from excessive non-metallic inclusions, segregations, pipes, laps, cracks, twists, seams, damaged ends, and other injurious defects, and shall have a workmanlike finish.
- Tolerances : All material shall be furnished to standard AISI tolerances for hot rolled bar stock unless specified otherwise on buyer's purchase order.
- Physical Properties: Material shall have the following physical properties after hardening at 1550-1650°F., oil quenching (not to exceed three minutes in oil) and tempering between 1050 and 1250°F. for two and one-half hours.
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| Tensile Strength, p.s.i. | 115,000 min. |
| Yield Strength, p.s.i. .2% offset | 95,000 min. |
| Elongation in 2" | 18% min. |
| Reduction of Area | 45% min. |
| Brinell (approx.) | 235-290 |
- Hardenability : Material shall be subject to the Jominy Hardenability Test as described in ASTM Standards No. A255-42-T. Readings at 5/8" from the quenched end shall be above Rockwell C-47.