

Material Specification #155 (Continued)

Grain Size

: Material shall be coarse grained, McQuaid-Ehn Grain size, 1 to 5 incl. as determined in accordance with ASME Standard B-19-39T, when carburized for 8 hours at 1700°F.

Machinability

: When properly heat treated (heat treatment shown under Physical Property Section), it should be possible to machine steel meeting the requirements of this specification into acceptable barrels, at rates comparable to those regularly obtained in good commercial practice. Machining of barrels consists of deephole drilling, reaming and rifling. Best machining results, particularly on the interior of the barrel, are obtained when the hardenability of the steel, its heating and quenching, are such that the steel is hardened through the cross section, leaving a minimum of free ferrite. This also applies to physical properties.

Seams

: Particular care is requested in eliminating seams, laps and internal cracks. Material 1-1/2" dia. and under having seams, laps or cracks deeper than $1/32"$ shall be rejected.

Hot Acid Etch

: Material shall be free from excessive non-metallic inclusions, porosity, segregations, pits, laps, spuds, scums, and internal cracks as determined by hot acid etching at 160°F. for a sufficient time to insure a proper etch.

Identification

: All material shall be legibly and indelibly tagged to show the name of vendor, heat number, size of stock and Remington Specification Number.

Shipping

: The minimum shipment of any one heat shall not be less than 18,000 lbs. Should more than one heat be included in a shipment, the vendor shall ship in such manner that individual heats are kept separate and adequately identified by color markings on the ends of the bars.

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6-10-49