

**Pipe Specification A135**

|   |   |                |      |                |      |
|---|---|----------------|------|----------------|------|
| <b>Specification</b>  | <b>A135 NPS 1/4 -- 30", Schedules 10, 40 and XL THD, Lightwall</b>  |                |      |                |      |
| <b>Scope</b>  | Covers two grades of electric resistance welded steel pipe. Grade A is adapted for flanging and bending and is suitable for welding. Purpose for which pipe is intended should be stated on order.  |                |      |                |      |
| <b>Kinds of Steel Permitted For Pipe Material</b>   | Open-hearth                      Basic-oxygen<br>Electric-furnace   |                |      |                |      |
| <b>Permissible Variations in Wall Thickness</b>   | The minimum wall thickness at any point shall not be more than 12.5% under the nominal wall thickness specified. Threadable, lightwall (XL) must meet manufacturers minimums.   |                |      |                |      |
| <b>Chemical Requirements</b>  | <u>C max %</u> <u>Mn max %</u> <u>P max %</u> <u>S max %</u>  |                |      |                |      |
|   | Seamless or ERW   |                |      |                |      |
|   | Grade A   | 0.25           | 0.95 | 0.05           | 0.06 |
|   | Grade B   | 0.30           | 1.20 | 0.05           | 0.06 |
| <b>Tensile Requirements</b>   |   | <u>Grade A</u> |      | <u>Grade B</u> |      |
|   | Tensile Strength, min., psi   | 48,000         |      | 60,000         |      |
|   | Yield Strength, min., psi   | 30,000         |      | 35,000         |      |
| <b>NDE &amp; Hydrostatic Testing</b>  | Hydrostatic inspection test pressures for plain end and threaded are specified. Hydrostatic pressure shall be maintained for not less than 5 seconds for all sizes of electric resistance weld pipe. Non-destructive electric test should be in accordance with practices E213, method E227 or practice E213. |                |      |                |      |
| <b>Permissible Variations in Weights per Foot</b>   | Plus or Minus 10% schedule 10<br>Plus 10% minus 3 1/2% schedule 40  |                |      |                |      |
| <b>Permissible Variations in Outside Diameter</b>   | Plus or minus 1%  |                |      |                |      |
| <b>Mechanical Tests Specified</b>   | Tensile Test -- Transverse returned on pipe NPS 8 and larger.<br>Flattening test -- Three steps required with weld located 0° or 90° from the line of direction of force required.  |                |      |                |      |
| <b>Number of Tests Required</b>   | Flattening and tensile on one length of pipe from each lot of 400 lengths or less of a style.   |                |      |                |      |
| <b>Lengths</b>  | Pipe shall be furnished in 38' with a minimum of 20 ft. Pipe furnished to schedule 10 shall be in a specified length between 16 and 22 ft.  |                |      |                |      |
| <b>Required Markings on Each Length (On Tags attached to each Bundle in case of Bundled Pipe)</b> | Rolled, Stamped or Stenciled (Mfrs. Option)<br>Name or brand of manufacturer.<br>Kind of pipe, that is, electric-resistance welded A, electric welded B, same schedule wall thickness, schedule 10 or 40, NL<br>ASTM A135<br>Length of pipe.  |                |      |                |      |
| <b>General Information</b>  | End finish may be plain end beveled or plain end square cut.  |                |      |                |      |