

## Approvals and Specifications

This product meets the following standards:

- Hydrostatically tested (if required)
- Nondestructive electric test
- Flattening tested for NPS ½" and greater
- Made in Canada

## Product Marking

Each length of pipe ½" NPS and larger is continuously stenciled to show:

- The manufacturer name
- Made in Canada
- Grade
- Type of pipe
- Size
- Length
- Heat number (if required)
- Lot number (if galvanized)
- Date

## Dimensions and Weights

| NPS | OD<br>(in.) | Wall<br>(in.) | Weight<br>(lb./ft) | S40 Wall<br>(in.) | S40 Weight<br>(lb./ft) | S80 Wall<br>(in.) | S80 Weight<br>(lb./ft) |
|-----|-------------|---------------|--------------------|-------------------|------------------------|-------------------|------------------------|
| ½   | 0.840       | -             | 8.67               | 0.109             | 0.85                   | 0.147             | 1.09                   |
| ¾   | 1.050       | -             | -                  | 0.113             | 1.13                   | 0.154             | 1.48                   |
| 1   | 1.315       | -             | -                  | 0.133             | 1.68                   | 0.179             | 2.17                   |
| 1¼  | 1.660       | -             | -                  | 0.14              | 2.27                   | 0.191             | 3.00                   |
| 1½  | 1.900       | -             | -                  | 0.145             | 2.72                   | 0.200             | 3.63                   |
| 2   | 2.375       | -             | -                  | 0.154             | 3.66                   | 0.218             | 5.03                   |
| 2 ½ | 2.875       | -             | -                  | 0.203             | 5.80                   | 0.276             | 7.67                   |
| 3   | 3.500       | -             | -                  | 0.216             | 7.58                   | 0.300             | 10.26                  |
| 3 ½ | 4.000       | -             | -                  | 0.226             | 9.12                   | 0.318             | 12.52                  |
| 4   | 4.500       | 0.188         | 8.67               | 0.237             | 10.80                  | 0.337             | 15.00                  |
| 5   | 5.563       | 0.188         | 10.80              | 0.258             | 14.63                  | -                 | -                      |
| 6   | 6.625       | 0.188         | 12.94              | 0.280             | 18.99                  | -                 | -                      |
| -   | 7.000       | 0.272         | 19.56              | -                 | -                      | -                 | -                      |

## Scope

Covers bare and black electric resistance welded, Grade B and C pipe. Light-weight pipe is suitable for joining by welding while the standard-weight pipe is suitable for threading, and welding.

Produced to latest revision of ASTM A500/A500M.

## Manufacture

Welded tubing shall be made from flat-rolled steel by the electric-resistance welding process.

## Hot-Dipped Galvanized

The average weight of zinc coating is determined by the ASTM A123 where coating Grade 35 is used unless specified otherwise in the PO. When galvanized pipe is bent or otherwise fabricated to a degree which causes zinc coating to stretch or compress beyond the limit of elasticity, some flaking of the coating may occur.

## Flattening Test

NPS 1/2" and greater: As a test for quality of the weld, position of the weld at 90° from the direction of force and flatten until the OD is 2/3 of the original outside diameter. No cracks shall occur along the inside or outside surface of the weld.

## Bend Test

NPS 2" and smaller, a sufficient length of pipe shall be capable of being bent cold through 90° around a cylindrical mandrel, the diameter of which is twelve times the specified outside diameter of the pipe, without developing cracks at any portion and without opening the weld.

## End Finish

Plain end: NPS 2" and larger: ends are beveled top a angle of 30°, + 5° – 0° with a root face of 1/16 ± 1/32 Threaded: To ANSI Standard B1.20.1

## Chemical Requirements

Composition, max % Carbon: 0.26, Manganese: 1.35, Phosphorus: 0.035, Sulfur: 0.035

## Tensile Requirements

|                                   | GR B  | GR C  | GR B & C |
|-----------------------------------|-------|-------|----------|
| Tensile Strength :<br>MPA minimum | 58000 | 62000 | 62000    |
| Yield Strength<br>MPA minimum     | 46000 | 50000 | 50000    |
|                                   | 23%   | 21%   | 23%      |

\* Refer to "table 2" ASTM A500

## Permissible Variations in Wall Thickness and In Outside Diameter, In Weight per Foot

- Minimum wall thickness at any point shall not be more than ±10% under nominal wall thickness specified.
- Pipe Diameter NPS 1 1/2" and under ±0.5% rounded to nearest 0.005"
- Pipe Diameter NPS 2" and over: ±0.75% rounded to nearest 0.005"