

SPECIFICATION

METHOD OF MANUFACTURE

The pipes are weldless hot rolled from solid round steel bars.

KIND OF STEEL

Open hearth steel is used for the manufacture of the pipes. The tensile strength is from 35 to 42 tons per square inch. The elongation is at least 16% in a test bar 8" long. The elastic limit is at least 50% of the ultimate tensile strength.

TESTING

Each individual pipe is tested to 1000 lbs per square inch. The bursting pressure of the pipes with standard thicknesses is between 5000 and 7000 lbs. per square inch.

COATING

After the pipes are reheated to about 300 degrees Fahrenheit they are dipped into a bath of specially composed asphaltic solution (Mannesmann Patent solution). The solution is burnt into the inner and outer pipe surfaces and will not crack off even if the pipes are bent or knocked about.

WRAPPING

After asphaltting the pipes are wrapped in a jute cloth which has been drawn through the asphaltic solution. The wrapping is done mechanically, the edges of the jute stripes are overlapping at least $\frac{1}{2}$ inch wide. This wrapping is absolutely adhesive and impenetrable. A sufficient amount of asphalt and wrapping will be supplied with the pipes free of charge, in order to cover the joints after caulking and to repair any damage to the wrapping.

TAPPING

The standard thicknesses are chosen with the object to allow of direct tapping i.e., no saddles or clamps would be required for the tapping. 3 or 4 threads in this hard steel would be equivalent to 6 or 8 threads in cast iron. If the house connecting pipes are larger than $\frac{3}{4}$ " it would be recommendable to use saddles or clamps for the smaller sizes of main pipes.

SOCKETS

The sockets are reinforced over the whole length to about 3 or 4 times the pipe wall itself (gradually tapering down to the thickness of the pipe wall). Thereby the socket is sufficiently strong and stable to allow of driving home the hemp and lead in the proper way, i.e., the sockets will not vibrate or get deformed during the caulking process. The sockets are of ample depth and width required for proper caulking.