

ABSTRACT

A method of manufacturing a MLP with upset ends comprising at least the steps of: (a) forming the carbon steel outer pipe as a single length; (b) radial expanding of the carbon steel outer pipe ends by either cold or hot working; (c) applying weld overlay deposit on the inner surface of the expanded area and counterboring the deposited weld overlay to match the inside nominal diameter of the outer pipe; (d) forming the inner liner pipe made of a Corrosion Resistant Alloy (CRA); (e) inserting the CRA liner pipe into the outer pipe; (f) fitting tightly the inner liner within the pipeline to create the mechanical bond by expanding radially the liner inside the outer pipe; (g) sealing the liner to outer pipe at each end of the MLP by seal weld / weld overlay and (h) machining the seal weld / weld overlay area at each pipe end to match the nominal inside diameter of MLP.

[FIG. 2]