

CORROSION OF STAINLESS-STEEL TUBING IN A SPACECRAFT LAUNCH ENVIRONMENT

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ABSTRACT

This is a report of exposure of various metal tubing to oceanfront launch environment. The objective is to examine various types of corrosion-resistant tubing for Space Shuttle launch sites. The metals were stainless steels (austenitic, low-carbon, Mo-alloy, superaustenitic, duplex, and superferritic), Ni-Cr-Mo alloy, Ni-Mo-Cr-Fe-W alloy, and austenitic Ni-base superalloy.

Keywords: tubing, stainless steel, nickel, corrosion, spacecraft launch environment