



Rolled Alloys Case History - Pulp Paper

AL-6XN[®] Alloy For Fractional Distillation Column

One of the nation's leading forest products companies installed an AL-6XN alloy fractional distillation column for separating tall oil. Measuring approximately 14 feet in diameter and 160 feet tall, the column, heat exchangers, packing, reboiler, piping, vapor lines, jacket piping and pumps have all been constructed of AL-6XN.

The column follows the Swiss type design, introduced in the late sixties. However, this unit is a modified system that utilizes both packing and trays. Using DOWTHERM as the sole heating medium, nearly all the heat is recovered by the exchangers, producing all the steam needed in the process. The system also increases yield, improves quality and reduces pollution problems.

This column is reported to give two additional weeks of production yearly, as maintenance time is cut in half. Previously, a similar tower made of a different material would routinely be taken out of service for repair two weeks every six months, and after three years noticeable corrosion was found. By comparison, the AL-6XN column is now taken out of production for two weeks every twelve months and studies found no visible signs of corrosion after three years of service. It has been in service since October 1989.

DOWTHERM is a registered trademark of The Dow Chemical Company.