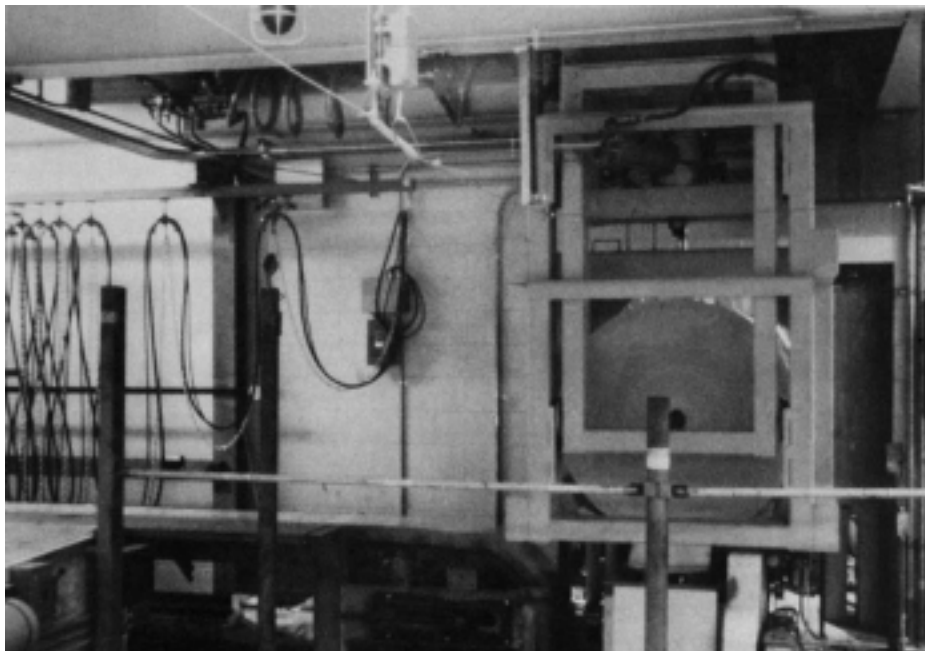


Modified Stacker Crane



Modified Stacker Solves Paper Handling Problem for St. Paul Pioneer Press

The St. Paul Pioneer Press and Dispatch's new production plant in the Plato Industrial Park in St. Paul is one of the most modern plants in the country. Built in 1981 the plant contains all the latest state-of-the-art press equipment. Its paper handling system is also fully automated.

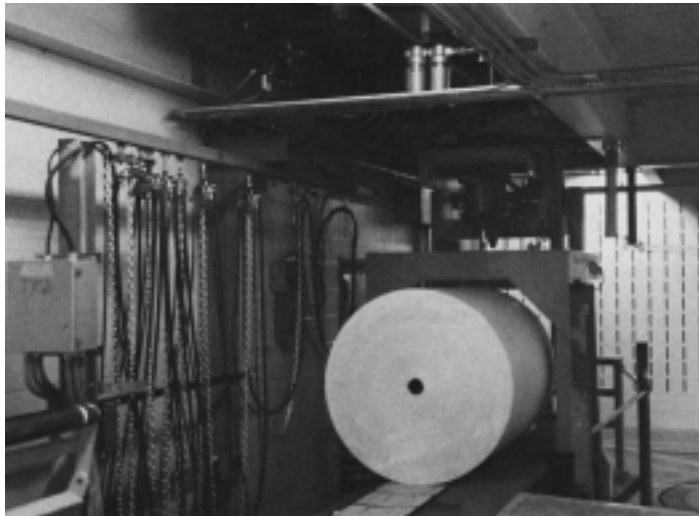
The St. Paul Pioneer Press Dispatch, a Knight Ridder Publication puts out two daily editions Monday through Friday and a Saturday and Sunday paper. They use approximately 425 rolls of paper weekly.

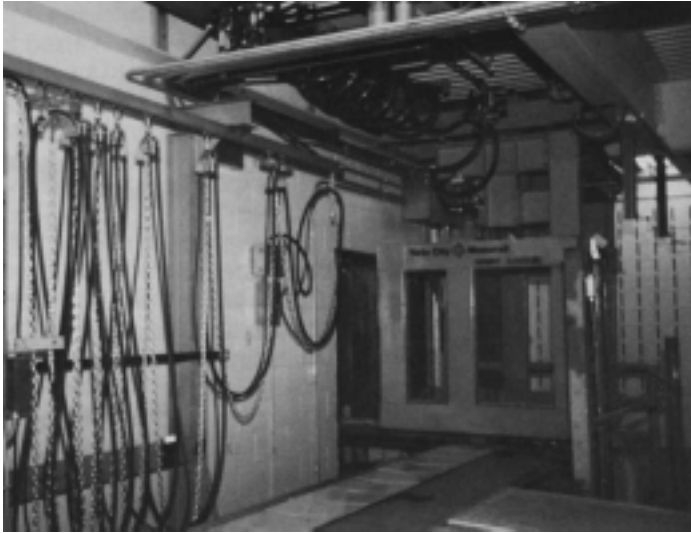
Problems developed from the start with the paper delivery system. The huge newsprint rolls were placed on a conveyor system and routed to the press via several additional conveyor lines. The roll is first routed to a station where the kraft paper is removed and the roll weighed. The roll is then

transferred to another conveyor to be run into the pressroom. Once in the pressroom the roll turns 90 degrees and is transferred to another conveyor to be delivered to each press.

The trouble developed as the roll was transferred from the kraft removal station to the first conveyor. The roll was nicked by the conveyor and the edge of the paper roll puckered. The roll lost several layers of paper to damage. The roll continued on to the next conveyor where it was again nicked and it puckered again. Then, in transferring to the final conveyor, it was nicked and consequently puckered again. The resulting damages totaled about 192 feet damaged paper to each roll. When you multiply this by 425 (the weekly average of paper rolls), it resulted in a huge amount of damage.

Jack Marquette, Head of Maintenance for the newspaper, set out to solve the problem. He looked at several solutions. One involved several modifications to the existing conveyor system, which proved to be a costly solution and even then he wasn't guaranteed that the problem would be solved. The solution he chose was to install a modified Stacker Crane System from Twin City Monorail, Inc. of Minneapolis, Minnesota. The Stacker has a 4,000 lb. capacity. It is automatic electric controlled with a





90° rotation. The unit has air cylinder operated crane travel, rotation and lift.

The Stacker Crane solution was cost efficient plus Jack was guaranteed that the installation would solve his problem. The stacker crane system was installed at the end of the conveyor at the kraft paper removal station. The Stacker provided for smooth easy movement of the paper roll. The 54³/₄" wide, 2,000 lb. newsprint roll was picked up by the stacker, turned 90° and then delivered to the last conveyor. The stacker set the paper down

on the last conveyor. The paper then was delivered to each press carriage without damage.

The modified Stacker System was installed in two days by Twin City Monorail, Inc.'s dealer, Aero Material Handling, Anoka, Minnesota. The parameters for installation of the system were such that the newspaper could not afford to lose any production time. The system was installed between the two daily editions. No time was lost. It has been a year since the installation and not one repair problem has developed. "And that is after we have run over 22,000 rolls of paper through

the stacker. We have saved over 4 million feet of newsprint and that amounted to savings of \$29,000.00 in paper. We looked and looked for solutions for our damage problems. They were either too complicated or costly to pursue. The modified Stacker System from Twin City Monorail proved to be the perfect answer. It is simple to operate, reliable and extremely cost efficient," concluded Marquette.