

Practice Report – Roller Alignment

See how Shotton Paper Company plc (a member of the UPM – Kymmene Group), the largest manufacturer of the UK newspaper print, cuts maintenance costs. Leica's Industrial Total Stations TDM5005 are applied for Roller Alignment.

Alignment benefits

To maximise production of a machine run, it is important that the machine's alignment is correct. If this is not achieved, performance and quality could be affected which could result in machine downtime and expensive repairs. When the machine is shut-down for repairs and planned preventative maintenance, it often includes the removal and replacement of various machine rollers. This is a relatively routine operation, however it is important that the roller is aligned level and square to the machine's datum.

Traditional way – costly way

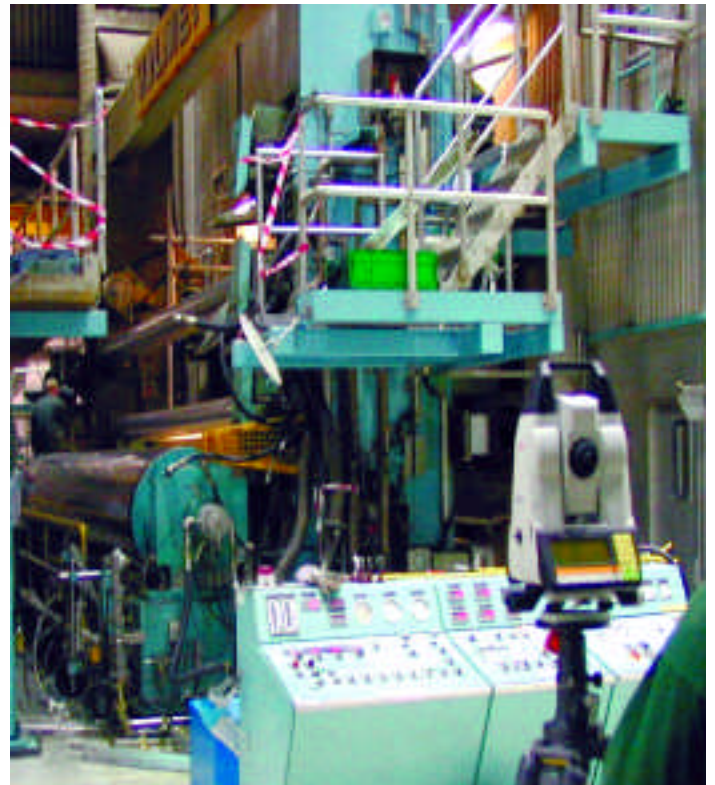
Traditionally machine rollers were aligned using conventional Theodolites and levels with a typical survey lasting several hours. Using these traditional methods an experienced operator required a set-up time of 20 minutes per roller. Although this method had proven to be successful, the measurement relied upon the skill and expertise of the operator. Valmet (the Machine Manufacturer) and various

A simple set-up procedure takes less than five minutes to complete.

survey companies provided this task at a significant cost to the business.

New way – faster, less costly way

Today, Shotton Paper Company and VALMET use Leica Total Stations, they have successfully adapted to this new technology. Shotton Paper Companies Plant Maintenance Engineers have been trained to use and apply the Total Station for the alignment of their paper machine parts. With the aid of the instrument's on-board software these alignment tasks are easier and quicker than previously taken by a conventional instruments. A simple set-up procedure takes less than five minutes to complete. The on-board processor calculates the position of the instrument in relationship to the machine datum. Two points are then measured on the roller, with the simple press of a button the operator is provided with the deviations



The Engineer has aimed the Total Station onto the target on the Machine roller

on instruments display panel, these corrections are then passed onto the engineer to align the roller square and level. Shotton Paper Company plc decided that an investment in a Leica Total Station would yield a good return in saved time, money, and increased production, with the added benefit of hav-

ing their own on site expertise to rectify any alignment problems. With step by step training, maintenance personnel can operate the instrument with confidence and ease. With an optimum range of 120 Meters the instrument can accurately cover the full extent of the Machine.

Photo:
Shotton Paper Company plc

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