

Control System updates breathe new life into your machines

Church & Dwight Products, based in New Jersey in the US, is market leader for a broad range of consumer and specialty products. Founded in 1846, the company manufactures everything from cleaning products and deodorant to toothpaste and Orajel for the global market.

There are fourteen production lines at Church & Dwight's New Jersey plant, with around 450 employees working three shifts, seven days a week.

Church & Dwight runs three Orajel lines on machines that date back to 2005. But while the Norden machines themselves were mechanically sound, the control system was having trouble.

"Tube filling is about 40% of our business – we run three Orajel lines, three dental lines, and two Nair lines," says Timpone.

"Prior to the upgrade we had a lot of problems with the control system because it was so old. We were doing maintenance almost every week and it was getting to the point where we couldn't even service it or get different components. This meant more and more downtime, which obviously wasn't good for business. So, after speaking with the Norden, we decided to bite the bullet and upgrade the control system."

The Upgrade

Joseph Timpone says Norden technicians came in and removed the control system, not touching the machine itself or any of the mechanical bits. They then installed a new control system, with a new control power transformer, new servo drives, new servo

motors – and the entire system upgrade took less than four days.

"It was impressive how quickly they worked and got our line up and running so fast," says Timpone. "Now we have all the latest, most up-to-date components. Having the latest computer, with the HMI screen and PLC all in one, along with all new manuals, means if there are any issues we can troubleshoot – but we haven't had to touch the manuals or troubleshoot anything because it's all been working really well!"

Church & Dwight's has line operators and mechanics who run and are in charge of different machines and of course, they receive training. But when it came to the upgraded control system there wasn't much need for new training.

"The machine is the same mechanically and it's a very sound and reliable machine, so we don't have any issues in that area. We looked at the new control systems and the programs and new configurations and most were very similar to what we had before so there wasn't a big learning curve. Despite that, it was very helpful to have the US Norden team go over everything, so we were good to go right away. The whole process was very transparent and now we're back up to capacity – prior to the upgrade we were in touch with them at least once a month. Now? We never talk to them, because the upgrade works so well!"

The Future

With the success of the control system upgrade on the Norden filling machine, Church & Dwight are investing in the future quite a bit, with a number of upgrades being implemented on machines throughout the plant.

"Essentially we replace ageing equipment when it becomes available," explains Timpone. "Church & Dwight is growing: a lot of our

business is essentials, such as cleaning products, toothpaste, and Orajel. These are all essential items and this keeps our company strong."

Why Norden

For Church & Dwight, Norden filling machines fill a niche. Orajel tubes are smaller than average and the Norden filler machines are perfect for this purpose. According to Joseph Timpone, when there have been challenges with the machines, Norden's response has been very helpful and he says they are a very good manufacturer to work with.

"Basically, Norden machines are good quality from a mechanical point of view. If you look at the machine which got the control system upgrade, the machine itself, despite being old, is still going strong and is very sound mechanically. We didn't have to touch any of the mechanics and the upgrade was obsolete due to the advance of technology, which is just what happens."

Timpone goes on to say that when a machine is down it costs the company money, which is why they jumped on the upgrade – and he says it was well worth the investment.



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