

Tissue-maker's Scada system is not to be sneezed at

A tissue paper manufacturer in Wales is using a Scada program to supervise a robotic packing station where products are palletised in a variety of different formats. The system can also record and visualise production data.

At its plant in Bridgend near Cardiff, Northwood & Wepa specialises in producing bathroom and kitchen rolls. Its activities include both tissue-making and converting operations. Packing and dispatch of the finished products is a complex operation because the company produces multipacks in many different sizes and these are arranged on pallets for transportation in a variety of patterns.

The production hall used for packing has a shuttle conveyor that delivers batches of products to one of two robotised palletising stations.

Robots have become increasingly popular for palletising duties in recent years because of they can lift substantial weights without risking repetitive strain injuries and can achieve high productivity levels. This is coupled with their ability to execute many different loading patterns and the flexibility to change quickly from one product or sequence to another.

Northwood & Wepa brought in the electrical and automation specialist Platinum Controls from nearby Neath to work on the control systems for its robotic palletisers.

"We reviewed the site and looked at options for control solutions," recalls Platinum's technical director, Stephen Vincent. "One of our key recommendations was to use a flexible, but competitively priced, Scada (supervisory control and data acquisition) package."



Platinum recommended the Progea Movicon system (available in the UK through Products4Automation). The system controls the robot's programs from a database of many different pallet-filling patterns, which are chosen according to the size and shape of the multipacks being palletised and/or to meet individual customer preferences.

Picking patterns

The operators interact with the robots via an industrial keyboard and a 21-inch touchscreen monitor mounted on the control panel. Via these, they select the required stacking pattern. They are also able to develop and store new stacking patterns – something that previously had to be done

Northwood & Wepa controls its robotic palletising system via Scada software

by the production and engineering team.

"These new patterns are stored in the database under names added by the operators themselves, rather than using long reference numbers," Vincent explains. "This small change has proved popular and effective because the reference numbers were difficult to remember, whereas the names are completely intuitive."

The hardware used in the control system includes two PLCs, one communications driver, 9,211 I/O and a PC that can display more than 50 different information screens. ■

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