

Offenburg Behind the Scenes of the Home Entertainment Industry



As a subsidiary of The Rank Group, Deluxe Media Services serves an international base of entertainment industry customers including Paramount Picture, Universal Studios, Warner Brothers International Television, 20th Century Fox International, Sony Pictures and Columbia TriStar Home Entertainment, through its North American and European operations.

At the company's distribution facility in Germany, a system was required which could sort and label videos and DVDs to the highest standards.

As a solution, Axiom GB supplied and installed a state-of-the-art sorting and labelling solution incorporating a tailored version of the new Series 25 sorter together with a high speed, variable height label applicator.

Labelling Intelligence

The sorter is capable of accommodating different sized products from the size of a credit card up to cartons and boxes weighing 30kg. The main sorter conveyor consists of multiple 25mm wide timing belts, strategically spaced to enable the carriage rollers to 'pop up' and divert product off the conveyor to outsort piers, bins or take-away conveyors. The rollers are precision ground to ensure they are balanced for higher rotational speeds. The possible number of out sort destinations is, the company claims, limitless as the sorter can be extended to suit any application. In addition, with different pitches down the length of the machine, outsort positions can be moved to suit any site requirement and out sorting can be either single or double sided in any combination.

A self-contained carriage is located at each outsort position and connected to a local control module by plug and socket enabling it to be quickly changed if there is a problem. It is also simple to remove the integral conveyor belts if needed.

The label applicator is claimed to be 'intelligent' and prints and fixes individual printed labels onto the products at a rate of 120 per minute, with two units each applying one label per second. In addition to its high speed capability, the applicator features a height-seeking device that, in a random product throughput, detects the height and position requirement for the next item's label in a fraction of a second. The device instantly passes this data to the applicator which affixes each label precisely where required. This means that a mix of products of

assorted heights and dimensions – from a 10mm thick DVD to a 130mm thick pack of videos – can be consigned to the conveyor randomly and exit the system at high speed, emerging correctly labelled, sorted and undamaged.

An essential requirement for the system integration was a link for data exchange between Deluxe's system servers running SAP in the UK and the Axiom control server in Germany. Consequently, Deluxe created a link over which Axiom can receive data as well as use it as a virtual private network (VPN) for remote support over an ADSL connection to the internet. The VPN carries html traffic, PLC monitoring data and remote terminal sessions enabling Axiom to remotely support the system at high speeds and relatively low costs.

Order Collection

Deluxe implemented changes within SAP to automatically forward data to Axiom upon creation of 'transfer orders' within the SAP process. The data files are pushed from SAP to Axiom, where a timed process runs. At this stage, the files are automatically imported and validated for errors while reports allow users to evaluate the errors and carry out appropriate actions. The data files are broken down into customer orders and shipping containers, each of which relates to one bin in the sortation system.

For efficiency, the system associates collections or orders in a wave, to match the picking process, providing the ability to bulk process order requirements. While FTP is a dated interface protocol, it not only provides full programmatical control over data exchange between Deluxe and Axiom but it is also simple and works over a wide range of platforms.

Commenting on the system, Alex Schmieg, general manager Offenburg Operations for Deluxe Media said: "Axiom's system has completely revolutionised our Offenburg operation. The sorter element alone provides greater flexibility and speed but, combined with the height-sensitive labeller, our productivity and cost-effectiveness have increased almost immeasurably."