FAST DESIGN TURNAROUND AND DEEP CONSULTANCY CAPABILITIES CREATE THE FOUNDATION FOR NEW PACKAGING EVOLUTION

ama Group lives by the principle that it will always deliver its industry domain expertise, in-depth technological knowledge and broad consultancy capabilities at every stage of a project's lifecycle – from very first contact, through machine and packaging design and all the way through optimisation, support and spares during the machine's operation.

And it shows! The success of this approach was demonstrated recently at PackExpo, when a customer received a complete packaging evaluation, potential redesign and a proposal for a fully featured automated solution they very next day... during the show.

Cama wasn't at PackExpo to just have a marketing presence, it was there to deliver consultancy and solutions, from experts who on hand to answer questions from representatives from a vast array of different industries, all with unique and sometimes fascinating challenges. In this case, the customer in question was a leading global home and healthcare brand. It was looking to automate its currently manual sleeving process, with a There's so much more to Cama Group than its machines. Behind its class-leading solutions is a team of designers, engineers and consultants who will stop at nothing to develop and deliver the best possible solutions to industry's most demanding packaging challenges.







packaging solution that would also be applicable for use by manual-process co-packers too.

The product was a pumped hand soap dispenser, which was packed in a removeable cardboard sleeve that carried all the branding and product information. Davide Di Lorenzo, Sales Engineer Manager at Cama Group, takes up the story: "The sleeve design was instantly recognisable to consumers, so we had very little scope to modify it for automated packaging. The problem was the way it was constructed and fastened was not amenable to automated packaging, especially as the customer wanted a throughput of 225 bottle per minute.

"We asked to the customer come back the next day, and immediately got to work to find a format that would not only maintain the proper shape and branding but would also be suitable for both automated and manual packaging.



Our sales team, our packaging design team and our machine design team came together to brainstorm the idea and very soon arrived at the perfect solution for all



Packaging





the challenges. It's this teamworking and mutual trust in each other's capabilities that shines through in projects such as these.

"By cutting a slot in the flap that fits over the neck of the bottle – turning the hole into a U-shaped cutout – and folding the glued securing tabs up rather than down, we turned an all-manual packaging format into an automation-friendly sleeve with near identical manual handling. We even took this one step further, as one of our design iterations simply glued the sleeve to the bottle, resulting in a less complex design and a less complex packaging process. This one is on the back burner for possible future deployment."

Cama's solution was based on the impressive multiindustry capabilities of its IF318 top loader. Fed by 14 separate sleeve magazines – to maintain the impressive throughput – the machine receives 7.5 or 10 oz (207 or 295 ml) filled bottles in single file, which are then pitched with a screw conveyor before being delivered to a flighted conveyor. Concurrently, sleeve blanks are picked from the magazines and placed into specially designed pockets on a phaser conveyor, with multiple sleeves being handled at the same time to decrease the overall cycle rate.

Multiple bottles are then picked up using vacuum cups and placed into the awaiting open sleeves. The phaser then indexes the bottles and sleeves to a closing station, which uses a robot with a special folding tool to close the sleeve by folding the 'U' shaped top flap against a back stop. The backstop has glue applied at a slightly earlier stage, as the pockets were transferred between stations.

Once the glue has set, the closing robot picks the completed assemblies and places them onto the exit conveyor, where there is also a solution for monitoring nonglued flaps.

The machine is a counter-flow design, where the bottles traverse one way and sleeves the other, so infeed and exit are on the same side for maximum accessibility.

"On the face of it, our solution to the packaging-design challenge appears relatively simple," Di Lorenzo explains, "but it was derived from years of experience in both packaging design and the capabilities of the processes and machines used to achieve it.

"This was just part of the picture though," he concludes. Our customer really appreciated the high quality of our support and our ability to consult on both aspects of the design – the sleeve and the machine.

And being able to deliver these solutions, the very next day at a major trade show, really impressed them, while also demonstrating our commitment to projects at such an early stage. It is this dedication and depth of experience that wins us so many orders from companies big and small all around the world. We are so much more than just a machine builder!"

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