

Flexibly transported through the machine

Sunscreen, hair spray, liquid soap, shampoo, nail polish remover, perfume – that wide is the range of cosmetic products of the contract manufacturer and bottler CWK from Winterthur. No question, the Swiss give flexibility the highest priority in their investments in new bottling and capping machines.



As a subsidiary of Coop, the Coop soap factory was founded 1945 and was named CWK AG in 1994. The contract manufacturer and bottler has specialized in the production and confectioning of body care products, cosmetics, household-cleaning products, as well as industrial cleaners. 116 employees work in the Winterthur company.

„In addition to Coop, our customers additionally include national and international retailers, name-brand manufacturers, and drug store chains“, explains Christian Koch, head of production and logistics of CWK Division.

The sales of the subcontractor are divided into the fields homecare, gastro, personal care, sun-care and aerosols, these sales are yielded in Switzerland and the EU-region. For the field cosmetics CWK 2006 has invested in a new bottling and capping machine. The selection was made in favour of a line of the machine manufacturer Rationator from Hillesheim. Rationator is not a newcomer for CWK, since the cooperation between the two companies has quite a long tradition. 19 years ago the confederates bought their first machine from the rhinehessians, a machine which still serves its purpose today, by the way, but it shall be replaced soon.. The second line of Rationator arrived in 2003 for duty and in August 2006 finally a third line of Rationator was put to operation by CWK. This means that the subcontractor now exclusively bottles via Rationator-machines. The most recent line represents a power-controlled linear piston bottler, a continuous capping machine for dosage pumps as well as a continuous capping machine for impression or screwed caps. Based on the wide range of products of the subcontractor as well as the large variety of bottles and caps the highest level of flexibility was requested.

Pucks transport even instable bottles safely through the machine

In order to ensure the requested flexibility the containers are guided in so-called pucks or transport moulds through the bottling and capping



machine. Here, even wobbly bottles and upside-down bottles are securely transported. Frequently various bottle formats can be processed in a single puck. In order to process the different containers and to guide them through the machine, CWK uses a total of 11 different transport moulds on the conveyer. „The transport moulds allow us to quickly change formats. This was decisive for the investment decision. Additionally we have made good experiences with the transport moulds on our other Rationator-conveyers“, stated Christian Koch.

„By the pucks in the bottle transportation section bottle placers and fillers operate without separating formats. In the capping field very few formatting parts are necessary, so that only little formatting expenses arise. Additionally, the format changeover times could be shortened considerably, which again results in minimum down times. This way, we can ensure highest flexibility in processing the most different bottle formats and caps, when bottling thinly to thickly liquid cosmetics products as well as foaming products“, Peter Schindel adds, executive manager of Rationator GmbH.

„Frequently we process small batches of only 7,000 to 8,000 bottles“, explains Christian Koch. „Here, a short changeover time is very beneficial. However, sometimes there are charges of up to 100.000 bottles. Then, the very high output of the machine is requested. Thanks to the possibility of the conveyer we can well master the stretch between flexibility and high output.“

A particular accessory is the linear piston filler for bottling alcohol and solvent containing products protected from the risk of explosion. This way, CWK can also bottle products such as nail polish remover or perfume without problems.

Another important criterion in the decision for the investment was the rapid cleaning of the arrangement. Without any prior retrofitting the automatic cleaning of the arrangement occurs on the push of a button. The product-depending cleaning processes can be saved and thus a consistent cleaning result is achieved.

Capping is made easy

Containers with dosage and spray pumps or impression caps are then sealed on a continuous capping machine for dosage pumps Capping spindles are each provided with a motor. The sealing caps are precisely positioned in their angle by predetermined programs. A control of the



presence of risers as well as automatic height control occurs. Here it is controlled if the bottle is too low, i.e. the cap is missing, or if the bottle is too high, i.e. the cap is not completely pressed onto it and/or screwed.

When the filled container shall be closed with an impression or screwed cap, the processing occurs in the subsequent continuous capping machine. The capping occurs via computer guided power capping spindles. Torque, rotation, and angular position are digitally predetermined. The capping parameter is monitored during the capping process to ensure quality.

In addition to technical features of the arrangement the long-standing good cooperation between Rationator and CWK also suggested an investment in this machine. For example, the start-up operation went well in spite of the tight schedule, additionally the planned budget was adhered to, states Christian Koch pleased and continues: „We consider to be very well served by Rationator, the service is provided by competent mechanics.“

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