

The Importance of Packaging Machine Maintenance

Maintenance Planning Guarantees Productivity

Packaging equipment requires two types of maintenance. There is maintenance based on the manufacturer's recommendations and maintenance that is based on equipment operation and usage. Every station of a machine has certain recommended servicing at designated intervals based on hours of operation. For example, on a cartoner the leaflet clip chain is replaced after 5,000 hours of operation, the carton chain after 7,000 hours of operation and the product loading chain after 10,000 hours of operation. Adherence to a servicing schedule based on hours of operation, helps to avoid unexpected downtime. As a result, machine availability increases, and production reliability ensures that orders are completed on schedule.

When we look at machine operation, individual machine maintenance is required to ensure machine efficiency and reliability in the long run. In this case, required maintenance depends on the operating hours as well as other machine and production data. Some lines run only 8 hours per shift, some operate over 2 or 3 shifts, while others are in operation for only a few hours per week. Some machines package just one product while others are required to package many products per day. An individual maintenance program depends on the individual process data of each line. But how consistently can the servicing intervals for packaging machines be, based on the different operating parameters listed above? Also, will your maintenance personnel be able to identify the service that is required? A maintenance agreement takes the guess work out of maintenance for you. In close cooperation with the customer's maintenance staff, the OEM's support service technicians provide for long-term, smooth production through a combined package of operational and preventive maintenance measures tailored to the individual requirements for each machine and for every technical function. Assessing wear and tear in advance, attaining maximum machine efficiency, avoiding unexpected downtimes and guaranteeing cost effectiveness are the four (4) priorities of a maintenance agreement.

Discuss and Then Act

A detailed discussion takes place before a tailored maintenance plan is drafted. The operating hours of the machine are recorded and previously observed irregularities are documented. A Customer Support and Service technician then inspects the different stations with the help of check lists, and issues a list of required parts and material. Which spare parts are needed? Does the customer have them in stock? Is test material required to check operation after maintenance? In other words, all issues are clarified beforehand to ensure that the maintenance work can be carried out smoothly and quickly. Another key question is when should maintenance take place in order to avoid production downtime?

Complete Replacement or Station by Station

There are two optional forms of maintenance: The more time-consuming maintenance of each station or the much quicker replacement of complete components. Which option is selected depends on the production workload.

The product loading function of a cartoner is a good example of the work involved in station by station maintenance: Clean; check transport chain for wear and tear, lubricate and, if necessary, tighten; check chain guide and ball bushings of the loading carriage; check function as well as wear and tear of the control rail; lubricate all guide rods; check overload of product loading function as well as smooth running of the loading function.

If all these measures are carried out at the customer's premises, the machine will be down for approximately 30 hours, whereas replacement of the complete product loading station only takes about 8 hours. In the latter case, the removed product loading station undergoes a complete overhaul at OEM's premises and is then available when replacement is due again. In either case, general technical improvements to the stations are automatically integrated. Once the work is completed, our Customer Support and Service technician and the customer check off the completed measures on the maintenance list. The machine is ready to restart production.

A maintenance agreement gives you security and guarantees the productivity of your machines today and in the long term. Experts from the Customer Support and Services division record the state of your machine's parts and compile a specific list of required parts. If required they check and correct calibration, answer questions about current operation and much more. After completion of the maintenance check, you receive a list with full details of the machine status as well as the exact dates for the next replacement of specified parts. Regular, scheduled maintenance is an investment in machine reliability.



Inspection of the carton pick-up by one of Uhlmann's support service technicians - regular, scheduled maintenance is an investment in machine reliability.