

/ Checkweighing and foreign body detection of natural products



Directly from its home location in Bavarian Swabia, the acclaimed family business **Carl Durach GmbH & Co. KG** produces pickled products and vegetable preserves for the European market. Well-known bulk consumers as well as prominent discounters have always been some of the satisfied customers of a company that can rightly be proud of over 130 years of experience with natural products. On site the company uses special manufacturing techniques that honor established traditions and yet always adhere to the latest standards. To maintain the highest quality standards, Wipotec checkweighers and X-ray systems are therefore in continuous operation – a lasting collaboration to the benefit of both partners.



Management at Carl Durach: Günter Durach Jr.

/ A success story involving the family business for over 130 years

Carl Durach is a team of specialists. Salads as well as fine pickled vegetables – including pickled cucumbers, peppers, red cabbage, carrots, beet, sauerkraut – are prepared fresh from the region ready to be sold. In other words, an experienced team takes care of everything that needs to be pickled and preserved, explains Günter Durach Jr. during a tour of the plant in Todtenweis.

“We fill jars, soft packaging (pouches) and cans. So, between wet production and pasteurization, our machinery has to operate without a hitch in highly adverse conditions.” Wipotec’s dynamic weighing and inspection solutions live up to these high demands. The filling process is supported by classic checkweighers, while X-ray systems detect foreign bodies. “We always gladly welcome this added safety.” ▲

Our client **Carl Durach**


As a manufacturer of pickled products and vegetable preserves, the family-owned company offers a wide range of services with several decades of experience in the food sector. Working together with the farmers in the region, Carl Durach always strives to achieve the highest quality.

Established: 1891

Location: Todtenweis/Sand, Germany

Products: Pickled products and vegetable preserves

More information:

 www.durach-konserven.de

DURACH
Eingemacht. Feingemacht. Seit 1891.

/Reliability as a quality feature

Particularly when filling glass containers, shards of glass can have disastrous consequences for the end consumer. Carl Durach's control processes must therefore be able to almost completely rule out any potential damage to the end product. In general, a simple metal detector would detect only a fraction of the foreign bodies in natural products. This is because stones or other impurities quickly end up in the production plant as a result of harvesting from the field. This is where Wipotec's X-ray technology proves indispensable.

"As a company that depends on the seasons, we need reliable partners who can come to our aid immediately in the event of technical complications," explains Carl Durach's Managing Director. "We cannot afford to have technical service difficulties or excessively long waiting times for spare parts." In addition to intensive on-site support, Wipotec therefore offers comprehensive remote maintenance, which saves considerable costs and effort, especially in the critical initial period. "Exchange is smooth. Cooperation cannot work without open communication."



*It's widely
known
in the industry:
If it lasts
at Durach, it will
last anywhere.**

Günter Durach Jr.
Management



Feeding sauerkraut
into the filling process

* Related to technical equipment in the food industry due to the hard conditions of use in the pickling industry.

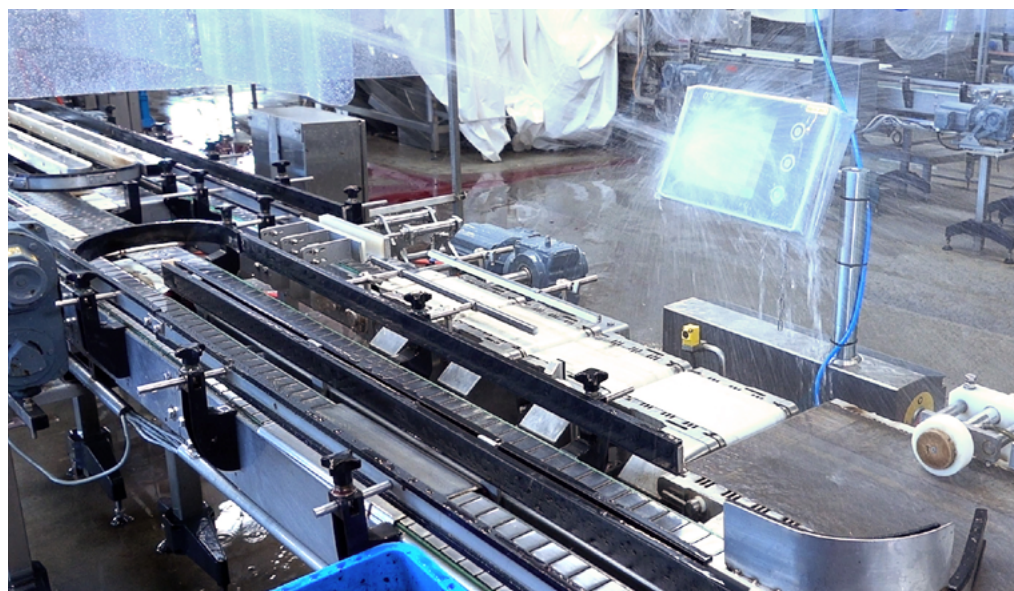


Separation of beet jars for checkweighing

Challenges for beet production in glass jars

At Carl Durach, beet's journey begins as cut slices, which are placed on vibrating screens to pass through the further production process. Foreign bodies are already eliminated in the upstream cooking- and washing process; however, sorting is made much more difficult due to the fact that natural products have different textures.

Beet leaves marks – on the floors of the production halls, but above all also between the machine parts. Acidic foodstuffs containing vinegar, sugar or salt are aggressive and require thorough cleaning of any surfaces they come into contact with. For this reason, the actual contents are checked at the Carl Durach plant using HC-M-WD checkweighers, which are suitable due to their wash-down hygienic design. >>



Checkweigher with hygienic design for optimum cleaning

Glass-in-glass-inspection for quality assurance

Next, the glass jars are sealed with lids and go through the process of pasteurization, closely followed by probably the most important control mechanism: According to Stefan Tarnowski, member of the management, "Here at Durach, we rely on Wipotec's X-ray technology as the final instance of foreign body prevention in the product. In addition to our own high standards every product must both comply with all official requirements and meet the expectations of end users in every respect." What is the ideal solution to achieve this? The SC-S 5020 Dual View X-ray scanner.

Even at first glance, the scanner reveals its sophisticated design. Cleaning is facilitated by a generous ground clearance, including a separate water drain, while the body of the SC-S 5020 can be opened fully to allow easier access. A highly accurate two-beam system inspects the contents of the glasses from multiple angles. So, critical areas like the lid or the base are inspected closely and are ejected if contamination with foreign bodies is detected.

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We see glass-in-glass-inspection as the supreme discipline of foreign body detection. To protect our customers, there must be no shortcomings in quality assurance.

Stefan Tarnowski

Member of the management

Dual View X-ray scanner for optimal inspection of standing products



Filling sauerkraut into doypacks

Sauerkraut is another specialty of the house. Its acidic qualities, combined with the fibrous structure of cabbage, can present real challenges for the filling plant. Packed as a finished product in doypacks, the products are checked on a HC-M-VA series checkweigher. The high-quality stainless steel casing of the checkweigher allows thorough cleaning with water jets, which is perfectly adequate for everyday use. If a pouch does suffer major damage and spills its contents in the machine, the automatic monitoring system kicks in to minimize force shunt, thus preventing incorrect weighing results.

The checkweigher is operated using the integrated display. All relevant data and additional statistics can be viewed at a glance in real time. The display surface is identical for all Wipotec systems, making operation of the systems fairly intuitive.



Identical user interface on all Wipotec systems



Foreign body card for testing the X-ray system



Easy to see: All foreign bodies were detected

Product safety by X-ray inspection

When producing sauerkraut, doypacks with aluminum coating are best suited for storage and transport, so X-ray inspection is vital for foreign body detection. Carl Durach uses a Wipotec Top Down X-ray system from the modular SC 3000 series. Two different modes are set: In production mode, all bags are checked for foreign bodies as usual and are reliably sorted out. This is followed by a reinspection of the products already discharged to further isolate the cause of the problem.

Only after this are the goods prepared for removal. Each element involved in the production process must perform its task perfectly. Carl Durach is very pleased not to have extensive recall campaigns. The future is open with a strong partner. "We felt that we were in good hands with Wipotec right from the start," says the managing director.

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Effective data transfer for production optimization

The data collected from the checkweighers and X-ray systems are also aggregated using Comscale software. "We couldn't ask for a better overview. Various analyses help to identify trends early on so that counteraction can be taken on time in the production process," states Günter Durach. Responsible employees can even access the central database using their mobile devices. "For us, Comscale represents a significant time saving that greatly reduces the effort required to manage and capture data. This is a very significant advantage over the competition." ▲



Everything in view with Comscale – data management for inspection systems

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