

CURRENT ISSUES

TEM News

ATL Anlagentechnik Luhden GmbH - Machines for Thermal Deburring

The New Plant at the Company Site in Luhden

Already since midyear 2011 the construction of the iTEM final assembly and new home of the TEM department was in full swing. By the end of December 2011, the building was completed and the moving took place at the beginning of January 2012.

The new plant has a total area of 800 m², a 250 m² built-on office wing and is located directly opposite the headquarters in the Hainekamp 43 in Luhden.

So far, the business divisions industrial supply, pressure silencer and TEM were located in a production area of approx. 3,000 m² in the Hainekamp 2.

Because of the construction of the new building, final assembly of the thermal deburring machines and the administrative area of the TEM department are relocated.

ATL Anlagentechnik Luhden has made provisions with regard to a continuing positive future. The approx. 6,000 m² large plot of land, which was bought by ATL before the start of construction, provides sufficient space for extensions, for example, addition of another office storey, but also additional production halls.



ENORMOUS: iTEM200/1200 Delivered

At the beginning of this year, ATL delivered an absolute highlight. The technicians developed the biggest long chamber machine so far with a semi-automatic handling system for a leading company in the automotive industry.

The internationally leading organization for engine technology is an accredited systems supplier for leading-name manufacturers. And exactly for this area, the concern counts on an individually developed TEM machine from Luhden.

The *iTEM200/1200 LC* (Long Chamber) is especially developed for thermal deburring of shafts for rocker arms (truck engines). The task that is to be performed is both simple and challenging: repeatable removal of detachable burrs.



With a deburring chamber size of Ø 200 x 1,200 mm and a maximum filling pressure of 23 bar, the 1-station-machine automates the process which has been used so far - the manual deburring. Not only the dimensions of the deburring chamber are special for this machine, the handling system - consisting of rotary indexing table and gripper - was especially designed for the customer, too.



The rotary indexing table is equipped with 8 stations, the deburring fixtures and the workpieces are placed on it and hydraulically driven towards the machine. One fixture at a time is lifted into the machine and placed on the closing plate by the gripper.

Similar to other iTEM machines, closing plate and deburring chamber are hydraulically closed and the thermal deburring process is initiated. After deburring, the fixture including workpieces is taken out of the machine and placed back on the rotary indexing table. Subsequently the gripper grabs the next advanced deburring fixture and the process restarts.



PROJECTS & REFERENCES

WEMA Belgium: Effective Cleaning of Hydraulic Components

By the end of 2011, a thermal deburring machine of the *ITEM400* series was delivered to the Belgian component supplier WEMA NV.

WEMA is one of the leading subcontractors in series production of high precision mechanical and hydraulic parts. The Belgian company based in Zedelgem provides market-leading manufacturers of earth moving equipment, agriculture machines and hydraulic and automotive parts worldwide.

The decision to buy a TEM machine from ATL Anlagentechnik Luhden GmbH was made very promptly. Not only because of the substantial optimization of the production processes. "During the discussions it became



obvious that our TEM equipment, in addition to the optimization benefit, meets the guidelines of the WEMA environmental management. From then on, nothing prevented the conclusion of the contract", explains ATL's CEO Struckmann.

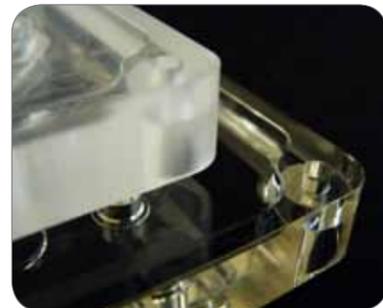
B. Braun Melsungen Germany - Thermal Deburring of Thermoplastics

Just as metals, thermoplastics have burrs after production which generally must be removed in a cumbersome and time-consuming way. Among thermal deburring machines for metals, ATL Anlagentechnik Luhden GmbH offers the so-called *ITEMPlastics* which allows processing of several plastics.



The German medical and pharmaceutical company B. Braun Melsungen AG has now decided to invest in an *ITEMPlastics*. Especially in the field of medical technology, a reliable subsequent processing of the workpieces is of central

importance. The TEM method does not only deburr thermoplastics effectively and repeatable, a significant improvement of the surface roughness is achieved in addition. Because of this effect, further



handling expense can be depleted. The operating gases are oxygen and hydrogen. All thermoplastics like PA, PMMA, PUR, PE, PP, and die casting parts without glass fibre content are processable.

Steiner Germany - With TEM into the Future

Decades of experience, manual dexterity, consolidated knowledge and future-oriented action are the basis of the Johannes Steiner GmbH & Co. KG. Among other things, the German company produces 1.2 Million coupling nuts made of steel and stainless steel for the common rail system per day.



controls can be reduced without any loss in quality. That is why the family business decided to replace the former used chemical deburring for its coupling nuts and to invest in a thermal deburring machine.



The *ITEM400* is equipped with 5 stations and especially tailored to the requirements of the customer. As the machine is operated with a fully automatic handling system, the control panel is directly mounted on the machine housing.

The focus at Steiner is on quality and precision. Preliminary investigations have shown that a significant increase of quality is reached by using TEM. Simultaneously, the costs for quality

ATL systems offer maximum flexibility and practicability. This allows an economical operation and an excellent return on investment.

Valeo France - Modernization of the Zinc Die-casting Production

Within the framework of production modernization, the French concern Valeo decided to invest in a thermal deburring system from ATL Anlagentechnik Luhden GmbH. The machine is operated at Valeo Sécurité Habitable, Business Group "Comfort and Driving Assistance Systems" in Nevers, France.

An *ITEM400* equipped with 5 stations was chosen by Valeo. From now on, workpieces made of zinc diecasting will be thermally deburred. With cycle times of approx. 35 seconds, up to 6,000 kg of workpieces can be deburred daily.

The machine is additionally equipped with a handling system for adaptation to the production

line. Upon customer request, the control panel is not installed on the equipment, but is placed separately.

