



## 2016 – YEAR OF CASEMASTER EVOLUTION

# SECO/WARWICK

### INVENTION MEETS RELIABILITY

In 2016, SECO/WARWICK's CaseMaster Evolution was the preferred heat processing technology of vacuum case hardening for the most challenging industries, such as automotive, aerospace, machinery, wind energy, transmission and commercial heat treat facilities.

CaseMaster Evolution designed by SECO/WARWICK by ensuring uniformity and high quality of parts following heat treating processes, high speed and economic process performance and very low consumption of processing mediums, is the preferred technology among manufacturers of parts for demanding industries.

With more customers searching for improved mechanical properties in materials undergoing heat treating processes, SECO/WARWICK offered CaseMaster Evolution (CME), a hybrid solution that thanks to a newer carburizing process increases strength, hardness and wear resistance.

Carburizing is one of the most common heat treating practices for surface hardening functional components. SECO/WARWICK vacuum technology offers more efficient and improved carburizing. Due to its reliability, their systems attract worldwide manufacturers, especially those of automotive parts, who are facing multiple challenges as the today's auto industry is going through a dramatic change. There are more competitors, demand for mobility is rising, and the vehicles of the future need to be built from high-quality components to be able to deliver safe and sustainable experiences.



With dozens CME furnaces installed, SECO/WARWICK is currently at the forefront of international vacuum

heat treating market. "We are pleased with CaseMaster Evolution gaining more and more recognition among customers who noticed the potential of this solution and excellent application possibilities," said Maciej Korecki, Vice President, Business Segment Vacuum at SECO/WARWICK "CaseMaster Evolution is a flagship product in SECO/WARWICK's portfolio due to its quality, performance, reliability and high precision of repeatable results. It is a new generation of vacuum furnaces for carburizing with integral quenching tank, which addresses

the needs of various industries; aviation, automotive or machine-building. All of these industries require advanced technologies that provide automation, process repeatability and flexibility and these expectations are met by CaseMaster Evolution," added Maciej Korecki.

In 2016, various leading companies that needed superior mechanical properties compared with conventional case hardening methods, have increased their production capacities with CaseMaster Evolution designed by SECO/WARWICK.

One of such companies is a manufacturer of the complete range of high tensile 'standard' and 'special' fasteners in the main Asian markets. The company has a global manufacturing presence and sells its products also to United Kingdom, Malaysia and Germany. Interest in SECO/WARWICK's CaseMaster Evolution is growing also in the American market - for instance, one of the most innovative companies specializing in automotive manufacturing improved their production by purchasing CaseMaster Evolution, multi-chamber vacuum furnace with integral sealed oil or gas quench.

This advanced technology that uses high temperature and low pressure carburizing replaced conventional sealed quench furnaces by achieving shorter cycle times and higher production rates, is a perfect solution for manufacturers of precision gears ensuring high-speed and economical process performance. Even though, it is mainly used by automotive industries, it also finds its application in the aerospace, machine-building, bearing and commercial heat treating industry. For example, by a Polish longtime manufacturer of drilling tools and equipment for the oil and gas exploration industry, geological, hydrogeological, geophysical, engineering drilling and coal mining sectors and by a comprehensive producer of gears and gear units that has been in automotive and machine building industry for a few decades.

Following the requirements and expectations of the global industry for sustainable performance, achieving repeatability and the highest production quality is fundamental also among Austrian commercial heat-treating facilities. One of such companies, in order to strengthen its market position and competitiveness, has recently increased its production capacities, by purchasing an advanced heat processing system, 10.0 CaseMaster Evolution™ designed by SECO/WARWICK.