

Product development

Eurotech has broad experience in the complete development of modules and machines. Eurotech Aluminium Castings can take up the full development process. A project based approach guarantees the outcome. With the knowledge present at Eurotech Aluminium Castings, the company can also offer fully integrated aluminium sand casted products, whether assembled together in a module or not. Precise analysis of the functions of an assembly, allows us to produce several part into an integrated product. Often aluminium castings are used in this way. In all fairness, it can therefore be stated that knowledge of aluminium and integrated aluminium castings are the specialisation par excellence of Eurotech Aluminium Castings. Our clients benefit from serious cost reductions, due to the reduced number of parts, less processing and less assembly time. Our own Engineering Department, working with the CAD systems Pro Engineer and Solid Edge, vouches for that.



Technology Centre

The various specialists closely cooperate in the technology centre. Eurotech Aluminium Castings has everything under one roof: foundry specialists, product developers, machining specialists, and project managers. At the technology centre the project managers manage a team of specialists in order to prepare the start-up of new development in the best way as well as the corresponding production start-up. Technological, logistical and quality aspects are integrated in the project in this way. As a result, Eurotech Aluminium Castings is able to realise optimal solutions for the client like no one else.



Eurotech Aluminium Castings, Groot Egtenrayseweg 58, 5902 RB, Venlo-Blerick, (NL)
☎ +31 (0)773231515, fax +31 (0)773231516, E-mail: info@eurotechgroup.nl,
Internet: www.aluminiumcastings.nl



Eurotech Aluminium Castings is a unique combination of competences. On the one hand, the company is a very high-quality aluminium sand casting company, on the other hand, it is a specialised system supplier that develops and constructs modules and machines.

Eurotech Aluminium Castings is therefore an ideal partner for customers looking for a specialist in the field of aluminium sand moulding products, be it machined or combined in modules or not. Because of our broad experience in product development, Eurotech Aluminium Castings can look for the most optimal solution together with the customer. This common approach, with input early in the development process, distinguishes Eurotech Aluminium Castings from others. During the production phase Eurotech Aluminium Castings has, apart from its own production options in Venlo, the capacity of Pezag at its disposal. Pezag is part of the Eurotech Group and consists of a modern machining factory with an aluminium sand casting foundry in the Czech Republic. Eurotech Aluminium Castings controls the full process of product development up to serial delivery. The corresponding logistic control is fully taken over by Eurotech from its clients, including quality assurance and supply chain management.

Eurotech Aluminium Castings has the following competences at its disposal to that means:

Aluminium sand casting.

Aluminium sand casting offers enormous opportunities for the development and production of integral parts. These are casted and processed aluminium parts that replace the functions of several parts. In other words:

- The integration of several functions in one part;
- The creation of new design opportunities such as shape creations which are hardly technically and economically possible when made of solid material or sheet metal work;
- Cost reductions because of reduction of the number of parts and complexity;
- Casted in materials in order to create specific material characteristics locally in the product.



Eurotech Aluminium Castings has a strong, flexible aluminium sand casting foundry with its own core and pattern shop. The integration of its own casting-technical engineering department is also remarkable. In cooperation with our own pattern shop we can create the most efficient and creative casting designs. The transfer of knowledge with the colleagues from the machining department furthermore guarantees an optimal design in view of mechanical processing.

The aluminium sand casting foundry with well-educated employees makes use of the following moulding techniques:

- Automatic HWS EFA-SD5 sand moulding line (year of construction: 2006) with MPS
- Ductalucast® on an Automatic HWS EFA-SD5 sand moulding line
- Vacuum moulding in foil
- Machine moulding at Pezag in the Czech Republic
- Hand moulding in furan sand

Ductalucast® stands for sand casted products that are casted with low pressure. The products casted with this have special characteristics:

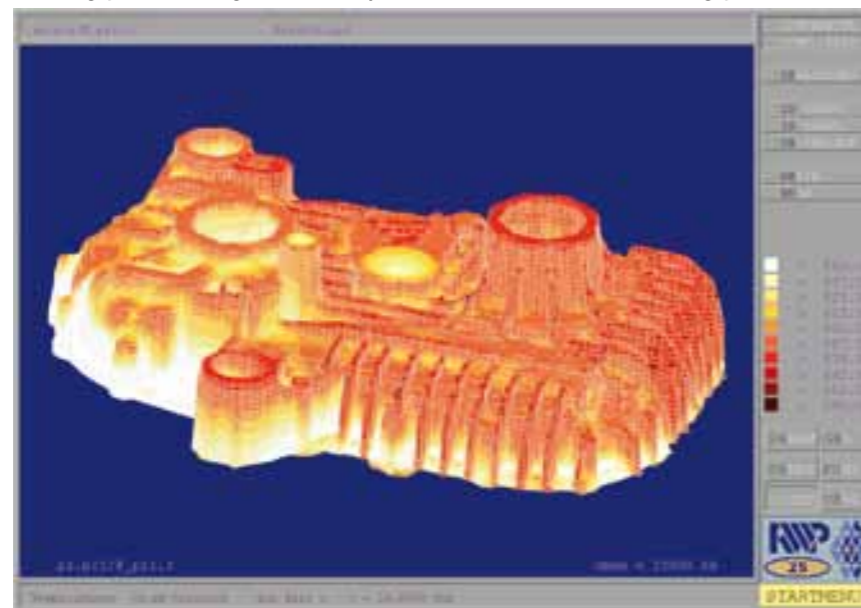
- High level of reproducibility
- High homogeneity and density of the moulded products
- Higher strength and stretch of the product



The added value of castings manufactured in accordance with the vacuum moulding process in foil is represented best when the following requirements are set:

- Relatively small amounts, some pieces once-only up to several hundred pieces per annum;
- Accurate castings with smaller tolerances;
- No draft angle;
- Thin walls, depending on the dimensions up to 2 mm;
- Very high level of surface appearance.

Of course Eurotech Aluminium Castings has casting simulation software at its disposal in order to optimise the product and the moulding process together with you, before the actual casting process.



Building of modules and machining

Eurotech Aluminium Castings builds complete modules or machines in accordance with customer specifications, and assumes the full logistical process including the assembly and delivery tests. We can also deliver mono-parts as well.

The development and production of null-series and smaller production series of machines, modules and parts is just right for Eurotech Aluminium Castings. The working range concerns the so-called high mix/low volume field. The prototypes necessary to that means are also developed and produced on a project basis.



The modules and machines generally speaking have a mechatronic character.

The project manager and his multi-disciplinary team control the whole process.

The machining department closely cooperates with the foundry and has a huge number of CNC turning and milling machines at its disposal. In combination with the machining department of Pezag in the Czech Republic, Eurotech Aluminium Castings can make competitive offers worldwide.



Eurotech Aluminium Castings relies on craftsmanship and a broad expertise. For the assembly of complete machines or modules with strict requirements in the field of contamination, Eurotech Aluminium Castings has a 'clean room' at its disposal.

