



ALUMINIUM DUFFEL
mind over metal

Internship for

Materials Science/Chemical Engineers

What is so special about aluminum?

Aluminum is strong, light, durable, flexible, extremely versatile, impermeable, corrosion resistant, an excellent conductor of electricity, non-magnetic, non-flammable, an abundant element in the earth's crust and infinitely recyclable.
Aluminum has unlimited potential to be part of solutions that move society forward.
Its freedom enables people and businesses to create a better future by innovatively using the versatility that aluminum offers.

Your field of work

Since the innovation center is linked to the factory, there is a close collaboration between R&D and production. We can already offer you an insight into different positions where an engineer can end up in industry (R&D, quality service, technical customer support, process technology, etc.).

We can offer you interesting research topics that will make you familiar with the industrial research and help us develop even better products.

Some examples include microstructure studies, where the grain size and the particles are analyzed through processing and their effects on the final material properties, such as; strength, formability, and surface quality are investigated.

Your duties and requirements

- Gather information, both from literature and through collaborators, usually coupled with lab tests or attending industrial trials.
- Analytical mindset and able to work systematically in a team environment.
- Good knowledge of Dutch and English.

Interested?

Then send your CV attn.
Els Verboom (Manager R&D),
els.verboom@aluminiumduffel.com

Aluminium Duffel B.V.

is a European leader in manufacturing and marketing aluminum rolling products for a wide variety of markets (automotive, architectural, construction, consumer products, etc.) worldwide. It has state-of-the-art technology, including the widest cold rolling mill in the whole of Europe and a CALP (Continuous Annealing Line with Pre-Treatment) production line.

The Innovation Center in Duffel, Belgium, therefore focuses on segments such as the automotive and industrial sectors.

Through process microstructure evolution of aluminium products used in automotive industry

Internship for student in Master level

Location: Aluminium Duffel, Duffel, Belgium

To produce sheet metal, aluminium goes through successive processing steps, starting from casting and homogenization followed by hot rolling and cold rolling steps where there might be an inter-annealing step in between cold rolling passes, and processing ends with final annealing where the material is treated thermally and chemically. All these processing steps influence the microstructure of the material and therefore on the final material properties (such as; strength, formability, surface quality etc.).

The objective of the work is to experimentally study the microstructure evolution of the material through processing, from casting to final annealing using light optical microscopy (LOM), FE-SEM and EBSD, and correlation of the investigated microstructure to final material properties.