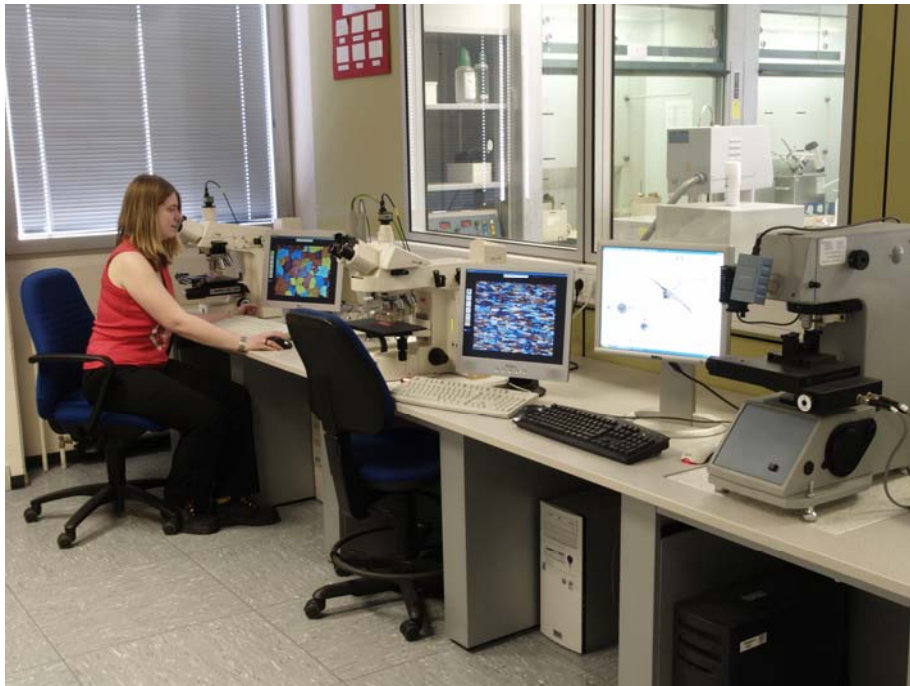


**Aleris Aluminum Koblenz GmbH** is one of the world's leading suppliers of high-quality aluminum rolled products. Every year, the Koblenz factory delivers over 160,000 metric tons of semi-finished aluminum stock to customers in Germany, Europe and overseas. It uses cutting-edge equipment to produce highly specialized, customized coils, sheets and plates from almost 100 different alloys.

It mainly manufactures aluminum plates and sheets for aircraft production; products made from high-strength Al-Mg wrought alloys such as Alustar for ships, tanker trucks and bulk transporters; plates made from Giantal, Weldural and Hokotol special alloys for molding and tooling; and brazing coils and sheets for heat exchangers, especially in the automotive industry.

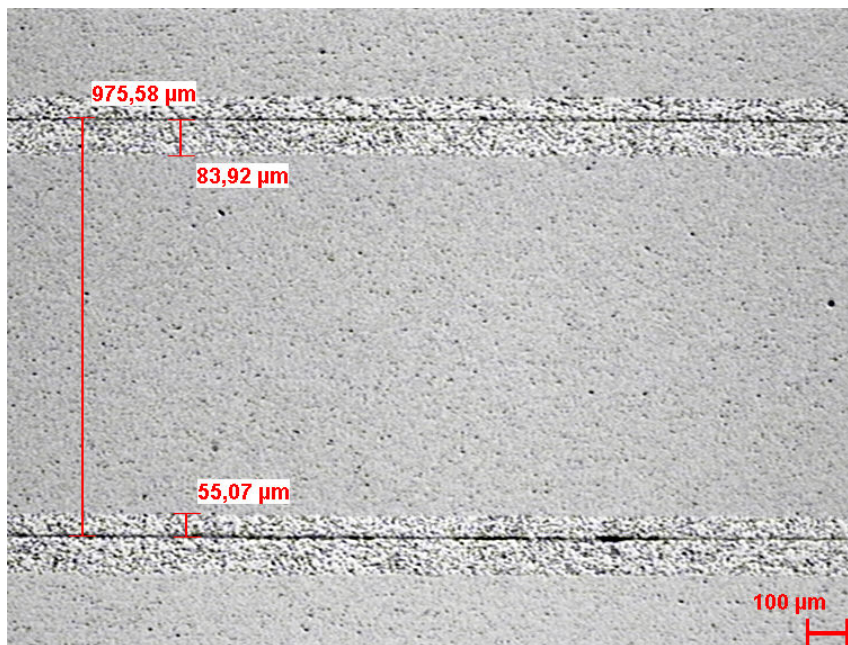
This is a company committed to quality, and it shows in its certifications: DIN EN ISO 9001 (general), ISO/TS 16949 (automotive), DIN EN 9100 (aviation) and numerous customer certifications. Maintaining this standard means investing in cutting-edge material testing systems.

One of these systems is the **dhs Image Data Base**. After abandoning conventional photography, the Metallography Department was equipped with three full-scale workstations. The systems are used to process, analyze and document material failures, research projects, development contracts and production samples. Following preparation and etching, the structures of the samples are evaluated and analyzed microscopically. The technicians measure the layer thicknesses, grain sizes, phase distributions, phase sizes, porosity and purity of the samples.



The **dhs Image Data Base** has a very clean design for outstanding ease of operation. The three workstations are networked over the company intranet, so the data can be stored on a central server. Two workstations are connected to a microscope; the third is used for image measurement, image labeling, data entry and report generation. The reporting module effortlessly generates customized document templates in MS Word™ in order to present the images in a single report.

### The dhs Image Data Base Modules in Action



### Module: Measurement Tool

Image of a brazing coil. The material thickness and the individual layers were measured, and a scale bar was overlaid on the image. Measurement Tool can also insert text, arrows, circles, et cetera in the image.

## Module: Metal Sections

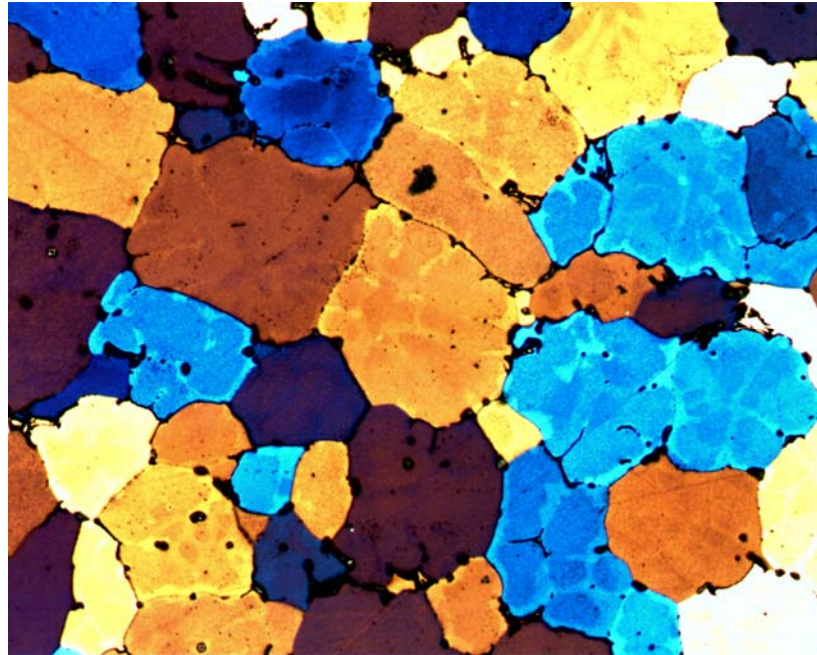


Image of a globulitic grain structure. With the Metal Sections module you can easily determine ASTM (and other) grain sizes using reference images.

### Conclusion:

Users are delighted by the ease of operation and intuitive design of the *dhs Image Data Base*. The *dhs-MicroCam 1.3* camera systems offer high resolution levels to ensure impartial results in complaint root cause analysis and research contracts. Report generation, data transfer and archiving can be done efficiently and effortlessly. The systems have been in use for 5 years without any problems.

In a nutshell: We made the right decision to get out of analog photography and process our samples with the **dhs Image Data Base**! We now have a partner we can rely on completely for the medium and long term.