



AUTOMOTIVE OEM – ENGINE COMPONENT CASE STUDY

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1. Description of casting

- Material type: ENAC 46,000
- Size: 430 mm x 325 mm x 200 mm
- Weight: 12,25 kg
- Casting method: high pressure die-casting
- Application: automotive engine block

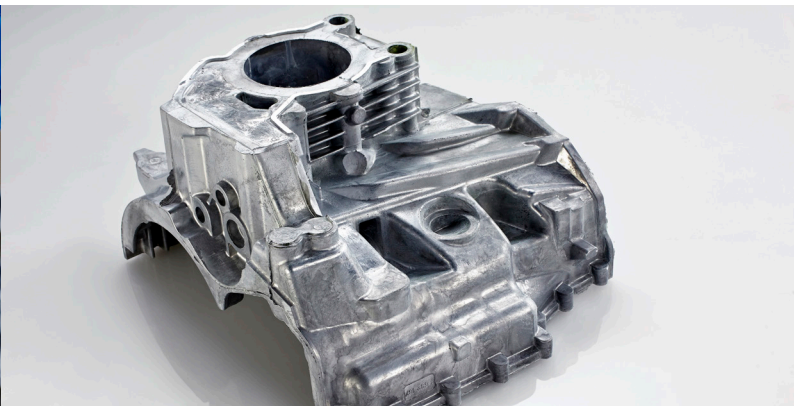
2. Summary of Process Diagram



3. List of services

3.1 Fettling

The manual fettling operation is removing burrs and flacks, as well as parting lines and surface defect from the casting tool visible on the casting surface.

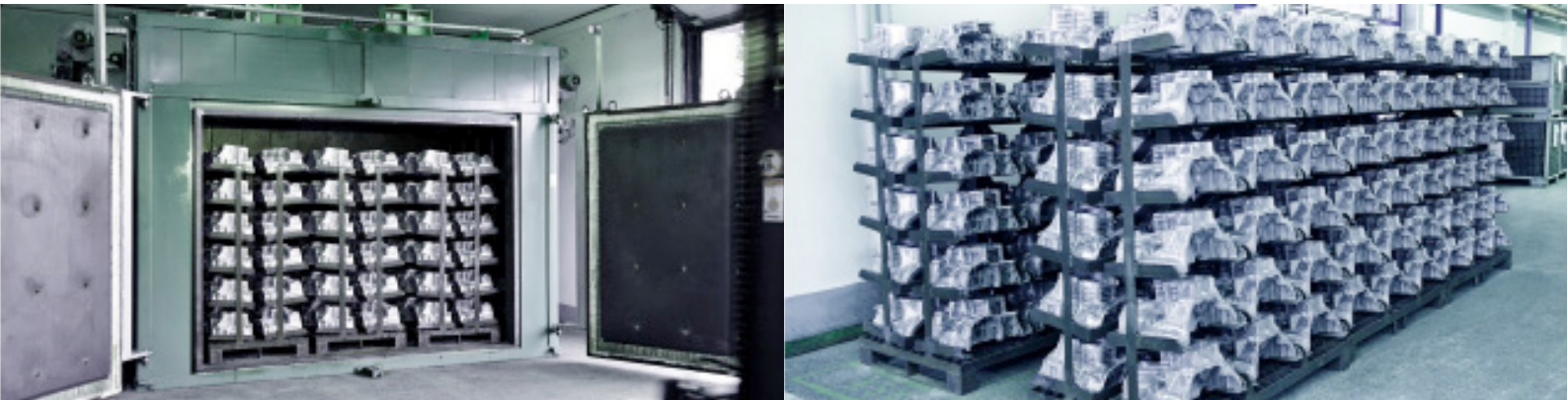


3.2 Heat Treatment

For many years Sterr & Eder Industrieservice has specialized in the heat treatment of cast aluminium and with our equipment can offer all the important heat treatments, such as T4, T5, annealing, T6 and T7.

We have 4 powerful and precise working machines from leading manufacturers; including measurement engineering, documentation and hardness testing. We therefore have an annual capacity to handle 4000 tons of all types of aluminium castings.

In order to assure accurate measurement results, we appoint accredited institutions to carry out drag measurements at regular intervals on the systems with actual heated goods.



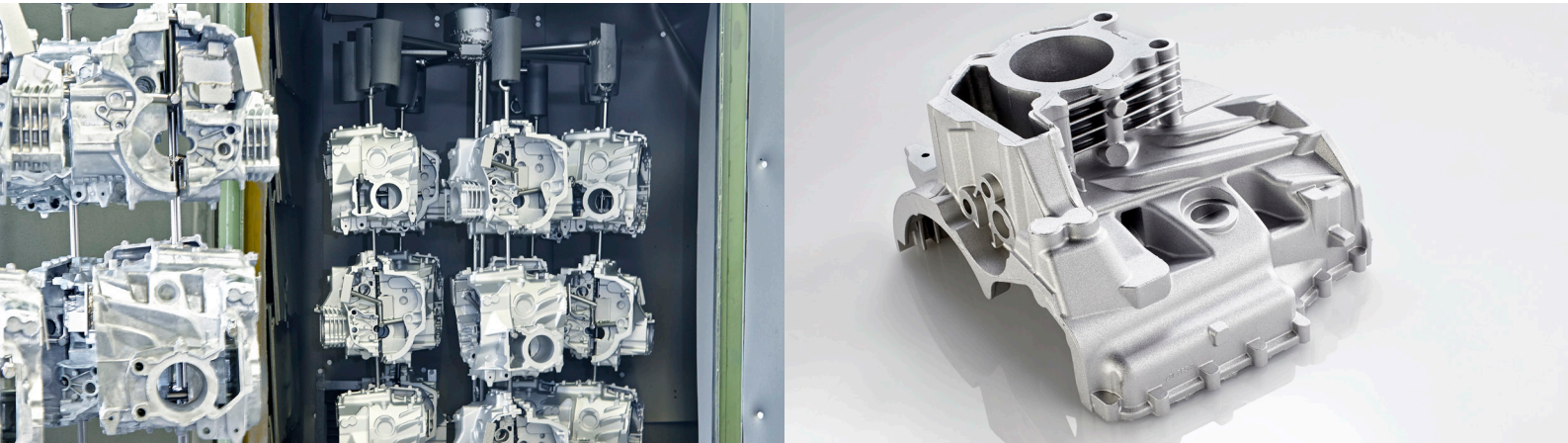
3.2.1 Process Tracking

DMC code reading after heat treatment to ensure data transfer directly to customer of achievement of successful process parameter.



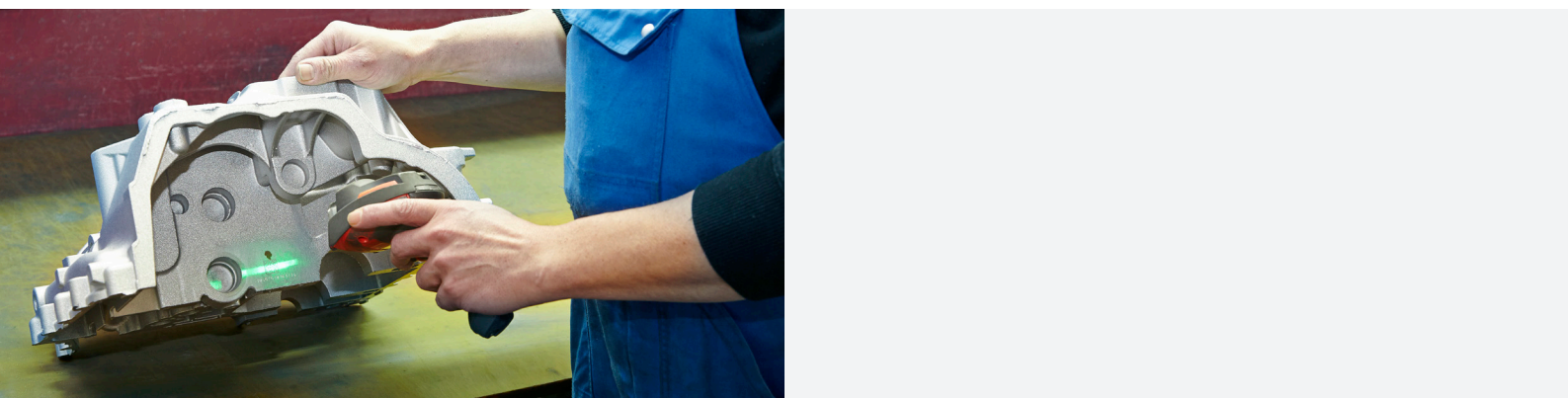
3.3 Shot Blasting

Shot blasting to achieve a unique surface structure as pre-treatment for the following powder coating operation



3.4 Final Checking

100% visual check to ensure highest surface quality requirements



4. Raw vs. Finished State

Condition of casting when received from customer.

Test sample – Casting condition after S&E treatment.

