

BACKGROUND

Eisengiesserei Torgelow GmbH is one of the biggest hand molding gray cast iron and ductile iron foundries in Europe. Having modern casting and production technology the company is able to produce effectively heavy and complex castings.

Having heard about Blastman technology the company decided also to upgrade their manual blasting to state of art robot blasting.

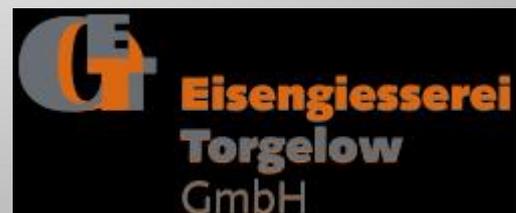
The EGT is one of the largest European hand molding foundries with a capacity of 8,000 t / month. It supplies finished components made of gray and ductile iron with a blank weight up to 115 t and provides other services such as modeling, simulation creation and engineering.

OBJECTIVES

Target was to robotize their manual blast room since blasting large castings manually is ineffective.

There was a need to use a robot by programs and additionally manually by joysticks for touch up blasting.

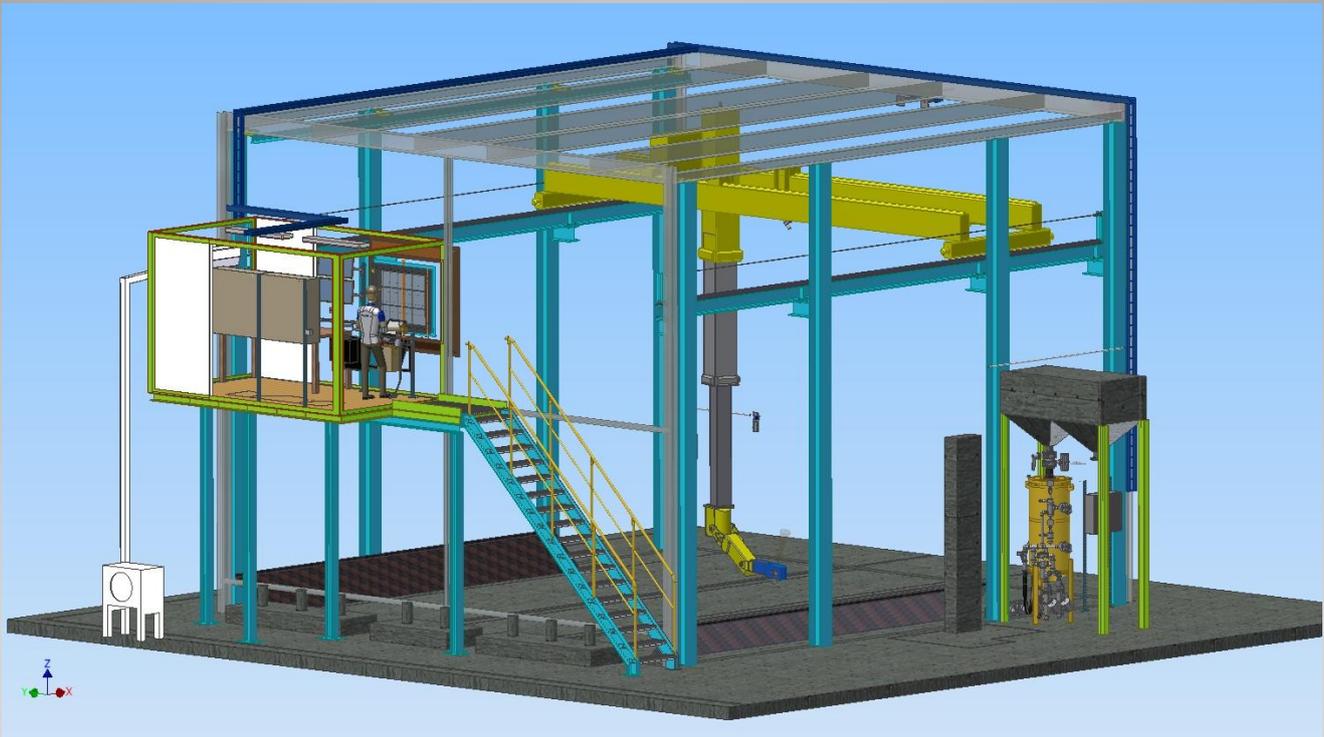
Touch up blasting is needed since possible casting failures are hidden and can be found after a robot blasting process. The old transport wagon was planned to be retained.



BLAST CLEANING OF LARGE CASTINGS

Advantages of Automated Blast Cleaning

- considerable savings in production costs
- increased production capacity
- remarkable health and safety implications
- freedom to use any abrasive material
- desired surface cleanliness and roughness
- slight surface shaping by controlling the blast pressure
- working lifts and platforms not needed
- increased fatigue strength of specific welded joints



Technical Information

Nozzle diameter	19 mm
Number of nozzles/robot	1
Blasting pressure	7 bar
Abrasive	Steel grit

Degrees of freedom	8
Programming	Point-to-Point or Teach-In
Operation mode	Automatic or manual

SOLUTION

The blast room was robotized by one Blastman B20S robot equipped with a camera system and a control room for touch up blasting.

The blast room was equipped with robot rails. The old recycling and ventilation system was integrated for robot operations and a new Blastman double chamber blast pot for continuous operations was included in the scope. The old transport wagon was integrated in the system.

RESULTS

The robotized blast room works perfectly both in automatic and manual operations. The manual touch up blasting is easy due to excellent visibility from the control room located well above the floor level and a supporting camera system to check the cleaning result in detail from short distance.

