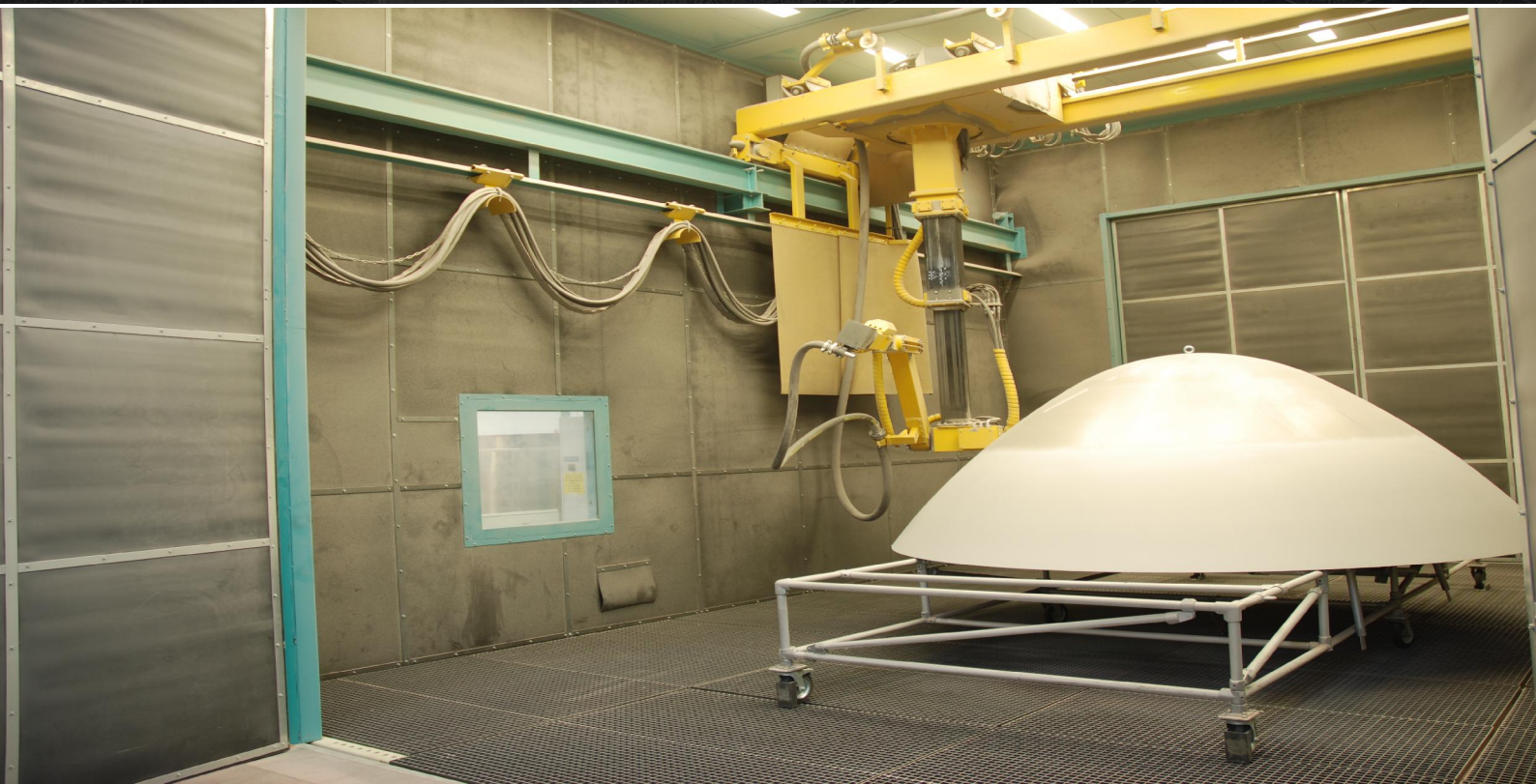


BLAST CLEANING OF WIND TURBINE GENERATOR HOUSINGS

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BACKGROUND

As a follow up to Blastman's successful delivery of two Blastman B12 robots for EWP Windtower Production AB in Sweden Enercon invested in two B20 robots for its daughter companies in Aurich and Magdeburg in Germany.

With more than 22,000 wind turbines installed in over 30 countries ENERCON is recognized as one of the leading manufacturers at the international level. Research and development, as well as production and sales are constantly evolving.

OBJECTIVES

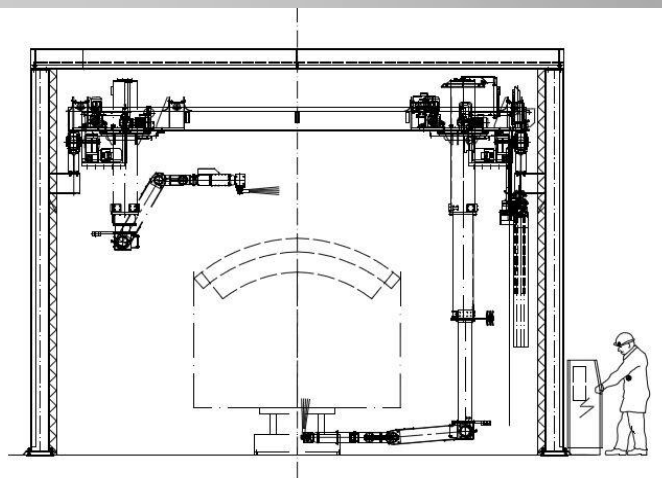
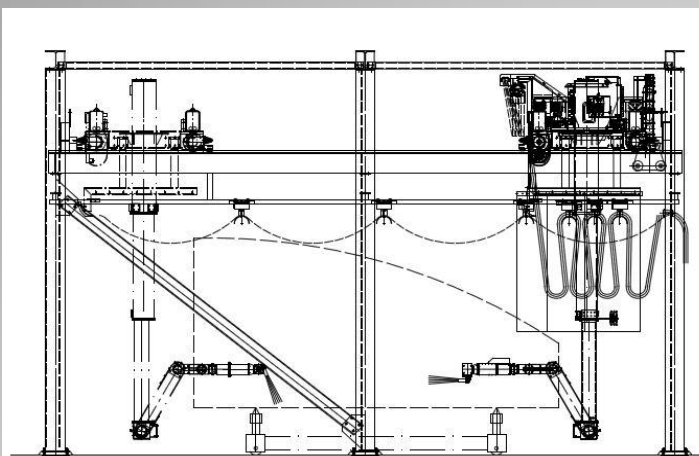
Target was to treat the surface of wind turbine generator housings made of aluminum sheet. It was required to reach a homogeneous matt surface without a need for further surface treatment.



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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	5 bar
Abrasive	Corundum

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

SOLUTION

The solution is to blast clean the housings with fine aluminum oxide abrasive.

The blast cleaning is made automatically by a Blastman B20 robot using 19 mm nozzle.

RESULTS

As a result of automatic blast cleaning a fine homogeneous matt surface is created within targeted cycle time. No manual repair work because of unblasted or overblasted areas is needed.

