



BACKGROUND

CSR Nanjing Puzhen decided to renovate an old manual blast chamber into a robotic blast cleaning chamber for the passenger coaches.

Customer stressed the importance of superior surface quality and increased production capacity.

CSR Puzhen is an enterprise specialized in research and manufacture of rail transport equipment in China, and is the first-class large-scale company in China's railway equipment manufacturing industry.

OBJECTIVES

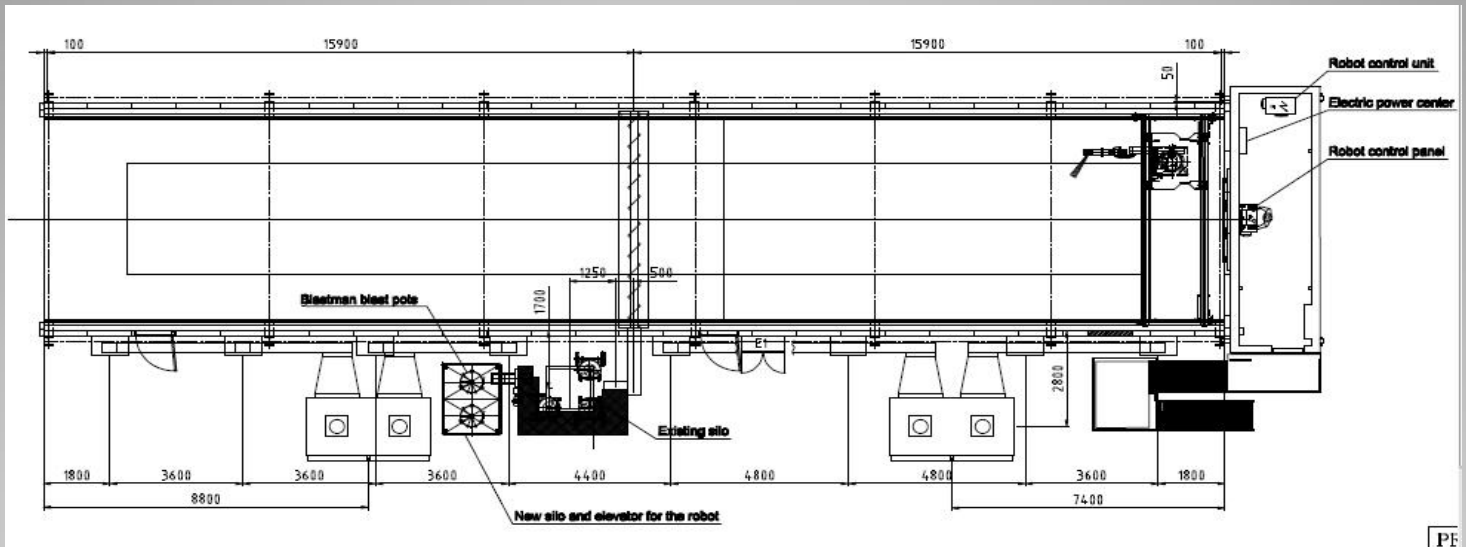
The requirement was to blast clean completely exterior surfaces and essential interior surfaces of various metro cars within the specified cycle time.



BLAST CLEANING OF PASSENGER COACHES

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	16 mm	Degrees of freedom	8
Number of nozzles/robot	2	Programming	Point-to-Point
Blasting pressure	6,5 bar	Operation mode	Automatic
Blasting rate	3 hours per car		
Abrasive	Corundum		

SOLUTION

A Blastman B20S robot was installed in the existing manual blast chamber with two blast pots.

Existing chamber was reinforced by steel structures.

Additional silo and elevator were installed in order to ensure constant abrasive flow.

RESULTS

Blastman robot perfectly integrated into customer's existing manual blast chamber.

The quality of surface roughness and cleanliness was improved. There is no need for manual blasting anymore.

This was Blastman's first renovation project in China. It gave potential customers a new idea how to improve production with a robotic blast cleaning solution.

