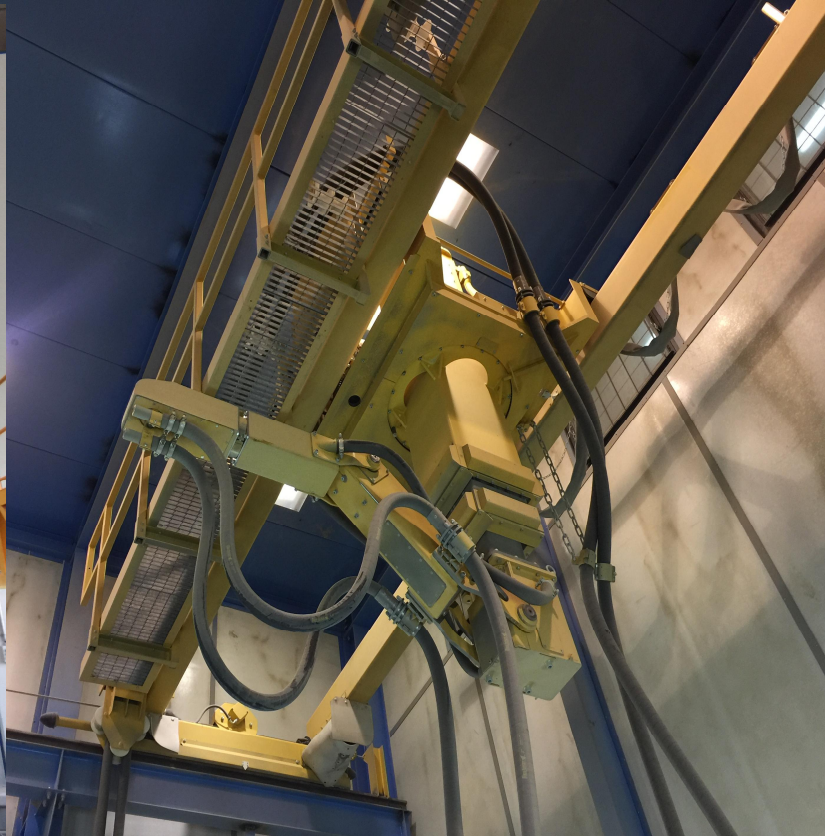


CRRC Zhengzhou Co.,Ltd
Xingyang, Zhengzhou, China



BACKGROUND

CRRC Zhengzhou is a brand new rolling stock manufacturing base in China. Modern automatic technology is deeply applied into their each line of manufacturing.

Thanks to the previous successful Blastman deliveries among other CRRC subsidiaries and the basis of experience in automation the customer had a clear picture of the possibilities to use Blastman robots for blasting.

CRRC Zhengzhou Co., Ltd., a subsidiary of CRRC Qingdao Sifang Locomotive, is a nationally accredited high and new technical company, which mainly produce intercity cars and metro for the area in the middle of China.

OBJECTIVES

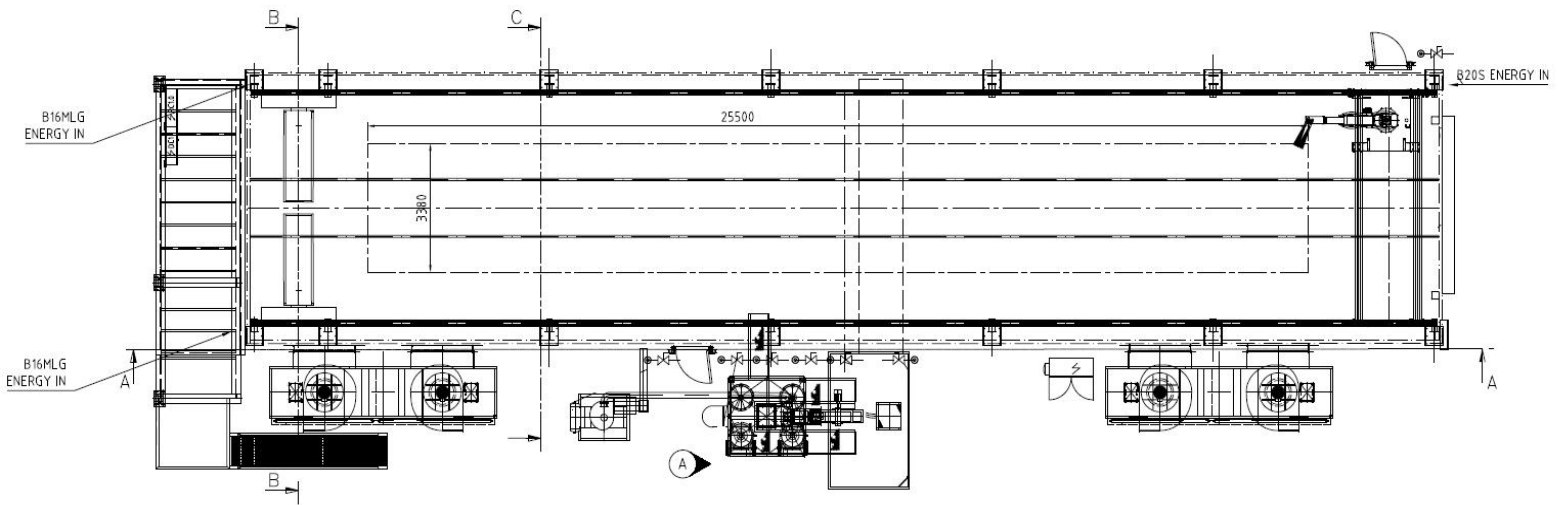
The requirement was to blast clean completely exterior surfaces and essential interior surfaces of various passenger coaches with given speed.



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 / Offline
Blasting pressure	7 bar	Operation mode	Automatic
Blasting rate	3 hours per car		
Abrasive	Corundum		

SOLUTION

The blast room is equipped with one Blastman B20S robot and B16MLG manlifts. The robot arm is equipped with two 16 mm blast nozzles.

The Blastman robot cleans both interior and exterior surfaces of various passenger coaches. Manlifts are used for inspection and occasional manual blasting.

Except robot, Blastman also delivered the abrasive handling system, ventilation, as well as the blast chamber.

RESULTS

CRRC Zhengzhou have achieved satisfied blasting quality result and capacity as what they expected by Blastman delivery.

Worth to highlight that most of robotic blasting programs were made by Blastman own offline programming tool, which dramatically shorten the overall time of programming and allows no car stands in the chamber while making programming.