



## BACKGROUND

Due to earlier deliveries for Bombardier factories in China and Czech Republic the customer became interested in automation of the blasting process also in France.

On the basis of experience in automation the customer had a clear picture of the possibilities to use Blastman robots for blasting.

Bombardier is one of the leading manufacturers of rolling stock. The broad product range includes rolling stock for passenger transport, complete rail transport systems, locomotives, freight wagons, drive technology and train control systems.

## OBJECTIVES

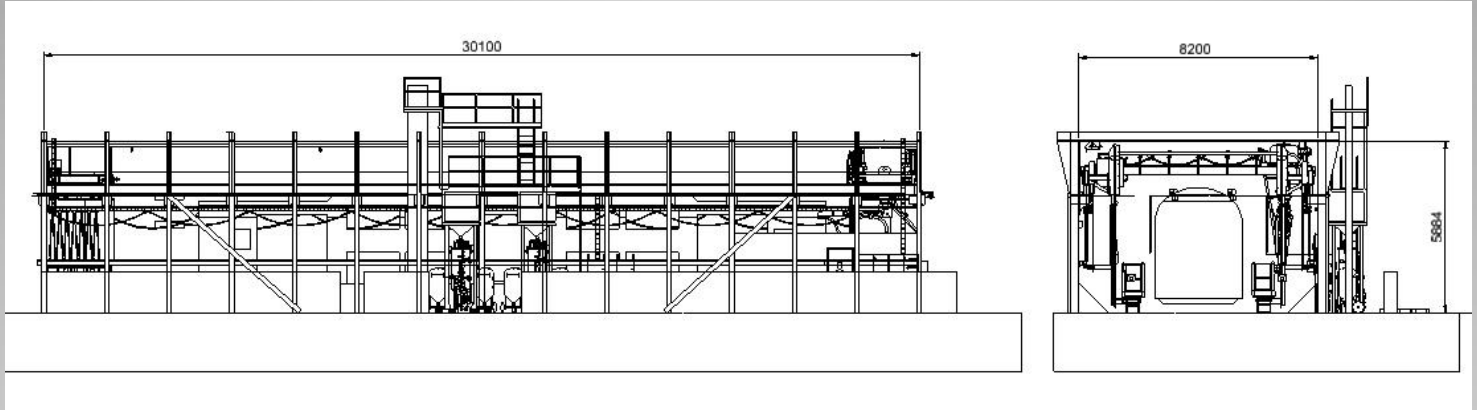
The requirement was to blast clean completely exterior surfaces and essential interior surfaces of various passenger coaches with given speed.



# BLAST CLEANING OF RAILWAY CARS

## 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	Degrees of freedom	8
Number of nozzles/robot	2	Programming	Offline and Point-to-Point
Blasting pressure	7 bar	Operation mode	Automatic
Blasting rate	70 – 100 m <sup>2</sup> /h		
Abrasive	Steel grit and corundum		

## SOLUTION

The blast room is equipped with one Blastman B20S robot and B16MLG manlifts. The robot arm is equipped with two 19 mm blast nozzles: one for steel grit and the other one for corundum.

The Blastman robot cleans both interior and exterior surfaces of various passenger coaches.

Manlifts are used for inspection and occasional manual blasting.

## RESULTS

The required roughness and cleanliness were reached in given cycle time and only some internal areas need manual touch up.

