

Painting axle-carriers

Customer requirements

A new paint shop is required to coat axle carriers with a preservative paint. In addition to corrosion protection, the paint to be applied should also provide protection against stone chipping. Different types of axle carriers are to be painted in the system. Certain areas of the axle carriers must not be painted, so masking is necessary.



Solution design



The axle carriers are transported through the system with the help of a Power & Free system consisting of 5 chain circles. At the loading station, the axle carriers are removed from transport boxes with the help of handling robots and transferred to the P&F system. The axle supports are transported into the painting booth through a masking area. After painting has been completed, the transport route leads through an evaporation zone into the dryer. Here the painted axle carriers are dried at a

temperature of 80 ° C. After passing through the cooling zone adjoining the dryer, the axle supports are unmasked and removed from the P&F system by another handling robot. There are RFID data carriers on the carriage, which are read and written to via RF185C modules. Both process and quality data are stored on the data carriers.

Customer benefit

Operation	Central overview of the ongoing processes. Intuitive operation.
Availability	Optimization of downtimes through efficient fault analysis.

Technical data:

- S7 151 8F-3 PN/DP
- 15" IPC 477 with WinCC and EKS-Key
- 5 chaindrives
- 25 switches
- 59 stoppers
- 4 pushrods
- 21 readers RF185C
- Peripherals via ProfiNet
- Prisma-connection
- SMS-fault monitoring system