

RAILWAY TECHNOLOGY

Automatic Shaft Cleaning Plant for complete/dismounted wheelsets



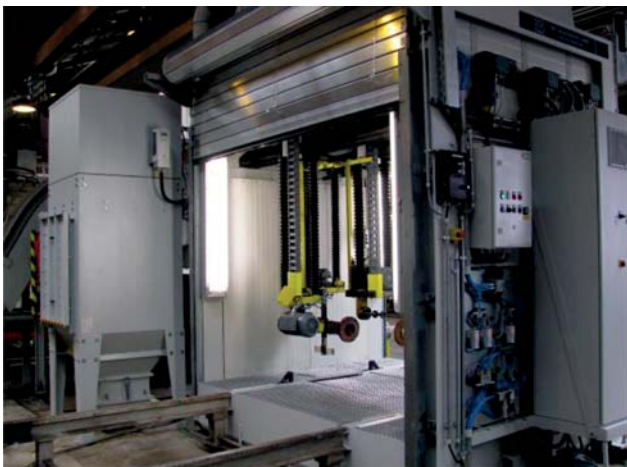
Whether testing or painting measures – the basis for any form of processing of demounted wheelsets is their comprehensive cleaning from dirt, rust or old paint. The cleaning plant conceptualized for this is equipped with brushing- and grinding tools and works completely automatically. According to the respective specifications wheelset shafts can be dry-cleaned at complete wheelsets or individually.

Components:

- cabin with rolling doors
- cleaning unit with brushing and grinding tools
- wheelset roll-stand or take-up device for wheelset shafts
- extraction- and filter unit (explosion protected)

Advantages:

- diverse surface qualities through exchangeable brushing and grinding devices
- step less speed and feed control
- long service life and low maintenance expenses
- easiest subsequent programming of further designs
- depending on pollution scope selects the operator the leaning level





Plant process



The wheelset to be cleaned is rolled into the roll stand by the operator. After the operator has entered the type, the identification number and the processing areas, the cleaning process starts. The brushing- and grinding tools are activated and process the wheelset at the predetermined places. After completion of the automatic cleaning process manual rework can be performed. Afterwards the wheel set is automatically rolled out.



Optionally, demounted wheelset shafts can also be processed. To do this, the wheelset shaft is clamped into a special take-up device and transported into the cabin on rails. As soon as the take-up device is positioned and the operator has entered the data of the shaft, the automatic cleaning-process can be started.

Plant-configuration possibilities:

- Wheelsets with/without gear or brake discs
- Wheelset shafts with/without gear or brake discs

Technical Data

Rotation speed of the grinding tool:
2,000-3,800 rev/min

Duration of cleaning (by type): <10 min
3 cleaning steps surface quality 1,6 Rz

Suction performance: 3,500 m³/h

Wheelset weight: about 2,500 kg

Track gauge: typical for the country

Type of shaft: diverse

Status as of 09/2022