RAILWAY TECHNOLOGY

High-pressure-water-blast plant (HPWB)

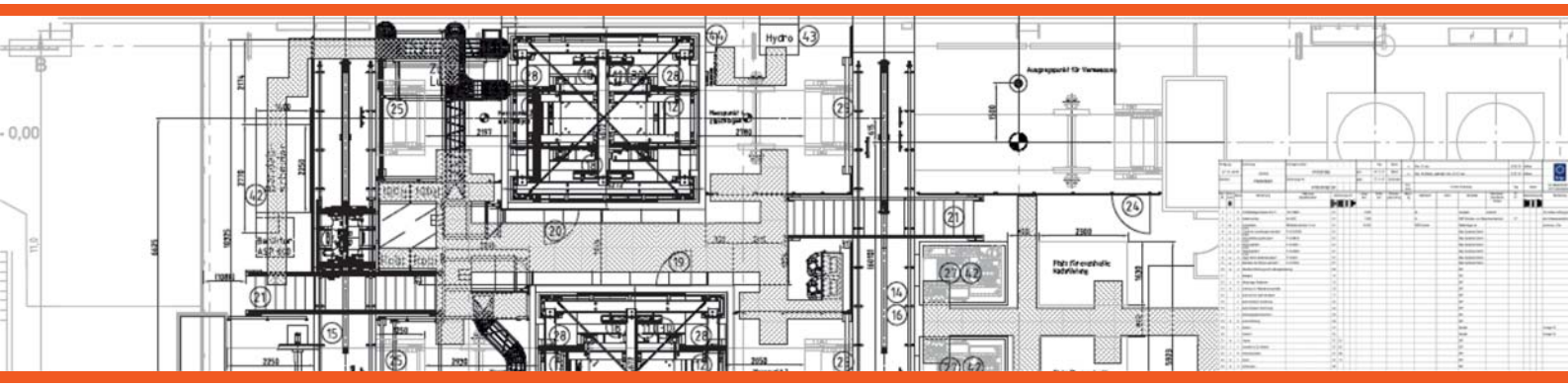
By this system, railway wheelsets and bogies for subsequent processes using the high-pressure water blast method robot-supported cleaned or de-coated, without causing changes to the surfaces, as occurs by abrasive methods.

This innovative technology creates the prerequisites for heavy-duty wheelset maintenance, applying a material-saving, time-saving and resource-saving process, thereby contributing to increasing the process reliability and adapting to the requirements of "Industry 4.0".

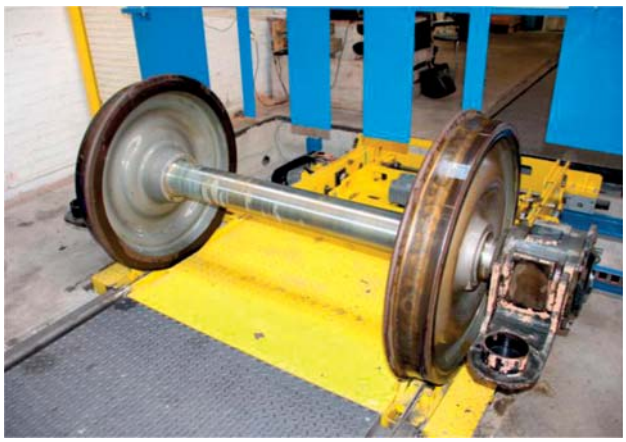
The main advantage of this procedure is that absolutely no damages are caused to the surface and that it is fully automated. Therefore, physically demanding work will no longer be required.

The cleaning is carried out without any additional chemicals.

bip technology GmbH · Am Elisabethhof 22 · 14772 Brandenburg an der Havel
Tel. +49 3381 75 90 11 · E-Mail info@bip-technology.de · Web www.bip-technology.de



The process environment



The de-coating process takes place in a closed cabin which is specifically designed for the technological parameters of the water jet process.

Water nozzles are driven along the contour of the wheelset with rotated water jet and reach therefore the complete surface of the wheelset. Thanks of adjustable pressure between 500 bar and 2.500 bar the programs can be individually adapted to the required maintenance steps.

The rolling in and rolling out of the wheelsets and boogies take place automatically. A innovative feeding of supply air and exhaust air prevent a condensate escape in the environment. The cleaned or complete de-coated wheelsets or bogies can be fed for subsequent processes.

Technical Data

Water pressure 500-2.500 bar	Wheelset diameter: 600-1.100 mm	Fully automated minutes
Wheelsets and bogies with and without attachment parts	Wheelset weight up to 2.500 kg	Cycle time with two robots aprox. 15 min.

Status as of 09/2022

bip technology GmbH · Am Elisabethhof 22 · 14772 Brandenburg an der Havel
Tel. +49 3381 75 90 11 · E-Mail info@bip-technology.de · Web www.bip-technology.de