To enhance their image, all railway networks have to provide clean rolling stock. Cleanliness demonstrates the network’s efficiency to its customers and provides an improved traveling experience. **NEU Train Washing Plants** (Drive-Through or Moving Gantry systems) are completely flexible and modular and their operating reliability ensures trouble-free washing and clean rolling stock.

**CONCEPT**

Whatever the train configuration, **NEU Train Washing Plants** can be tailored to match different rolling stock profiles, drive-through speeds, frequency of use and other specific requirements. **NEU’s robust and modular** design is a guarantee of reliable operation.

A typical installation is mainly composed of:

- **Equipment** located along the track:
  - Spray arches equipped with water spraying nozzles (rotating or fixed) for pre-wetting,
  - Spray arches equipped with detergent spraying nozzles (with sampling and temperature sensor if necessary),
  - Brushing stations (single or double brush) with spraying nozzles for efficient cleaning of body sides, eaves, skirts and the vehicle roof as required,
  - Train rinsing station with softened water or reverse osmosis system,
  - Drying station with fan blowers for a perfect finish.

- **Preparation unit** including distribution and control systems for water and detergents:
  - Water softener or reverse osmosis system,
  - pH control,
  - Water tank,
  - Detergent storage tank fitted with dosing and transfer equipment,
  - Temperature controller.
Train Washing Plant

- Washing water reclamation and recycling installation with:
  - Filtration and neutralization systems,
  - Solid collector system with separator and compactor,
  - Recycled water storage tank for reuse during another cycle,
  - Biological/Chemical treatment (80% recycling).

Characteristics

- Robust mechanical design for more reliability during operation,
- Operation possible in both directions for drive-through system,
- Water flow and pressure fully adjustable at each station,
- Automatic activation of the washing cycles,
- Automatic stop in case of fault detection (open doors, low water level, too high speed,...),
- Contact pressure control during washing to optimize cleaning efficiency and to minimize wear,
- Total or partial water reclaim adapted to the network’s requirements,
- Low water consumption and no waste water losses,
- Low operating and maintenance costs,
- Fully automated system from identification of train type (by means of tagging) to water treatment cycle with minimum human intervention required,
- Automatic frost protection.
TRAIN WASHING PLANT – SCHEMATIC DIAGRAM

- Drive-Through system:

- Moving Gantry system:

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