OCTOBER 2026

Multistation
Digital manufacturing provider since 1987

Multi-Rail by Multistation

Railway Range

Reprofiling lathes, heavy machine tools and additive manufacturing: maintain, repair and produce your railway parts.
One single partner, from study to machine maintenance.



1987

Nearly 40 years integrating digital and additive manufacturing for our customers.

7 manufacturers

SAFOP, Mario Carnaghi, Waldrich Coburg, Titomic, BigRep, Meltio, WAAM3D.

15

Railway references in France and worldwide.

Maintain, repair and produce in rail

Multistation equips railway maintenance and manufacturing with machine tools and additive manufacturing. The Multi-Rail range serves three audiences.

1

MAINTENANCE WORKSHOPS

Depots: underfloor wheel lathes, wheelset reprofiling lathes, vertical lathes, wheel press-fit / removal presses.

2

INFRASTRUCTURE

Repair workshops, large gantry machines for switch machining.

3

COMPONENT MANUFACTURERS

Cars, wheels, rails and switches: large machine tools.

AND NOW: ADDITIVE MANUFACTURING

Spare parts

Obsolete or unobtainable parts, produced on demand, without moulds.

Tooling

Maintenance jigs and fixtures made in your own workshop.

Cladding

Repair rather than replace: add metal back where the part lacks it.

FAMILY	SOLUTION	WHAT FOR
Railway lathes	**SAFOP · underfloor, wheelsets, axles**	Reprofile wheels and wheelsets, remachine axles
Hub lathe	**Mario Carnaghi · vertical lathe**	Machine wheel hubs in an automated cell
Large machine tools	**Waldrich Coburg · precision gantry machining**	Machine switches
Cold spray	**Titomic · D523 · TKF623 · TKF 1000/9000**	Repair and coat, without heat in the part
Polymer 3D printing	**BigRep · IPSO · ALTRA · VIIO**	Spare parts and tooling, without moulds
Laser wire metal AM	**Meltio · Engine Blue · M600**	Clad, repair, produce near-net blanks
Wire arc metal AM	**WAAM3D · RoboWAAM · MiniWAAM**	Large metal parts, critical spares

02 — SUPPORT

From study to maintenance of your machines

Since 1987, Multistation has integrated every link of digital and additive manufacturing. Our application engineers and service technicians handle on-site deployment, maintenance and performance guarantees.

01

Study your needs

Engineering consulting and advice, workshops and training to build skills.

02

Install and deploy

Our teams integrate the machines into your workshop, on site.

03

Manage your fleet

Trade-in and buy-back against obsolescence; certified used machines with Multistation Second Life.

> Multistation represents all our manufacturing partners in France and provides local service to their users.

04 — MAINTAIN

Our after-sales service starts with a remote diagnosis. It leads to:

A.

Parts under warranty

Remote assistance with parts shipped.

B.

Return to workshop

The machine returns to our premises, where possible.

C.

On-site intervention

A technician comes to your depot or workshop.

SAFOP

Reprofile wheels and remachine wheelset axles

Italian manufacturer founded in 1923 in Pordenone, SAFOP produces a complete range of railway lathes for the maintenance of trains, metros and trams.



NO DISMANTLING

Underfloor wheel lathes

Built into the depot floor, they reprofile wheels directly on the vehicle, without removing the wheelsets: rolling stock downtime is reduced. Passenger trains, metros, trams.

- GAUGE · 1,000 to 1,676 mm
- TREAD Ø · 580–1,600 mm
- MAX LOAD · 30 t
- ROLLERS · 4 × 22 kW
- WHEEL Ø DIFF. · 0.10 mm max
- OPTION · UGLX 30DB tandem



REMOVED WHEELSETS

Wheelset lathes

CNC lathes that reprofile worn or damaged wheelsets inside a soundproof enclosure. From passenger trains to heavy locomotives.

- GAUGE · 900 to 1,676 mm
- TREAD Ø · 700–1,250 mm
- WHEELSET · 1,700 to 2,400 mm
- ROLLERS · 4 × 30 kW
- DISCS · 2 to 4, Ø 330–650
- TOLERANCES · 0.10 mm

WHEELSET AXLES

Axle lathes

Turning, grinding and reprofiling of axles, with large length and diameter capacity.

- BETWEEN CENTRES · 3,000 mm
- LOAD · 1.5 t
- CARRIAGE Ø · 0–300 mm
- POWER · 41 kW
- TORQUE · 1,200 Nm

CYLINDRICAL PARTS

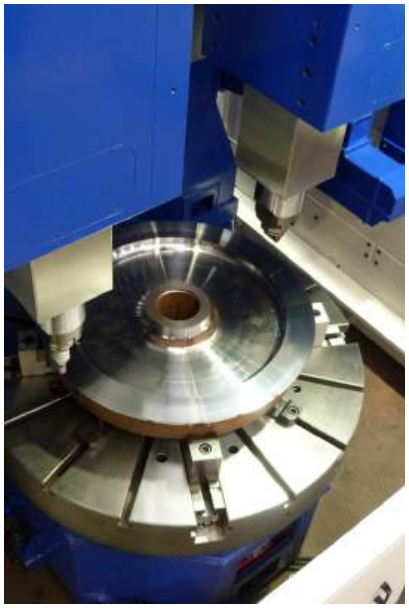
HT horizontal lathes

Medium-size horizontal lathe with slideways, for shafts, cylinders and drums — rail is among its applications.

MARIO CARNAGHI

Machine hubs in an automated cell

Founded in 1929, the Italian manufacturer has delivered more than 4,200 turning and milling machines. Its railway offer: machining of wheel hubs and railway components.



HIGH PRODUCTIVITY

Vertical lathe for wheel hubs

This high-productivity machining cell combines a vertical ram head for turning, automatic loading and full enclosure. It machines the hub in an automated cycle: face facing, hub machining, groove, then back-face facing.

TABLE	1,250 mm · turning Ø 1,600 mm
SPINDLE	60 kW · 17,500 Nm · 450 rpm
RAM	250 × 250 mm section
CLAMPING	Self-centring chucks (3 or 2 + 2)
PALLETS	2 stations with tilting unit
LOADING	Automatic wheels and brakes, part probe
PROTECTION	Full: no fumes, no splashes, no chips

WALDRICH COBURG

Rail and switch machining

Founded in 1920 in Coburg (Germany), Waldrich Coburg is a world specialist in large gantry milling, turning and grinding machines for large, high-precision parts. Switch manufacturers are among its main customers: these components demand extremely rigid, powerful and stable machines.



POWERTEC · GANTRY

RANGE

Gantry milling machines

PowerTec-Gantry.

POWER	80 / 105 / 130 kW
CLEARANCE	3.5 to 14 m wide
LENGTH	up to 50 m
LOAD	500 t max

RANGE

TAURUS

5-axis or 5-sided machining, eleven milling heads. TAURUS Gemini for large precision parts.

SWITCH REFERENCE

MultiTec 2500 FT

Milling machine delivered in 2021 for switch machining.

RANGE

Vertical lathes

Large-size: MultiTurn, ValuTurn, PowerTurn.

RANGE

Grinding machines

CorruGrind, WayGrind.

TITOMIC

Repair rather than replace

Cold spray projects metal powders onto the part at high velocity, without melting them. Used in rail to repair critical components and coat against corrosion and wear.

No thermal distortion	No oxidation	No residual stress	1 to 15 kg/h deposition



PORTABLE REPAIR

D523

Repairs parts in minutes, in-house, with little finishing: corrosion, bearing seats, electrically or thermally conductive layers.

MATERIALS · zinc, copper, tin, nickel, babbitt, gold, silver, platinum, Inconel 625

FLOW RATE · 30 g/min, air or N_2

TEMPERATURE · 20 to 600 °C

WEIGHT · 43 kg

BOOTH · sealed, on site



MEDIUM PRESSURE

TKF623

Portable repair of metal parts, faster and cheaper than traditional methods.

FLOW RATE · 60 g/min, N_2 20 bar

TEMPERATURE · 100 to 800 °C

WEIGHT · 76 kg

POWDERS · open, MIM

ROBOTIC CELL

TKF 1000

Head on a 6-axis robot: cladding, coatings or complete parts.

1,000 × 1,000 × 750 mm · up to 15 kg/h

CUSTOM

TKF 9000

Large parts and industrial series, fusion of dissimilar alloys.

9,000 × 3,000 × 1,500 mm · up to 30 kg/h

bigrep

Spare parts and tooling, without moulds

Berlin-based leader in large-format FFF 3D printing and strategic partner of Deutsche Bahn: obsolete parts (housings, brackets, covers), jigs, tooling and interior fittings, on demand.

PC-FR AIR DUCT · 50 UNITS

≈ €15,000
The injection mould alone.

> €400
Per moulded part, mould included.

€127
Printed on ALTRA 280, design can be modified.

Example costed by BigRep.



THE TOOLMAKER'S TOOL

IPSO 105

Maintenance jigs, fixtures and tooling made in-house.

VOLUME · 400 × 600 × 440 mm
EXTRUSION · 2 × DSX, 450 °C
MATERIALS · PC-FR, PEKK…
USE · 24/7, camera monitoring



LARGE TECHNICAL PARTS

ALTRA 280

End-use parts, panels, covers and large housings.

VOLUME · 500 × 700 × 800 mm
EXTRUSION · up to 4 × DSX
MATERIALS · ULTEM 9085, PEEK…
BACKUP · standby extruder



CONTINUOUS PRODUCTION

VIIO 250

Automated, unattended production of part series.

VOLUME · 1 000 × 500 × 500 mm
EXTRUSION · 2 × SMX, 350 °C
INFINITY BOX · automatic reloading, 4 × 8 kg spools

Fire standard EN 45545-2: according to BigRep, PC-FR, PEKK and ULTEM 9085 are compliant. Qualification by material and hazard level (HL1 to HL3).

MELTIO

Adding metal to repair

A standard metal wire melted by laser (LMD) adds material where the part lacks it: repair, cladding, coating, or blanks to be machined. The welding wire (Ø 0.8 to 1.2 mm) is bought from your local suppliers, with no exclusive contract.



ON YOUR OWN MACHINE

Engine BLUE CNC or Robot

Integration kit that adds laser wire deposition to an existing CNC. The head retracts automatically to make way for machining.

APPLICATIONS	Repair, cladding, hybrid, retrofit
VOLUME	That of the host machine (e.g. HAAS 1000)
LASERS	9 blue diodes 450 nm, 1.0 or 1.4 kW
MOUNTING	32 to 35 kg kit, spindle side
MATERIALS	Stainless, steels, titanium, Inconel, copper



METAL 3D PRINTER

M600

Near-net-shape blanks, upstream of machining centres, under inert atmosphere.

VOLUME	300 × 400 × 600 mm
LASERS	9 blue diodes, 1,000 W, closed loop
WORKHOLDING	Zero-point, compatible with machining centres
FORMAT	Compact, on castors, transportable

ROBOT

Engine BLUE Robot & cell

The robot kit and the Meltio cell, for larger or more complex parts.

MAINTENANCE REFERENCE

Charles de Gaulle aircraft carrier

The French Navy repaired damage with Meltio (source: Primante 3D).

WIRE ARC ADDITIVE MANUFACTURING

Produce or repair large metal parts and critical spares by AM

More than 20 years of R&D with Cranfield University: an electric arc melts a metal wire to build or clad large parts. Local production of critical parts, spares management, repair.



LARGE HEAVY PARTS

RoboWAAM Plus

Fast, repeatable production of heavy parts, spares and repairs of existing components.

- ENVELOPE · 2 × 2 × 2 m
- DEPOSITION · 15 kg/h, ±0.05 mm
- ALLOYS · Fe, Al, Ni, Cu
- TABLE · 2.1 t / 3 t tailstock
- KINEMATICS · 6-axis Kuka robot + 2-axis servo positioner

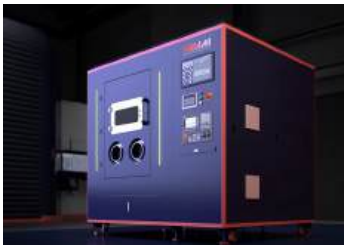


TWO PROCESS VARIANTS

RoboWAAM

Standalone installation, reconfigurable for large-area parts or rotating components.

- ENVELOPE · 1.8 × 1.2 × 1.5 m
- TABLE · 500 kg (→ 750 kg)
- GMA/GMAX · Fe, Al, Ni, Cu
- PTA/PMAX · Ti, stainless, Ni
- SHIELDING · global inert gas
- WIRE · 70 kg spool, 250 kg drum



COMPACT AND MOBILE

MiniWAAM

Transportable, standalone system, twin-wire plasma and multi-material deposition.

- ENVELOPE · 60 × 60 × 50 cm
- CHAMBER · < 50 ppm O_2
- TABLE · 60 kg, Ø 500 mm
- ALLOYS · Ti, stainless, Ni

All three systems include WAAMPlanner (toolpaths and parameters) and WAAMCtrl (real-time process monitoring).

Let’s talk about your depot or workshop.

Tell us about your wheelsets, wheels and parts to repair or replace: we will point you to the right machine and arrange a demonstration, at our premises or yours.

DEMO · PRICING · BROCHURE

Contact us

Tel · +33 2 99 16 35 35

multistation@multistation.com

Multistation