



Solutions for industrial networks

INDUSTRY line





INDUSTRY/inc

> A range of solutions for industrial networks

Working alongside world-class industrial companies for decades, Geismar understands the specific issues of industrial railway projects: larger scales, challenging environments, unusual logistics, heavier or longer trains, limited human interactions, etc.

Renowned since 1924 for manufacturing the first mechanical coachscrewing machine, Geismar has proven to be the reliable partner for all railway working operations. We engineer tools, lightweight equipment and heavy machinery that rise to the many challenges of industrial-scale projects no matter the place or the needs.

> Specific needs

Workshop machinery

pages 4 to 15

On-track machinery

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AUTOMATIC RAIL END BRUSHING MACHINE





- o The Brush Titan BRA 32 is fully automated and does not require an operator
- o It is designed to brush both ends of the rails (head, foot & web) using 2 brushes without any additional movements of the machine or the rails to facilitate and simplify the operation
- o The machine gives you the option to use steel wire brushes or flap wheel brushes for more power

Specifications	
Upper brush for rail head	ø 250 mm, width 120 mm (ø 10 in., width 5 in.)
Power of the upper brush	15 hp (11 kW)
Lower brush for rail foot and web section	ø 250 mm, width 180 mm (ø 10 in., width 7 in.)
Power of the lower brush	30 hp (22 kW)
Rotating speed of the brush	3,000 rpm
Cycle (automated)	150 s
Rail clamping (2 rams)	2 x 1.8 t (18 kN) maxi
Dust suction	11 hp, 4,000 m³/h (8 kW, 879,877 gal/h)
Hydraulic power	4 hp, 3,046 psi, 23 l/min (3 kW, 60 bars, 5 gpm)
Hydraulic oil tank	100 l (26 gal)
Pneumatic power (to be supplied by customer)	7 Nm³ at 6 bars (1,740 psi)
Total power	≈ 64 hp (48 kW)
Dimensions (L x W x H)	5,200 x 2,000 x 2,200 mm (205 x 79 x 87 in.), machine only
Mass of the machine only	3,4 t
Total mass of the installation	5 t



FLASH-BUTT RAIL WELDING MACHINE



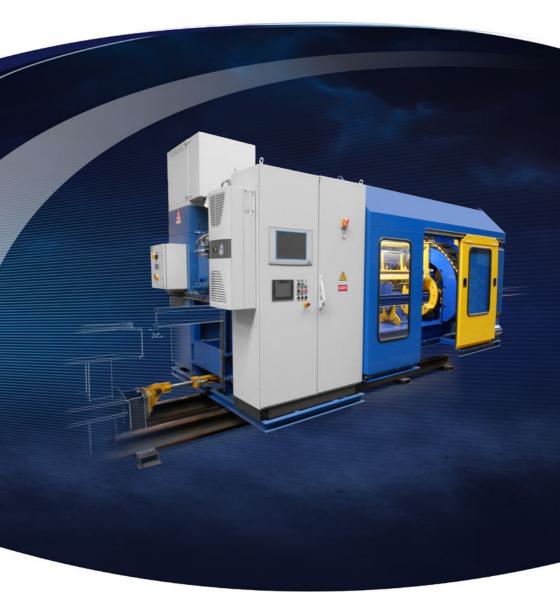


- Clamping the ends of rails to be welded with maximum force, without damaging them and preventing any rail shifting during the welding cycle
- Unit design allows welding of 600 m long rails
- o Automatic spark welding (no material addition, energy performance, better output) by ensuring mechanical tension of the long rail and holding of the weld after the welding and deburring cycle
- Hot deburring without breaking the rails according to EN 14587-2 standard
- o Possibility to remote control the machine operation, adjustment of work parameters, computerized recording of results, as well as data transfer via Internet

Specifications	
Type of rails	Flat bottom
Linear mass	Up to 75 kg/m
Connection between head and crane arm	Adjustable and isolated suspension
Clamping strength	1,450 kN minimum
Forging strength	600 kN minimum
Welding parameters	 Voltage Welding current Forging strength Welding time
Nominal tension	400 V
Frequency	50 Hz



MAS 150 E AUTOMATIC RAIL WELD GRINDING MACHINE





- o Grinding machine mounted on a mobile platform allowing precise positining without any movement of the welded rail
- o Straightness measuring device integrated in the grinding beam ensuring a compact machine
- o Automatic grinding of the rail head over a length of one meter around the welded area
- o Reduced operating cost thanks to the automated operation of the grinding machine, which does not require an operator

Specifications	
Type of rails	Flat bottom (46 to 70 kg/m)
Engine power	7.5 kW
Grindstones diameter	150 mm (6 in.)
Grinding	± 500 mm (20 in.)
Maximum rotating speed	5,400 rpm
PLC	Schneider
Automatic time cycle	3 to 5 min
Dust suction	4 kW, 3,000 m³/h
Total installed power	25 kW
Dimensions (L x W x H)	4,620 x 2,330 x 2,750 mm (182 x 92 x 180 in.), machine without dust suction system
Mass	7.5 t
Straightness measuring technology	Laser
Compliance	EN 14587-1 standard or similar



SPC 38/6 RAIL CARBIDE SAWING AND DRILLING MACHINE





- You can minimise your operational costs with the Dricut Titan SPC 38/6 which requires no operator and is the only carbide machine on the market offering the efficiency of an hydraulically driven saw blade
- The machine is designed to be almost silent and with no vibration ensuring that the machine achieves a very high number of cuts before the blade needs sharpening. The longevity of the blades life keeps your running costs low
- o You are guaranteed a perfectly square cut with a very high quality surface due to the Dricut Titan SPC 38/6's unique design
- o The drilling and sawing operations are effected simultaneously in the same duration thereby assuring you of high production output

Specifications	
Diameter of blade	630, 660, 710, 800 or 810 mm (25, 26, 28, 31 or 32 in.)
Continuous adjustment of the rotation speed	70 rpm max.
Fast forward speed of the blade	6,000 mm/min
Drilling units	2
Number of drilling spindles	2 x 3
Spindle power	2 x 3 x 11 kW at 1,500 tr/min
Fast forward speed of the drilling units	4,000 mm/min (157 in./min)
Working forward speed of the drilling units (continuously adjustable)	600 mm/min max (24 in./min max)
Drilling unit stroke	500 mm (20 in.)
Total power on board	≈ 180 kW
Dimensions (L x W x H)	4,400 x 2,900 x 2,500 mm (173 x 114 x 98 in.)
Mass	17 t



PHRML 250/120-15

HYDRAULIC 4-WAY MOBILE STRAIGHTENING PRESS





- o The Press Titan PHRML offers you the options of fully automated operations with no operator or semi automatic with some degree of operator intervention
- o It offers you a high degree of precision due to its integrated laser system, giving you accurate rail straightness suitable for high speed networks
- o The Press Titan PHRML is designed to straighten the rail in 4 directions with its powerful rams

Specifications	
Vertical ram force	250 t (2,500 kN)
Vertical ram stroke	100 mm (4 in.)
Horizontal ram force	120 t (1,200 kN)
Horizontal rams stroke	± 100 mm (4 in.)
Sliding anvil-blocks range	From 600 to 1,500 mm (24 to 59 in.)
Ram moving speed	From 0 to 1,500 mm/min (from 0 to 24 in./min)
Straightening tool speed	4,800 mm/min (189 in./min)
Machine stroke	± 1,000 mm (39 in.)
Driving speed of the machine	10 m/min (33 ft./min)
Hydraulic power	 Straightening 30 hp (22 kW), 315 bar (4,569 psi) Auxiliary functions 12 hp (9 kW), 120 bar (1,740 psi)
Hydraulic oil tank	630 l (166 gal)
Total power onboard	≈ 51 hp (38 kW)
Dimensions (L x W x H)	6,000 x 3,700 x 3,200 mm (236 x 146 x 125 in.), machine with its trolley
Mass of the mobile machine	21 t



VO 406

WORKSHOP HYDRAULIC HORIZONTAL RAIL BENDER





- o The hydraulic horizontal rail bender model Curve Titan VO 406 is a highly efficient workshop machine designed for bending or straightening flat bottom and grooved rails in both directions and in the horizontal plane (single curves and reverse curves)
- o Precise and efficient bending of the rail by a single operator thanks to the easily accessible interchangeable rollers
- o The bending machine is equipped with a measuring system for measuring the feed rate of the bending rollers, including a pointer and one ruler, in compliance with EC directives

Specifications	
Engine(s)	Petrol: Bridge & Stratton 217907 - 4-stroke - 6.7 kW at 3,000 rpm or 3-phase electric motor: 400 V or 230 V, 50 Hz - 5.5 kW at 3,000 rpm
Number of rollers	6
Roller diameter	350 mm (13.8 in.), variable for grooved rails
Bending force	400 kN
Maximum bending moment	15,000 daN.m
Bending stroke	± 200 mm (7.9 in.)
Linear bending speed	≈ 9.3 m/min
Minimum bending radius	5 m (16.4 ft.), flat bottom rail
Height of the rails to be bent	650 to 710 mm (above ground or from top of rail in workshop track)
Dimensions (L x W x H)	2,135 x 1,690 x 1,140 mm (79 x 67 x 45 in.)
Mass	3,600 kg (7,937 lbs)



JA 100

HYDRAULIC VERTICAL RAIL JOINT STRAIGHTENER





- o Compact, hydraulic vertical rail joint straightener Bend Hornet model JA 100 is specially designed to straighten welded or fish-plated sag rail joints without the need to dismount fishplates
- Versatile, it is suitable for all kind of flat bottom rails (and grooved rails with optional kit) up to 60 kg/m
- o Robust, the hydraulic rail joints straightener Bend Hornet JA 100 measures and accurately controls the straightening operation with graduated gauges

Specifications	
Linear mass of the rails	60 kg/m
Bending force	1,000 kN
Working pressure	625 bars
Cylinder stroke	120 mm (4.7 in.)
Vertical straightening stroke	60 mm (2.4 in.)
Dimensions (L x l x H)	1,450 x 1,880 x 1,000 mm (57 x 74 x 39 in.)
Mass	230 t

BRV

TRACK BRUSH TOOL FOR ROAD-RAIL **LOADER & EXCAVATOR**

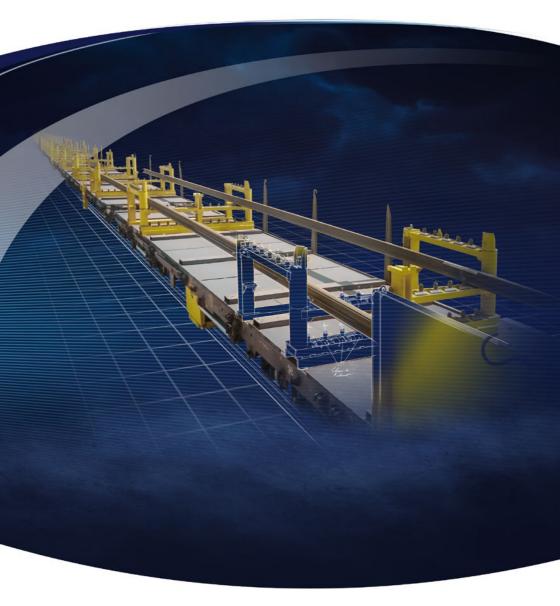




- o The BRV offers you outstanding performance brushing and cleaning up to 2 km (1 mi) track per hour
- o The ballast is safely and conveniently displaced to the left or right of the BRV through a dedicated ballast dispersal system
- o Maintenance of the equipment is quick and simple allowing you easy access to the brush via the brush cover

Specifications	
Track gauge	From 950 to 1,676 mm (from 37 to 66 in.)
Sweeping width	≈ 2,530 mm (100 in.)
Coupling interface	Rockinger
Pass height	From 6 to 8 mm (from 0.24 to 0.31 in.)
Brush rotation speed	≈ 260 rpm
Maximum vertical brush stroke	≈ 250 mm (10 in.)
Mass	≈ 2.7 t

TLR LWR TRANSPORT TRAIN



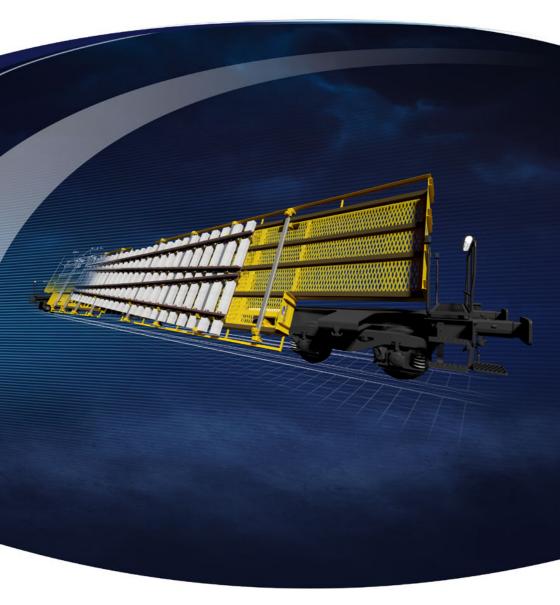


- o The LRS (Long Welded Rail) transport train TLR model is a configurable solution to all your rail transport needs. It can be completely supplied with wagons or be separated into individual equipment modules (free rail banks, fixed point rail banks, safety doors) mounted on a subframe
- o The clamps adapt to any type of flat-bottom rail profile, offering you versatile equipment for any type of site
- The robustness of the equipment allows for a low level of maintenance required and ensures a long service life

Specifications	
Travelling speed	80 km/h (50 mph)
Loading capacity	Up to 30 rails (3 tiers of 10 rails)
Length of LWR (long welded rails)	108 to 432 m
LWR loading method	Top loading (in factory by gantries or guiding station)
LWR clamping	Manual

WPA & WPS

TILTING WAGON





- o The WPA & WPS use automated clamping systems on the wagon without the need for operators there, ensuring the operators and workforce safety
- o The longer length of the wagon allows quicker worksite preparation, negates the need to disassemble the turnout thereby providing faster and more efficient completion of the work and shorter site possession times
- o The WPA & WPS is fitted with clearance control and with a clamping device. This ensures you safe, quick & user-friendly operations
- You can operate this system on most railway infrastructures, even under live catenary, making it a viable option for most track construction/renewal methodology

Specifications	
Wagon length	28 m (92 ft.)
Total mass	80 t
Working load	30 t
Working speed	Up to 100 km/h (up to 62 mph)

WACAD

AUTONOMOUS BALLAST LOADING & UNLOADING WAGON





- The WACAD offers you an automated & continuous system for loading ballast from a single point such as a worksite, ballast wagon or a ballast cleaning machine
- The large loading capacity and design features allow loading while the train is moving, which makes it suited to situations when you are short on time
- o Due to the large storage capacity, the WACAD can be used as a ballast supply source when loading is halted, thereby offering you important versatility on certain worksites
- o The WACAD offers you the potential to work in any environment even under live catenary, making it a useful option for many worksites

Specifications	
Number of wagons	1 x «Power» wagonFrom 1 to 3 standard ballast hoppers
Control of the continuous loading of the ballast	With remote control
Types of hopper control	Using video on touchscreen tablet
Maximum ballast flow	500 m3/h (132,086 gal/h)
Power of the "Power" unit/wagon	100 kVA
Wagon capacity	40 m3 (8,799 gal)







- o The Loco Dragon 1000 provides 1,100 horse power for extraordinary towing performance even on high gradients
- The vehicle offers you a high degree of operational autonomy working up to 18 hours a day without refueling, giving you extended use of the Loco Dragon when you need it most
- o Loco Dragon 1000 uses a bidirectional hydrostatic drive with two fully equipped cabins providing excellent visibility and is suitable for all networks in any environment

Specifications	
Engine / Power	Diesel, 2 x 400 kW
Motor emissions standard	From STEP IIIA to STEP V
Maximum speed	80 km/h (50 mph)
Track gauge	1,435 mm (56 in.) and any gauge from 1,000 mm to 1,676 mm (39 to 66 in.)
Motor axles	4
Fuel tank capacity	1,000 l (264 gal)
Minimum curvature radius	50 m (164 ft.)
Maximum gradient	3.5 %
Transmission type	Hydrostatic
Dimensions (L x W X H)	15,310 x 3,080 x 3,965 mm (602 x 121 x 156 in.)
Mass	≈ 48 t (with full charge)



> Services & support

- Remote technical support
- On-site intervention
- Training in the use and maintenance of equipment (approved training centre)
- Renovation and overhaul of equipment
- **Our Equipment rental**



- Supply of spare parts
- (preventive, curative, ...)
- Service man: a dedicated technician integrated into the customer's teams
- Periodic visits



Global coverage



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Multidisciplinary team



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