

Track laying & maintenance equipment



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Evolution and range

Guide of use

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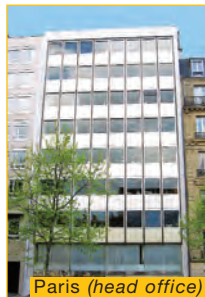
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T R A C K L A Y I N G A N D

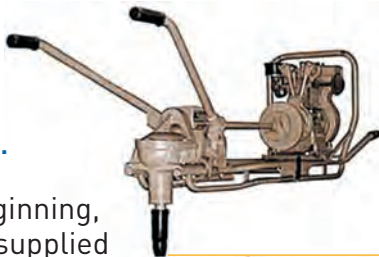
1924

FOUNDATION
OF ÉTABLISSEMENTS
LUCIEN GEISMAR IN COLMAR.



From the very beginning, the the company supplied small tools and related track maintenance equipment to the railway industry.

They developed a know-how and a technical capacity for the design and the manufacture of machines to meet the requirements of mechanised track maintenance.



1952

GEISMAR produces its first coach-screwing machine. This machine will be extensively used to tighten millions of bolts and screws as European Railways embark on an unprecedented reconstruction programme after World War II...

Rail drills and saws followed and marked the start of mechanised track maintenance.



2015



A new generation of sleeper coach-screwing machines, the **TDH** is lighter, more compact and with accurate digital control, designed to meet the performance demands of the leading railways.

The **VMB** with motorized bogies is the flagship of our railway vehicle range. The **VMB's** flexible design configuration allows enhanced working conditions, productivity, safety and comfort of railway personnel as well as meeting the strictest performance standards of individual railways.

Over 90 years of experience in track works and continuous development have enabled **GEISMAR** to pioneer the machines for the new millennium:

- latest technology in engine drives and optimized ergonomics,
- programming and electronic control with simultaneous recording of parameters,
- minimized maintenance.



TRACK LAYING AND



VPS



AP3



MP 23



The most comprehensive range, from hand-held machinery

For the maintenance of rails, fastenings and sleepers;
track laying and renewal, infrastructure maintenance,
transport and handling...

MAINTENANCE EQUIPMENT

 RANGE

S2PV



KGT-E



to heavy equipment for trackwork.

VMB 1510 GR Bi-mode



WORLD RAILWAY EXPERIENCE



GEISMAR equipment is used to build and maintain the infrastructure of all railway systems, high speed lines, national and private networks, light rail & metros, urban lines, mines and industrial...

GEISMAR is present in over **120** countries.



guide of use

This catalogue aims at providing our customers with a more comprehensive view of our products, including specific features, advantages and useful links.

A functional analysis of our railway customers' requirements and maintenance tasks has been used as a basis for its structure: we hope you will find numerous products to meet your needs and contribute to the improvement of track maintenance techniques.



SOLUTIONS

The equipment shown in this catalogue meets most of the requirements for track laying and maintenance. The main track components, the associated activities and works are classified in **9 chapters** for ease of identification and quick access to **the GEISMAR solution**. This classification is used in the CONTENTS and repeated on the edge of each page for easy reference.

The description of the equipments and of its functions may refer to optional features; other versions may be proposed or considered to meet specific requirements: our sales team and offices remain at your disposal to answer your queries:

CONTACT US !

1 RAIL

2 FASTENINGS

3 SLEEPERS

4 MULTI-FUNCTION

5 TRACK WORKS

6 TRANSPORT

7 HANDLING

8 LIGHTING

9 SAFETY & RESCUE





SAFETY



We have always been concerned with safety on the track worksites; we endeavour to consider the operators' protection from the early design stages through to the manufacturing process of our machines.

The equipment shown meets **E.U. safety requirements** when applicable.

GEISMAR machines are used worldwide and also meet the relevant local regulations.

The weight of off-trackable machines is also a key factor of safety on work sites.

Pictograms have been used to indicate the off-trackability of the equipment:



< 15 Kg

easily carried by 1 person *

Handled and off-tracked by:



< 30 Kg

1 person *



< 50 Kg

2 persons *



< 75 Kg

3 persons



< 100 Kg

4 persons

** used in the contents to easily identify the machines that can be used and off-tracked.*



URBAN

Many **GEISMAR** products can be operated on light rail, metros and other mass-transit systems.

Standard or specific features enable operation in these environments, these features include the compatibility with grooved rails.



This pictogram has been chosen to easily identify such equipment and is included in the contents.





TECHNICAL DEVELOPMENT

GEISMAR research & development is strongly rooted in our field of experience for designing new products or improving existing equipment.

The descriptions and features of the equipment shown may change as a result of the latest technical improvements.

The unique features and design of our equipment are patented to ensure **GEISMAR's** proven knowhow remains our customers' best guarantee for highest quality and suitability.



SPARE PARTS AND CONSUMABLES

GEISMAR is an original equipment manufacturer with first class industrial facilities in France and abroad.

Our substantial stock of original spare parts and high quality consumables ensure we can optimise the operation and maintenance of our equipment worldwide.







1

RAIL

1

- ▶ **CUTTING:** Blade saws - Disc cutters
- ▶ **DRILLING:** drills
- ▶ **WELD SHEARING:** Weld shears
- ▶ **GRINDING:** Grinding sets
Off-trackable grinders
Grinding vehicles
- ▶ **CLEANING:** Descaling machines - Hi pressure wagons
- ▶ **HEATING :** Heaters - Preheaters
- ▶ **DESTRESSING:** Knockers
Lifters
Tensors
- ▶ **BENDING:** Benders





SRH

Blade rail-saws



Weight



• petrol
• electric
Power source

• hydraulic
• pneumatic



A variety of consumables, tools and accessories are available on request.

CUTTING

saw



- **low noise** operation
- the saw guide features 2 rigid columns for **square and precise cutting**
- **very sturdy design**
- centrifugal clutch
- the cutting bow can be adjusted laterally
- the blade pressure can be controlled hydraulically to enable cutting of high resistance rails
- the bow can accommodate blades up to **450 mm long** (for grooved rails)
- **quick-acting fastening vice**

SRH

MTZ

Light-weight abrasive rail-saw



Associated products

- The ESN weld shears (pages 41-42) and the MP12 - MP23 grinders (pages 46-47) ensure a perfect finish of the thermit welds.



Weight
less than 17 kg



• petrol-2-stroke
Power source



A variety of consumables, tools and accessories are available on request.

RAIL



1

Using the latest technology, the **MTZ** offers:

- **exceptional cutting performance:**
 - average cutting time: 75 to 90 seconds*;
 - Accuracy - less than 1% horizontal and vertical deviation
- **unmatched comfort for the operator:**
 - reduces intense vibrations with a **patented Comfort Cushion™** system
 - reduced noise level
- **important productivity benefits:**
 - extended disc life (up to 20% extra);
 - half the maintenance required with **patented air filtration** fitted with cyclone pre-filtration system
- The Stihl 2-stroke engine features diaphragm carburetor, electronic ignition and centrifugal clutch
- 350 to 400 mm Ø discs

CUTTING

cutters

* according to
rail type
(source SNCF)

MTZ

- power source options
 - electric
 - hydraulic
- = model MTX



PR2



Weight
≈ 19 kg



Power source

• petrol 4-stroke Honda engine



A variety of consumables, tools and accessories are available on request.

DRILLING

drills

Super light-weight rail drilling machine with hollow drill bits



- designed for fast and accurate drilling all **types of flat bottom or grooved rails** up to a hardness of 270 HB *(for a hardness of rail top, please contact us in advance)*
- drilling the **connection holes** with helicoids drills bits up to a hardness of 270 HB *(for a hardness of rail top, please contact us in advance)*
- **hollow drill bits :**
 - drilling time decrease
 - excellent surface finish
 - decreasing drill chips
- up to 85 mm drilling stroke *(the highest in the market)*
- drilling diameter: up to 40 mm
- manual advance system through **capstan arm**, pressurized **lubricating and cooling system** through the spindle
- **the universal vice** *(multi holes position for all kind of flat bottom or grooved rails)* **with fast lever catch** and the **interchangeable rail forms** ensure accurate fixing and sturdy clamping



Track laying and maintenance equipment

PRZ

Super light-weight rail drilling machine with carbide bits with disposable carbide tips



Weight
≈ 20 kg



• petrol 2-stroke Stihl engine
Power source



A variety of consumables, tools and accessories are available on request.

RAIL



1

DRILLING

drills

- designed for fast and accurate drilling all **types of flat bottom or grooved rails** up to a hardness of 325 HB *(for a hardness of rail top, please contact us in advance)*
- drilling the **connection holes** with helicoids drills bits up to a hardness of 270 HB *(for a hardness of rail top, please contact us in advance)*
- **Carbide bits holder with disposable carbide plates :**
 - drilling time decrease
 - excellent surface finish
 - no necessary resharpener
 - lifetime increase with more than 100 holes per set of carbide tips *(4 faces - variable number of holes in rail hardness)*
- up to 85 mm drilling stroke *(the highest in the market)*
- drilling diameter: up to 40 mm
- manual advance system through **capstan arm**, pressurized **lubricating and cooling system** through the spindle
- **the universal vice** *(multi holes position for all kind of flat bottom or grooved rails)* with **fast lever catch** and the **interchangeable rail forms** ensure accurate fixing and sturdy clamping

PRZ

Track laying and maintenance equipment





PRUL

Carbide tool rail drill



Weight



• petrol

• electric

Power source



A variety of consumables, tools and accessories are available on request.

DRILLING

drills

PRUL



- **carbide technology**
- **light, yet sturdy** and economical
- **fast and accurate:** drills Ø 36 mm in UIC 60 rail in 40 seconds
- manual advance, pressurized, coaxial tool lubrication
- interchangeable **rail forms and quick-acting clamp** ensure accurate and firm fixing
- **simple and economical:** the easily changeable carbide tips can be used on all 4 faces which enables the drilling of **up to 100 holes**

PR7 S

Manual feed rail drill



Weight



Power source

- petrol
- electric

- hydraulic
- pneumatic



A variety of consumables, tools and accessories are available on request.

RAIL



1

DRILLING

drills

PR7 S



- manual feed
- drills up to 38 mm Ø with morse cone n° 3 (CM4 and flat drill bits are also available)
- 1 or 2-speed transmission
- large choice of drill bit rotation speeds
- standard or flat drill bits can be used
- compact quick fastening clamp
- drill bit lubrication



PR8



Weight



• petrol
• electric

• pneumatic

Power source



A variety of consumables,
tools and accessories
are available on request.

DRILLING

drills

Double feed rail drills



- **PR8 : automatic feed**
PR8 DUAL : automatic/manual feeds
- **drills up to 38 mm Ø** with morse cone n° 3
(CM4 and flat drill bits are also available)
- **1 or 2-speed transmission**
- large choice of drill bit rotation speeds
- **standard or flat drill bits** can be used
- **quick fastening clamp compact vice**
- drill bit lubrication

PR8

ESN3

Modular weld shear



Weight

A variety of consumables, tools and accessories are available on request.

RAIL



1

WELD SHEARING

weld shears

ESN3



Associated products

The MTZ disc cutters (page 35) are used to prepare the thermit welding process; the MP12 - MP23 grinders (pages 46-47) ensure a perfect finish of the thermit welds.

- **powerful:** shearing force **up to 220 kN** is evenly distributed
- **precision:** cutters and guides are adjustable to optimise shearing
- **profitable:** **final grinding** is minimal to reduce costs
- shears both the weld and the mould in one continuous operation
- **4 modular configurations:**
 - **HI:** manual pump mounted on the weld shear
 - **HS:** shearing unit + separate manual pump
 - **MI:** integrated electric or petrol powered pump
 - **MS:** shearing unit + independent powerpack (**MS-XL** : model for the grooved rail)

Track laying and maintenance equipment





ESN4

Powerful and lightweight weld shear



Weight

37 kg without cutters



Énergie

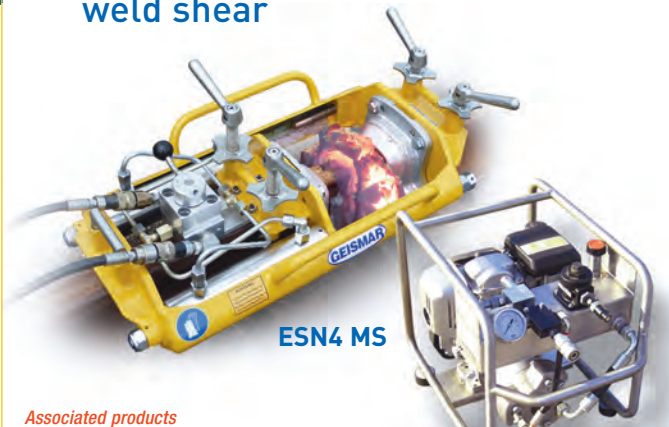
• petrol 4-stroke Honda engine



A variety of consumables, tools and accessories are available on request.

WELD SHEARING

weld shears



ESN4 MS

Associated products

- The MTZ disc cutters (page 35) are used to prepare the thermit welding process; the MP12 - MP23 grinders (pages 46-47) ensure a perfect finish of the thermit welds.

- **powerful:** shearing force up to **216 kN** is evenly distributed
- **precision:** cutters fixed and guides adjustable to optimize shearing
- **economical:**
 - **lifetime** of the cutters - up to 3x
 - **final grinding** is minimal to reduce costs
- **compact:** versatile use in track and switches and crossings
- shears both the weld and the mould in one continuous operation
- configuration **MS:** shearing unit + independent powerpack



Track laying and maintenance equipment

EMX-M

Mechanical grinding set



Weight



Power source

• petrol

• diesel



A variety of consumables, tools and accessories are available on request.

RAIL



1

GRINDING

set

EMX-M

- **mounted on a wheel barrow** with tyres or rail rollers with outrigger
- pivoting power unit and centrifugal clutch
- 4m long flexible shaft
- **straight or right angle tool holders** with handles and guards and **integrated clutch control**
- **up to 8 types of grindstones** **for all applications** can be used: flat, cup type, recessed, depressed etc...



PHG 2

Multipurpose portable grinding machine



Weight
9 kg



Power source

• petrol 2 or 4-stroke



A variety of consumables, tools and accessories are available on request.

GRINDING

portable grinder



Self contained versatility and ease of use make **PHG 2** the handiest of tools for a variety of maintenance tasks from a single source.

Multipurpose:

- **a variety of possibilities:**

- **Grinding** of running surface, lateral sides of rail, fish plate area, rail ends, switch points and frogs
- **Cutting** of coachscrews and fishplate nuts
- **Weld shearing**- removal of risers
- **Working in flat bottom and grooved rails**

- **easy and quick to use:**

- Integrated petrol engine
- Perfectly balanced
- 2 ergonomic handles incorporating centralised controls

- **maximum safety for the operator**

- Ø 230 mm grindstones, from 2.5 to 7 mm thick



Track laying and maintenance equipment

MP5

Lightweight rail profile grinder



Weight



Power source

- petrol
2-4-stroke

- electric
- hydraulic



A variety of consumables, tools and accessories are available on request.

RAIL



1

GRINDING

off-trackable
grinders

MP5



- ensures perfect grinding of the rail head
- **the guiding rollers are adjustable** to best suit the working area
- **light, yet rigid steel frame**
- the **grindstone** is accurately controlled, perfectly **in the plane of the rail** (various dimensions and fastening are available)
- **safe operation:** elastic transmission and protective casings are standard features



MP12

Rail profile grinder



Weight



Power source

• petrol
2-4-stroke

• electric
• hydraulic



A variety of consumables, tools and accessories are available on request.

GRINDING

off-trackable
grinders

MP12



Associated products



The MTZ disc cutters (page 35) and the ESN weld shears (pages 41-42) are also used in the thermit welding process.

- ensures **perfect grinding of the rail head**
- the guiding rollers guarantee a **fine grinding from horizontal to vertical position**
- the **long roller base** ensures a first class reference for the grinding
- the grindstone is precisely controlled (various dimensions and fastening are available)
- light, yet **rigid alloy frame**
- **safe operation:** belt drive and protective casings are standard features
- **ergonomical:** the grinder can be **locked at any angle** with an outtrigger
- options: - **power take-off** for flexible drive hand tools
- transformation **kit** in the **MOD 12**

MP23

Ergonomic rail profile grinder



Associated products

- The MTZ disc cutters (page 35) and the ESN weld shears (pages 41-42) are also used in the thermit welding process.



Weight



Power source

- petrol
- diesel

- electric
- hydraulic



A variety of consumables, tools and accessories are available on request.

RAIL



1

GRINDING

off-trackable grinders

- Grinds **the whole profile of the head of flat bottom rails in only one operation**
- outstanding rigidity of the aluminum alloy frame
- **Ergonomic, sure and comfortable machine to use**
- **2 adjustments of the grinding head:**
 - **vertically** (electrically controlled) for a progressive grinding of the rail
 - the **180° arc** allows continuous grinding without turning the **MP23** around
- **Off-set balancing bar** prevents the **MP23** resting on weld burrs on the opposite rail

MP23



MP6

Profile grinder for rails & turnouts



Weight



Power source

- petrol
2-4-stroke

- electric
- hydraulic



A variety of consumables,
tools and accessories
are available on request.

GRINDING

off-trackable
grinders

MP6



- fine grinding of the **rail head on main line**
- **pivoting and adjustable universal guiding rollers**, to best suit the working area
- the grindstone features controlled adjustment (various dimensions and fastening are available)
- **light yet rigid steel frame**
- **safe operation:**
centrifugal clutch and protective casings are standard features
- **MP6 SG :** grinding of switch points and frogs



MC3

Turnouts grinder



Weight



Power source

- petrol
- electric

- hydraulic



A variety of consumables, tools and accessories are available on request.

RAIL



1

GRINDING

off-trackable grinders

MC3



- the **sturdy frame** is insulated and features a **grinding head with 3-way adjustment**
- fine grinding of the **blades, crossing and check rails in all types of turnouts**
- the grindstone can be adjusted over a **$\pm 30^\circ$ angle range** (various dimensions and fastening are available)
- vertical adjustment ranges over 185 mm
- lateral adjustment ranges over 385 mm
- **ergonomic precise and sturdy controls**
- option: power take-off for tool holders

Track laying and maintenance equipment





MV3

Vertical rail grinder



Weight



Power source

- petrol
- diesel

- electric
- hydraulic



A variety of consumables, tools and accessories are available on request.

GRINDING

off-trackable
grinders

MV3



- deburring and grinding all flat bottom rails and check rails in any type of crossings and switches
- **tool holder assembly with 3-way adjustment:**
 - ≈ 385 mm horizontal stroke
 - ≈ 200 mm vertical adjustment
 - **the angle can be adjusted over $\pm 30^\circ$**
- adaptable optional for fish-plated recessed stone and abrasive wheels
- frame with rail rollers
- optional inclination $-20^\circ/+80^\circ$

MS9

Rail web and fishing table grinder



- petrol
- diesel
- electric



A variety of consumables, tools and accessories are available on request.

RAIL



1

GRINDING

off-trackable
grinders

- special design to **remove rust and scale**
- **the height and angle are adjustable** to suit the rail profile
- the shell-type grindstone protections pivot to suit either rail side
- **fine grinding of the web includes the transition onto rail foot and under rail head**
- 4-wheel traversing trolley, optional motorised trolley

MS9



MJ18

Rail joint grinder



• petrol

Power source



A variety of consumables, tools and accessories are available on request.

GRINDING

off-trackable
grinders



Associated products



Can be used when low joints have been straightened using JA vertical benders (page 67).

- the frame features a **quick-acting vice, and roller** to move on the rail
- up to **70 mm grinding depth**, easily controlled through a **spring loaded pivoting arm**
- the grinding head is laterally positioned against the joint through a precise capstan wheel
- belt transmission
- Ø 230 mm grindstone, 3.2 or 4.8 mm thick



Track laying and maintenance equipment

MOD12

Corrugation grinder



- petrol
 - electric
 - hydraulic
- Power source



A variety of consumables, tools and accessories are available on request.

RAIL



1

GRINDING

off-trackable grinders

MOD12



- fine grinding of the rail head and undulatory corrugation
- **two extensions sets of 16-roller provide a perfect platform for precise grinding out of corrugation**
- the grindstone features precise control (various dimensions and fastening are available)
- **light yet rigid alloy frame**
- **safe operation:** belt drive and protective casings are standard features
- **ergonomical:** the grinder **can be locked at any angle** when used with the outrigger
- optional power take-off available for flexible drive hand tools



VMR 445



Weight
15 t

GRINDING

vehicle

Preventative grinding vehicle



VMR 445

A variety of consumables, tools and accessories are available on request.

- power **164 kW** - water cooling
- hydrostatic transmission
- **80 km/h** speed on level track
- **2 hydraulic grinding units with 4 vertical stones** Ø 150 mm to **work on both rails up to 5 kmph**
- **the grinding heads can be tilted/inclined over 115°** to grind corrugation and gauge corner
- **up to 150 m per hour** (0.2 mm depth)
- features dust and particle extraction system
- catalytic converter can be supplied
- creep speed and **remote controled** grinding heads
- **V2R 850 M** : road-rail version available



DK3

High output rail descaling machine



Weight



Power source

- petrol
- diesel
- electric



A variety of consumables, tools and accessories are available on request.

RAIL



1

CLEANING

descaling machines

- **high efficiency to re-establish track circuits** even on new, oxidized or wet rails
- 2 high output **abrasive wheel** Ø 230 x 25.4 mm
- features a **pneumatic control of the wheel pressure**
- 2 selectable wheel pressures
- guiding through 2 double-flange rollers
- **rail is cleaned over a 40 mm width**
- options: - 3 abrasive wheels
- wire brushes

DK3



DER 672

Rail descaling machine



Weight



Power source

• petrol

• electric



A variety of consumables, tools and accessories are available on request.

CLEANING

descaling machines

DER 672



- **light and easy-to-use** machine for re-establishing track circuits
- **abrasive strips wheel** Ø 165 x 50 mm
- direct on-the-rail contact system
- **rail is cleaned over a 40 mm width**



Track laying and maintenance equipment

W40N HP

High pressure cleaning wagon



▶ A variety of consumables, tools and accessories are available on request.

RAIL



1

CLEANING

wagon

- **Wagon mounted** high pressure water jetting unit to clean the rail-head and restore rail adhesion
- Operating speed: up to **60 kmph**
- 310 HP pumpset delivers **130 l/min at 1,000 bar**
- **4 adjustable nozzles**, set at 1,000 bar, clean rails
- A separately mounted 250 bar spray-bar is available for **cleaning 3.3 m of track**
- **2 hand-held** lances provide 250 bar pressure for spot cleaning
- **6 m³ intermediate tank** installed with the pumpset enables station and platform cleaning, equivalent of 45 km of track
- **7 hours of continuous operation** possible when used in conjunction with a 50 m³ water tanker, up to 420 km of track

W40N HP

Track laying and maintenance equipment





SH

Rail heaters



Weight

SH 4 : 90 kg

SH 8 : 210 kg

SH 12 : 600 kg



A variety of consumables, tools and accessories are available on request.

HEATING

heaters

SH4



SH12



• heating power:

SH 4 = 255 kW

SH 8 = 510 kW

SH 12 = 765 kW

• consumption:

SH 4 = 20 kg/h

SH 8 = 40 kg/h

SH 12 = 60 kg/h

- off-trackable trolleys for rail destressing and welding LWRs
- burners fed from liquid propane gas bottles
- 3 models:
 - SH 4: 4 burners for 1 rail;
 - SH 8: 8 burners for the 2 rails, hand pushed;
 - SH 12: 8 lateral burners + 4 vertical burners for the 2 rails; mounted on a self-propelled aluminium trolley with brakes

Associated products

The TH hydraulic tensors (page 64) can also be used for LWRs destressing.





MR 512

Rail knocker


Weight
230 kg


Power source
petrol



- hand-pushed **frame with 4 rollers**
- **oscillating arms** positioned above each rail are **fitted with nylon pads** for knocking both sides of each rail head to allow destressing
- **48 blows/min**



Track laying and maintenance equipment

FRHP

Heavy duty rail knocker


Weight
285 kg


Power source
petrol



- hand-pushed **frame with 8 rollers**
- **oscillating arms** positioned above each rail are **fitted with nylon pads** for knocking both sides of each rail head to allow destressing
- **56 blows/min**

L2R 522

Hydraulic rail lifter


Weight
170 kg


Power source
• petrol

 A variety of consumables, tools and accessories are available on request.

RAIL



1

DESTRESSING

rail lifters

L2R 522



- hand-pushed **frame with 4 rollers**
- **2 hydraulic cylinders with 300 mm of stroke** enable one or two rails to be lifted
- hydraulic rail clamps
- lever type distributor controls
- **5.5 t lifting capacity**
- features **2 storage baskets** for destressing rollers
- **a dismountable version is also available**
- also available as a radio controlled self-propelled unit for use in conjunction with tamping (**L2R 525**)



LRH

Hydraulic rail lifter

DESTRESSING

rail lifters

LRH



Weight
250 kg

Power source
• petrol


A variety of consumables, tools and accessories are available on request.

- hand-pushed **frame with 4 rollers**
- **2 hydraulic cylinders with 350 mm of stroke** enable one or two rails to be lifted
- the **rail clamps can be locked 'up'** so as to avoid low obstacles
- features no return safety valves
- lever type distributor controls
- **3 t lifting capacity**
- **off-tracking kit** with ramps and wheels

THR 542

Rail tensor


Weight
280 kg

 A variety of consumables, tools and accessories are available on request.

RAIL

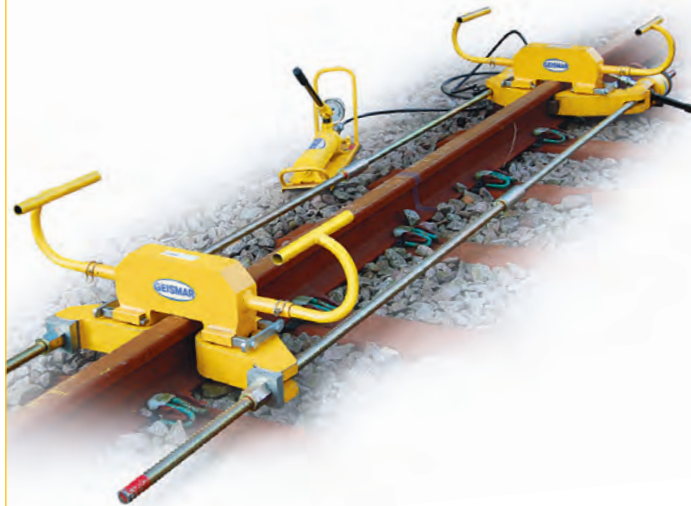


1

DESTRESSING

tensors

THR 542 



- **multipurpose tensor** for destressing LWRs, compensating rail gap, installing insulated joints
- **600 kN of capacity** enable pulling LWRs of up to 70 kg/m
- **64 mm stroke with manual take up** system for pulling larger gaps
- eccentric **obstructionless** clamps for use under traffic
- 700 bar manual pump with manometer and pressure regulation
- **dismountable to be carried by hand**



TH 70 & 120

Rail tensors

Weight
300 to
580 kg

A variety of consumables, tools and accessories are available on request.

BENDING

tensors

TH 120 VL

TH 70 VL



- **700 or 1090 kN** to pull up to 70 kg/m LWRs
- 380 mm stroke allows **LWRs up to 1,200 m** long to be pulled in order to establish the relevant stress free temperature
- **obstructionless model** with eccentric clamps
- the 40 cm to 300 cm pulling rods can be combined for installing closure rails
- manual or motorized pump with pressure gauge and pressure regulation
- **dismountable to be carried by hand**



Track laying and maintenance equipment

JB - JC

Horizontal rail benders



A variety of consumables, tools and accessories are available on request.

RAIL



1

BENDING

horizontal bending

- maximum force: **400 or 600 kN**
- double flow manual pump
- the 2 rams feature 110 mm stroke to **bend rails down to 6 m radius**
- **2 models** - mecanowelded frame with pushing and reaction blocks **for rails up to 70 kg/m**:
 - **JB 40**: for rails **up to 50 kg/m**,
 - **JB 60**: for rails **up to 70 kg/m**,
- **1 model** - swanneck frame enables the **bending of elbow fishplated joints** and rails:
 - **JC 60**: for rails **up to 70 kg/m**,the 2 rams feature 60 mm stroke

JB - JC



JLP 75

Lightweight multipurpose rail bender



Weight

45 kg

+ accessories

25 kg

BENDING

horizontal
and vertical
bending

JLP 75



A variety of consumables,
tools and accessories
are available on request.

- **light and easy operation to rectify or accentuate curve** on flat bottom rails & switch blades
- Mechanically welded frame and hooks made in high strength aluminium
- Double acting ram
- Maximum force: **750 kN**
- Double flow manual pump

JA

Vertical rail joint benders



▶ A variety of consumables, tools and accessories are available on request.

RAIL



1

BENDING

vertical
bending

- mecanowelded frame with reaction blocks and retractable rail rollers
- vertical ram with rail base clamp **for straightening both welded and fishplated joints**
- double flow manual pump
- maximum force: **400 or 1,000 kN**
- gauge-controlled stroke
- 2 models:
 - **JA 40:** for rails **up to 46 kg/m**,
 - **JA 100:** for rails **up to 60 kg/m**,
- supplied with outrigger

JA



JP 90

Rails and switch blade bender



Weight
290 kg

A variety of consumables, tools and accessories are available on request.

BENDING

switch blade
benders



- vertical **straightening of Vignole or grooved rails and switch blades** by using interchangeable pushing blocks
- horizontal straightening of rails and switch blades through tilting of the machine
- high resistance cast steel construction
- double acting hydraulic ram
- maximum force: **900 kN**
- 90 mm stroke, **hand pump**
- **optional transportation trolley** with rail rollers available

JL30

Light switch blade bender



Weight

45 kg

+ accessories

19 kg



A variety of consumables,
tools and accessories
are available on request.

RAIL



1

BENDING

switch blade
benders

- **light and easy operation** for bending switch blades in situ whilst disconnected from operating mechanism
- suits S49, S54 and UIC60 rail profiles
- **2 wedges and 1 rod are used with the bender to adjust the blade radius**
- manual hydraulic pump: 700 bar
- **300 kN** of bending force

JL30





VO 406

Continuous feed horizontal rail bender



Weight
3.6 t



• petrol
• diesel

• electric

Power source



A variety of consumables, tools and accessories are available on request.

BENDING

continuous
feed horizontal
bender

VO 406



Workshop based machine for the pre-bending of rail prior to installation in track

- **6 interchangeable rollers enable one or two-way bending** of Vignole or grooved rails in various configurations
- **400 kN** of bending force
- **minimum bending radius: 5 m**
- the rail is driven by motorized rollers up to 9.3 m/min
- **stationary or rolling frame** (over ground or rail)
- excellent visibility of working area



Track laying and maintenance equipment



2

FASTENINGS

2

RAIL-SLEEPER:



THREAD TYPE, tightening -untightening:

Portable power wrench

Mechanical coach-screwing machines

Mechanical coach-screwing machines *with torque assistance*

Hydraulic coach-screwing machines

Programmable coach-screwing machines

"K" bolt removing machine



CLIPS: Clippers



SPIKES: Extracting - Self contained spike puller

Inserting - Self contained spike driver

FISHPLATE: • fastening & unfastening: Bolting machine



MIW 3

Portable power wrench



Weight



Power source

- 2-stroke petrol

- electric
- hydraulic



A variety of consumables, tools and accessories are available on request.

2

RAIL
SLEEPERTHREAD
TYPEportable
wrench

MIW 3



Associated products



The TMI 2 (page 76) offers optimum weight/performance ratio for more demanding tightening work

- **the most powerful machine** available on the market for spot maintenance on vertical and horizontal fastenings
- the Stihl 2-stroke engine features diaphragm carburetor, electronic ignition and centrifugal clutch
- **torque available up to 2,600 N.m**
- ergonomic control for fastening/unfastening operations
- torque adjustment control available on option
- excellent oil bath lubrication with magnetic filter reducing heat and noise
- standard square inch drive
- 3 handles for **better working conditions**
- **MIW 3** can be mounted on dedicated 3-wheel foldable trolley to facilitate work on horizontal or vertical positions

TS

Heavy duty mechanical coach-screwing machine



Weight



• petrol
• diesel
Power source

• electric



A variety of consumables,
tools and accessories
are available on request.



RAIL
SLEEPER

2

THREAD
TYPE

mechanical
coach-screwing
machines

- **sturdy construction** for intensive use
- mechanical **transmission in oil-bath** with reverse and conical clutch
- 1 or 2-speed gearbox
- **adjustable tightening torque** and full unfastening power over 120 daN.m
- options: torque display through **graduated dial**, lighting for night-works and fish-bolting device
- 4-wheel traversing trolley, optional patented negative brake trolley

TS



TB



Weight



• petrol
• diesel

• electric

Power source



A variety of consumables,
tools and accessories
are available on request.

2

RAIL
SLEEPERTHREAD
TYPE

mechanical
coach-screwing
machines



Combined mechanical coach-screwing and fish-bolting machine



- **sturdy construction** for intensive use
- **pivoting head** with 1 outlet **for vertical fastenings** and 2 outlets **for fishbolts**
- mechanical **transmission in oil-bath** with reverse and conical clutch
- 1 or 2-speed gearbox
- **adjustable tightening torque** and full unfastening power over 120 daN.m
- options: torque display through **graduated dial**, lighting for night-works
- 4-wheel traversing trolley, optional patented negative brake trolley



Track laying and maintenance equipment

TEM

Maintenance mechanical coach-screwing machine



Weight



- petrol
- diesel

Power source

- electric



A variety of consumables, tools and accessories are available on request.



RAIL SLEEPER

2

THREAD TYPE

mechanical coach-screwing machines



- combines **performance and low weight**
- mechanical **transmission in oil-bath** with reverse and conical clutch
- 1 or 2-speed gearbox
- **adjustable tightening torque** and full unfastening power over 90 daN.m
- torque graduated dial is available
- options: lighting for night-works and fish-bolting device
- trolley with outrigger or traversing mechanism, optional patented negative brake trolley

TEM



TMI 2

Mini coach-screwing machine



• petrol
• diesel

• electric
• hydraulic



A variety of consumables, tools and accessories are available on request.

2

RAIL
SLEEPER

THREAD
TYPE



controlled
coach-screwing
machines

TMI 2



- **truly portable with full size features**
- **exclusive mono-rail trolley** ensures perfect stability
- mechanical **transmission in oil-bath** with reverse and conical clutch
- 2-speed gearbox
- **adjustable tightening torque** up to 80 daN.m unfastening power
- torque display through control **graduated dial**
- optional lighting for night-works

TPAS

Precise coach-screwing machine with hydraulic torque assistance



Weight



• petrol
• diesel

Power source

• electric



A variety of consumables, tools and accessories are available on request.



RAIL
SLEEPER

2

THREAD
TYPE

controlled
coach-screwing
machines

- mechanical transmission
- **precise torque control** with reliable hydraulic assistance
- double oil-bath conical clutch
- 1 or 2-speed gearbox with reverse
- **adjustable torque from 10 to 60 daN.m** and up to 100 daN.m for unfastening
- **graduated dial** for monitoring the tightening torque
- options: lighting for night-works and fish-bolting device
- trolley with outrigger or traversing mechanism, optional patented negative brake trolley

TPAS



TC

Compact coach-screwing machine



Weight



Power source

- petrol
- diesel

- electric



A variety of consumables, tools and accessories are available on request.

2

RAIL
SLEEPERTHREAD
TYPE

controlled
coach-screwing
machines

TC



- mechanical transmission
- precise **torque control**
- **ergonomical:** engine, reverse and speed change are controlled from the handles, 2 dedicated torque dials for selective reading
- progressive clutch control
- 2-speed gearbox
- **adjustable torque: 10 to 60 daN.m** and up to 100 daN.m for unfastening
- options: lighting for night-works and fish-bolting device
- trolley with outrigger or traversing mechanism, optional patented negative brake trolley

TPH

Precise hydraulic
coach-screwing machines
with
1 or 2-head

TPH 155

TPH 254



• petrol

• electric

Power source



A variety of consumables,
tools and accessories
are available on request.



RAIL
SLEEPER



2

THREAD
TYPE

hydraulic
coach-screwing
machine

- hydraulic transmission
- **10 to 40 daN.m torque** selection and high precision control
- up to 80 daN.m unfastening torque
- **automatic speed shift** from fast take up to controlled tightening
- **up to 500 fastenings per hour**
- 4-wheel traversing trolley, optional patented negative brake trolley
- optional positioning device for **Vossloh SKL14** is also for increased **output and profitability**

2 models - 2-speed with automatic tipping system:

- **TPH 155** features **1-head**, 
- **TPH 254** features **2-head**, 



TDH



Power source



A variety of consumables, tools and accessories are available on request.

2

RAIL
SLEEPER

THREAD
TYPE

hydraulic
coach-screwing
machine

TDH

Digital ergonomic hydraulic coach-screwing machine



- **high precision, fully hydraulic, high output and compact coach-screwing machine**
- **precision torque control** with digital display
- **ergonomical:** engine control, inverter and speed change are integrated on control handles
- engine and hydraulic equipment are mounted on silent block: reduction of vibration level for operator
- **10 to 40 daNm torque adjustment**
- **fully automatic speed selection** for fast or precision tightening
- **up to 500 fastenings per hour**
- options: LED lighting for night-works; recording of data; GPS
- trolley with outrigger or traversing mechanism, optional patented negative brake trolley
- foldable carrying arms and integrated handle for easy transportation and stocking

T 2002

2-head programmable coach-screwing machine



Weight
225 kg



• petrol
• diesel
Power source

• electric



A variety of consumables, tools and accessories are available on request.



RAIL
SLEEPER

2

THREAD
TYPE

programmable
coach-screwing
machine



- **hydraulic transmission with cooler**
- **head adjustment** device (spacing and angle)
- **high precision from 5 to 55 daN.m**
- over 100 daN.m unfastening torque
- **advanced electronic control with digital display:** torques are precisely programmed, process is monitored with fault alarm, speed shift is automatic
- **recording** of fastening torques **for PC analysis** is also available
- **up to 1,000 fastening cycles per hour**
- 4 wheel traversing trolley with rubber wheels and **off-tracking device**, options:
 - patented negative brake trolley
 - motorised trolley



T 2002



MEB

“K” bolt removing machine



Weight



Power source

- petrol
- diesel

- electric



A variety of consumables, tools and accessories are available on request.

RAIL
SLEEPER

2

THREAD
TYPE

bolt remover



- hydraulic machine **to extract simultaneously 2 T-headed bolts**
- head with **double extracting tool**
- capacity: **60 kN**
- the tools feature adjustable spacing and stroke
- 4-wheel traversing trolley

MEB



APL 6



A variety of consumables, tools and accessories are available on request.

2

RAIL
SLEEPER

CLIPS

portable
clippers

Portable hydraulic clipper for insertion and extraction of Fastclips



- Tool for manual insertion or extraction of Fastclips on most of the flat bottom rails in plain tracks
- **lightweight** and easily **transportable**
- for the safety of operator, **patented swiveling head** makes it possible to work and to stay inside the track

APL 6

AP 3

Compact clipper



Weight



• petrol
Power source



A variety of consumables,
tools and accessories
are available on request.



RAIL
SLEEPER

2

CLIPS

clippers



AP 3



Associated products

• The TPH is used to drive the Vossloh SKL fastening into position (page 79)

- **Fully hydraulic compact machine.** High output design with integrated head for inserting or extracting Pandrol Fast Clips
- **ergonomical controls** integrated on the handles of the machine
- **dual purpose tools** fitted (no change over needed) for inserting or extracting 2 clips simultaneously
- robust design, fast, easy to operate and maintain: the ideal machine for high output site renewals
- **high output:** - insertion \approx 1,200 clips/hour
- extraction \approx 1,100 clips/hour
- powerful: **up to 30 kN force** available
- 4-wheel traversing trolley
- foldable carrying arms and integrated handle for easy transportation and stocking
- option: sleeper's lifting



AP 11-21



• petrol
• diesel

• electric



A variety of consumables, tools and accessories are available on request.

2

RAIL
SLEEPER

CLIPS

clippers



Heavy duty multipurpose clippers

AP 11-21



Associated products



The TPH is used to drive the Vossloh SKL fastening into position (page 79)

- **3 models with up to 9 heads suit most clips:** E, PR, Fastclip, Safelock, Surelock, SB3, rail anchors, etc.
- **AP 21 and AP 11: the easily interchangeable working heads** with electrical and hydraulic fast connections
- the tools develop coaxial action **to insert or extract 1 or 2 clips simultaneously**
- **ergonomic and easy to use;** work cycles feature **electrical control**
- high output: **from 900 to 1,600 clips per hour** depending on the clip and working head
- powerful: **up to 29 kN force** available
- 4-wheel traversing trolley
- option: sleeper's lifting

AS-AC

Spike pullers



Associated products

Spikes can also be removed with the hydraulic attachment SP3-GH5/10 (page 105)



• petrol
• diesel

Power source

• electric



A variety of consumables, tools and accessories are available on request.



RAIL
SLEEPER

2



SPIKES

extracting
spike puller

- **up to 60 kN capacity** to extract spikes, lockspikes and dogspikes from the hardest of wooden sleepers
- **AC1: for assymetric elastic spikes**
 - weight:
- **AS3: for symetric spikes**
 - weight:
 - operates on either rail side
 - features **articulated head and pivoting support** for optimum stability
- 4-wheel traversing trolley, optional motorised traversing device

AS-AC



PSD3

Spike driver



• petrol

• diesel



A variety of consumables, tools and accessories are available on request.

2

RAIL
SLEEPER

SPIKES

inserting
spike driver

PSD3



Associated products

Spikes can also be inserted with the hydraulic attachment SD1-GH5/10 (page 105)

- **high output** hydraulic machine
- 5 seconds are enough to drive spikes into the hardest woods
- **up to 600 spikes/hour**
- high performance driving head:
impact power: **120 J/blow - 950 blows/min**
- 4-wheel traversing trolley
- **separates into 3 components for easy transport and off-tracking:** frame & engine, driving head and trolley

BSR8

High power bolting machine



Weight



• petrol
Power source



A variety of consumables,
tools and accessories
are available on request.



FISHPLATE

2

bolting
machines

- **tremendous power** enables untightening of the most severely jammed bolts, or just break them out ...
- **up to 300 daN.m** torque available
- 2-speed gearbox: **70 and 200 rpm** socket speeds
- **adjustable tightening torque** with graduated display dial
- 4-wheel traversing trolley

BSR8



MIW 3



• 2-stroke
petrol

• electric
hydraulic



A variety of consumables, tools and accessories are available on request.

2

FISHPLATE

bolting
machines



Portable power wrench



MIW 3

- **the most powerful machine** available on the market for spot maintenance on vertical and horizontal fastenings
- the Stihl 2-stroke engine features diaphragm carburetor, electronic ignition and centrifugal clutch
- **torque available up to 2,600 N.m**
- ergonomic control for fastening/unfastening operations
- torque adjustment control available on option
- excellent oil bath lubrication with magnetic filter reducing heat and noise
- standard square inch drive
- 3 handles for **better working conditions**
- **MIW 3** can be mounted on dedicated 3-wheel foldable trolley to facilitate work on horizontal or vertical positions

TB

Combined mechanical coach-screwing and fish-bolting machine



- petrol
- diesel
- electric



A variety of consumables, tools and accessories are available on request.



FISHPLATE

2

bolting machines

- **sturdy construction** for intensive use
- **pivoting head** with 1 outlet for vertical fastenings and **2 outlets for fishbolts**
- **mechanical transmission in oilbath** with inverter and conical clutch
- 1 or 2-speed gearbox: socket speeds from 70 to 255 rpm
- **adjustable tightening torque** and full unfastening power over 120 daN.m
- Options: torque display through **graduated dial**, lighting for night-works and fish-bolting device
- 4-wheel traversing trolley, optional patented negative brake trolley

**TS**

Heavy duty mechanical coach-screwing machine



- with optional fish-bolting device (page 73)

2**FISHPLATE**

**bolting
machines**

**TS - TPAS
TC - TEM**

TPAS

Precise coach-screwing machine with hydraulic torque assistance



- with optional fish-bolting device (page 77)

TC

Compact coach-screwing machine



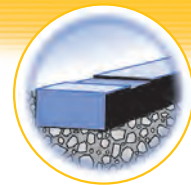
- with optional fish-bolting device (page 78)

TEM

Maintenance mechanical coach-screwing machine



- with optional fish-bolting device (page 75)



3

SLEEPERS

• DRILLING OF WOODEN SLEEPERS

Drill

• CUTTING OF WOODEN SLEEPERS

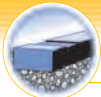
Sleeper saw attachment *for excavator*

Re-adzing machine

Chamfering machine

• MAINTENANCE OF CONCRETE SLEEPERS

Combined drill & *coachscrewing machine*



PT8

Heavy duty sleeper drill



- petrol
- diesel

- electric
- pneumatic



A variety of consumables, tools and accessories are available on request.

WOODEN
SLEEPERS

drilling

3

PT8



- **sturdy and powerful** for heavy duty use
- **drills up to Ø 33 mm** in the hardest woods; **drills vertically or at rail cant angle** (1/20 or 1/40)
- up to 200 mm **adjustable drilling depth**
- drilling guide provides **precision and protection**
- 4-wheel traversing trolley
- options: extra head for **conical drilling**
inclination device $\pm 20^\circ$

Associated products



the nylon shells found on concrete sleepers can be drilled and removed using the TDY (page 100)



Track laying and maintenance equipment

PTSL

Maintenance light sleeper drills



Weight



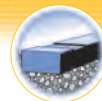
Power source

- petrol
- diesel

- electric
- pneumatic



A variety of consumables, tools and accessories are available on request.



WOODEN SLEEPERS

drilling

3

PTSL-2T



- optimum weight / performance ratio
- drills up to Ø 33 mm; drills **vertically** or at the rail cant angle (1/20 or 1/40)

PTSL-2T  : extra head for conical drilling

- drilling guide provides **precision and protection**
- up to 200 mm **adjustable drilling depth**
- trolley with outrigger or traversing mechanism

PTSL 



PTXL

Portable sleeper drill

Weight
14 kg



Power Source

• 2-stroke
petrol

• electric
hydraulic



A variety of consumables, tools and accessories are available on request.

WOODEN
SLEEPERS

drilling

3

PTXL



- **easy to use, efficient operation and safe**
- **drills up to Ø 25 mm, drilling depth is adjustable up to 200 mm**
- **pneumatic assistance** and drilling guide ensure easy and accurate drilling
- **portable and ergonomic**
- **safety features:**
 - instant release and protection of the drill bit,
 - automatic petrol engine rotation stop, in the event of drill bit locking
- optional carrier-trolley
- version “**S**” (simplified) is available

TTB 220

Sleeper saw



Weight

1,000 kg



hydraulic

Power Source



A variety of consumables, tools and accessories are available on request.



WOODEN
SLEEPERS

cutting

3

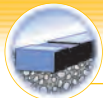
TTB 220



***A dedicated railway attachment for KGTs
(pages 106-107) for cutting the ends
of wooden sleepers;***

can also be fitted to other road/rail excavator types subject to specification

- up to 150 sleepers per hour
- the trolley frame is towed by the loader and features **2 mobile cutting heads**
- 2 blades of 600 mm diameter **with carbide inserts**
- the working configuration can be adjusted from 970 to 1,250 mm from the track axis
- **working depth adjustable** over 200 mm
- **radiocontrolled** from the loader cab

WOODEN
SLEEPERS

adzing

REEN**2-head on track readzing
machine**

Weight
 600 kg
**Power source**

• petrol

• electric



A variety of consumables,
tools and accessories
are available on request.



- **for adzing** new sleepers, **or re-adzing work**
- **1/20 or 1/40 angle** on either one or both rail seats
- **the 2 motorized heads are adjustable** vertically and horizontally
- various **carbide cutters** to suit all type of adzing patterns
- **template** for cutter
- the machine runs on rails placed on the sleeper ends
- **7000 G**: stationary version with drilling function is available



Track laying and maintenance equipment

DN80

Chamfering machine

• petrol
Power Source

• diesel



A variety of consumables,
tools and accessories
are available on request.

WOODEN
SLEEPERS

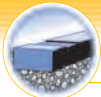
adzing

3



- **adjustable chamfering head:** distance to rail base and chamfer depth are controlled
- rollers guide the machine along the **rail base**
- the chamfering tool can be removed and features **2 or 4 carbide cutters** suitable for **45 to 120 mm wide adzing**
- clutch is right arm-controlled
- a **template** is available **to adjust the cutters**
- 4-wheel traversing trolley

DN80



TDY

CONCRETE
SLEEPERS

3 maintenance

TDY

Combined hydraulic coach-screwing and drilling machine



Weight



Power source

• petrol

• diesel



A variety of consumables, tools and accessories are available on request.

- **unique design** with fixed frame and spring-supported **parallelogram**
- **2 in 1**: a multi-purpose **coach-screwing machine** that also drills wooden sleepers or **removes nylon plugs** from concrete sleepers
- hydraulic transmission
- 30 to 70 daN.m tightening torque
- over 100 daN.m unfastening torque
- **70 and 210 rpm drilling speed**
- features **quick release tool attachments**
- 4-wheel traversing trolley, optional patented negative brake trolley



Track laying and maintenance equipment



4

MULTI-FUNCTION

4

- **Multipurpose *superlight* set**
- **Multipurpose hydraulic power packs**
- **Road-rail loader/excavators**



GMSL

MECHANISED
SET



Weight



• petrol

• electric

Power source



A variety of consumables,
tools and accessories
are available on request.

Multipurpose super light tool set



- **self-contained** power pack with 1.5 m flexible shaft
- **handy to use** with swivel base
- **optimum size/weight/power ratio**
- easy to transport and to operate
- **safe:** speed control and centrifugal clutch
- **versatile:** **GMSL powers numerous tools;** various grindstones to suit a variety of applications (cup type, disc, abrasive and micro grindstones...); bonding drill attachment etc...



Track laying and maintenance equipment

GH 5 & 5/10



Multipurpose hydraulic power packs



- petrol
- diesel (for GH5/10)

Power source



A variety of consumables, tools and accessories are available on request.



HYDRAULIC
SETS

high performance & compact power packs with hydraulic circuit cooler:

- **GH 5:** 1 x 20 l/min outlets

at 140 bar (2,000 PSI),

- **GH 5/10:** 1 x 40 l/min or 2 x 20 l/min outlets

at 140 bar (2,000 PSI),

- **over 20 tools** can be powered from the **GH 5/10** and **10 tools** from the **GH 5** (pages 104 and 105) to drill, cut, grind and shear **rails**; drill **sleepers**; (un) tighten **fastenings**; insert-extract **spikes**; tamp **ballast** (vibration or percussion)
- **7 or 15 m hoses** with push-pull leakproof couplers
- options: - transportation kit for **travel on track or on trackside**
- motorised wheels

Track laying and maintenance equipment



HYDRAULIC
SETS**1 GRINDING***pages***MP 5/6/12 H** ●Profile grinders for rails
and turnouts..... 45/48/46**MOD 12 H** ●

Corrugation grinder..... 53

MS9-H ●

Rail web and fishing table grinder 51

MC3-H ●

Turnouts grinder 49

600 YH2-600 XH ●

Right-angle tool-holder

600 WH4 ●

Straight tool-holder

Range of tools powered by the**2 CUTTING***pages***MTX 300/350/400-H** ●

Safe disc cutter 35

**3 SHEARING****ESN-ALW-PS** ● ●

Weld shear 41

● Tools powered by the **GH 5**● Tools powered by the **GH 5/10**



multipurpose power packs **GH 5 & 5/10**

Please let us **know** your specific needs, if not in this list

HYDRAULIC SETS



4

SLEEPER DRILLING

pages
PTXL-H ● ●

Safe and portable sleeper drill 96



5

RAIL DRILLING

PRUL-H ● ●

Carbide tools rail drill 38

PR8-H ● ●

Standart rail drill 40



6

TAMPING

VIBH ● ●

Vibrator

TT1 ● ●

Percussion hammer



7

TIGHTENING AND FASTENING

pages
HIW 3 ● ●

Portable wrench 72

TMI 2H ● ●

Portable coachscrewing machine 76



8

SPIKES

SP3 ● ●

Extracting tool

SD1 ● ●

Inserting tool

 ● Tools powered by the **GH 5**

 ● Tools powered by the **GH 5/10**




KGT-4RS



Weight
± 20 t

**LOADER/
EXCAVATOR**

road-rail

**Powerful and versatile
road-rail loader**



Associated products



the R25TR and UTE trailers, (pages 156 and 157) enables transporting the KGT-4RS

- **129 kW**, water cooled Diesel engine
- power Shift transmission on 4 wheel drive
- **4 steering wheels**
- **turning radius : 4.2 m**
- dual pneumo-hydraulic brake circuit
- **up to 30 t.m lifting** capacity
- **up to 7.2 m outreach**
- full 360° rotation
- state-of-the art non-infringing on-rail drive through tyres/drums
- articulated rail device to accommodate track twist
- speeds:
- **up to 36 kmph on rail**
- **20 kmph on road**
- a complete range of attachments dedicated to track works available
- electro-hydraulic rotation and height limiting (adjustable)
- quickly on and off-tracking
- for any track gauge



Track laying and maintenance equipment


**LOADER/
EXCAVATOR**

road-rail

4

KGT-E

KGT-E

Multipurpose road-rail excavator


 Weight
± 23 t


Associated products

the R25TR and UTE trailers, (pages 156 and 157) enables transporting the KGT-E

- **129 kW**, water cooled Diesel engine
- **dual drive mode:**
 - **on road** = hydrostatic transmission 4 wheel drive and steering , turning radius = 2.2 m
 - **on rail** = hydrostatic transmission with 4 railway driving wheels Ø 630 mm
- dual pneumatic brake circuit
- **up to 5.2 t lifting capacity** on tip of jib with **up to 7.8 m max. horizontal outreach**
- **the extendable counterweight** increases the lifting capacity **by 10%**
- hydraulic power: **up to 110 kW** on tip of jib
- full 360° rotation
- spacious and ergonomic **cab for 2 persons**
- fast and reliable **hydraulic controls**, with PLC monitoring
- speeds:
 - **up to 27 kmph on rail**
 - **25 kmph on road**
- a complete range of attachments and jibs dedicated to track works is available
- electro-hydraulic rotation and height limiting devices (adjustable)
- quick on and off-tracking
- track gauge: 1435 mm, others on request
- **compliance:** NF F 58-003 and NF EN 15746
- **SNCF approved** n° DPI 14221

Track laying and maintenance equipment





**LOADER/
EXCAVATOR**

road-rail

HANDLING



OBP

Clamshell
buckets
page 182



OFT

Sleeper fork
page 180



PCT

Sleeper beam
with chains
page 181



OBF

Front
buckets
page 182



OFF

Front fork
page 180



PTV

Hydraulic
beam for
sleepers
page 181



OMR

LWR roller
clamp
page 178



PAR

Hydraulic
rail grab
page 178



OEa

Magnet
page 140

Range of attachments of the

INFRASTRUCTURE



ODL

Blade
grasscutter
page 138



ORD

Hydraulic
brushcutter
page 138



OTC

Ditch cleaning
rotor
page 138



KGT-4RS and KGT-E



Please let us know your specific needs, if not in this list

& CIVIL ENGINEERING



OGR

Retro
buckets
page 139



OPV

Vertical drill
page 140



OGC

Clearing
buckets
page 139



OBR

Hydraulic
hammer
page 139



▶ TRACK WORKS



MB8 AC

2-head
tamping unit
page 130



MB1T

1-head
tamping unit
page 129



ODC

Ballast cribs
clearing beam
page 119



BRV

Track brush
page 133



ORT

Sleeper
changing
beam



TTB 220

Sleeper saw
page 97

LOADER/ EXCAVATOR

road-rail

4

KGT-4RS
KGT-E

KGT-E + RTM 6





TRACK WORKS

▶ LAYING & RENEWAL:

- **turnouts and mounted panels:**
Trolleys for longitudinal transport
Modular renewal gantries
Trackpanel laying and removal system
- **panels and sleepers:**
Laying & renewal gantries
- **slab track:**
Slab track positioning units
- **rails and/or sleepers:**
Gantries
LWRs and sleeper positioner
Rail threader
- **sleeper replacement method:**
Ballast clearing attachment *for loader/excavator* - *Sleeper changing machine*
Sleeper fixing machine

▶ SLEWING: Slewing machine

▶ LIFTING: Track lifting machine

▶ TAMPING: Tamping sets and units - Light tampers Hydraulic tampers

▶ BALLAST PROFILING: Ballast regulators - Brush *mounted on loader/excavator*

▶ INFRASTRUCTURE MAINTENANCE: Attachments for loader/excavator Vehicles: track motorcars

5





LEM 460

 **Weight** 4 t

 A variety of consumables, tools and accessories are available on request.

LAYING & RENEWAL

turnouts
and mounted
panels

Radiocontrolled self-propelled trolleys for transport



dedicated trolleys for use with the PEM gantries,
for the transport of panels and turnouts

- **radiocontrolled: one operator** can operate up to 8 **LEMs**
- **features onboard hydraulic power pack**
- **loading capacity: 20 t**
- **lifting and slewing table** for clearing the gauge of low trackside obstacles
- 400 mm Ø wheels
- Auxiliary track can be supplied for the **LEMs** to run on to assist the installation process



Track laying and maintenance equipment

PEM 807

 **Weight** 4 t

 A variety of consumables, tools and accessories are available on request.



Radiocontrolled self-propelled laying and renewal gantries



modular system **to lay or renew track panels and turnouts without deformation**

- **powerful:** 20 t of lifting capacity
- **accurate:** 3-way control of the load
- **radiocontrolled:** one operator can control up to 8 **PEMs**
- supports can extend up to 5 m to suit all handling configurations and **unload turnouts from transport wagons**
- **self-propelled:** 5 kmph
- use with transport trolleys **LEM 460** or alone for slewing only

LAYING & RENEWAL

turnouts and mounted panels

5

PEM 807 



S2PV



Weight

- transfer = 17.4 t
- laying = 16.5 t
- transport = 23 t



A variety of consumables, tools and accessories are available on request.

LAYING & RENEWAL

turnouts
and mounted
panels

Trackpanel laying and removal system



modular system to lay or remove track panels without deformation:

- system configuration:
 - **PEM XL**, gantries with connection bars,
 - **LMC**, motorized caterpillar trolley,
 - **LEM 460**, motorized transportation trolley,
 - **P2PV**, loading and transportation beam with connection ramp.
- **radio controlled and synchronized** by an operator per driving post (transfer, laying and transport).
- modular and adapted to different lengths of trackpanels:
 - 36 m = 3 **PEM XL** gantries
 - 24 m = 2 **PEM XL** gantries
- **loading capacity: 22 t** (option 24 t)



Track laying and maintenance equipment

PTH 350-500

Track laying and renewal
telescopic gantries



Weight PTH 350 = (1 pair) 12 t
PTH 500 = (1 pair) 21 t



A variety of consumables,
tools and accessories
are available on request.



**LAYING &
RENEWAL**

panels and
sleepers



- lay or renew **up to 450 m of track per hour**
- one pair **lifts 18 to 30 t**
- beam with hydraulic grabs or loose lifting chains with the facility for lateral adjustment
- **up to 36 m panels or 70 sleepers**, wooden or concrete, can be handled
- hydrostatic transmission to all wheels; available for 1,000 to 1,676 mm gauge tracks; up to 16 kmph on level under load
- **synchronised travelling control**
- 75 to 120 HP
- gantries and beam are easily **transported on standard flat wagons** in most gauges

5

PTH 350
PTH 500



PRV 550

Slab track positioning units

LAYING &
RENEWAL

slab track



Weight

1,750 kg
per gantry



Power source

• integrated electric power unit:
80 kVA



A variety of consumables,
tools and accessories
are available on request.



- **allows very accurate positioning** of slab track on urban and high speed lines before concreting
- Handling of 15 to 18m slab track section with **4 gantries** and 1 motorised unit controlled by a single operator.
- **3 t** lifting capacity per gantry
- **700 mm** lifting stroke
- **200 mm** (± 100 mm) slewing stroke
- **380 mm** (± 190 mm) of cant deficiency
- **wander lead or radio** for single or multiple control of gantries
- **self-propelled:** 5 km/h travelling speed



Track laying and maintenance equipment

PMC 8101

Gantries for replacement
of S&C units

 **Weight** 10.8 t

 A variety of consumables,
tools and accessories
are available on request.



**LAYING
& RENEWAL**

rails - sleepers



- **allows replacement of crossings and half sets of switches** without deformation
- **multiple units operation** for handling of the long S&C components particular to high speed lines
- **1 single operator controls up to 4 PMC** gantries via 1 remote control
- **12.8 t** lifting capacity
- 1,375 mm slewing stroke
- 1,850 mm lifting stroke
- **a self-contained gantry** equipped with:
 - 1 hydraulic control unit for lifting and slewing operations
 - 4 electric winches for handling operations
 - lighting and safety equipments
 - 1 power unit: 25.8 HP

Track laying and maintenance equipment



5
PMC 8101



MPR

LWRs threader

LAYING &
RENEWAL

rails - sleepers



Weight
1,095 kg

 • petrol • diesel
Power source

 A variety of consumables, tools and accessories are available on request.



Associated products

 the ATR6 rail puller (page 172) can be powered by the rail threader

- self-propelled hydraulically driven unit for laying and removing long welded rail with **one operator**
- 800 m per hour output
- 914 to 3,330 mm working gauge
- handles rail from 37 to 70 kg/m
- up to 500 mm lift; **4.5 t capacity**; supports for all types of sleeper
- **fast off-tracking** set available
- third ram available for handling a single rail
- **power outlet for ATR 6 - 16** rail pullers



Track laying and maintenance equipment

ODC



Weight 2 t

A variety of consumables, tools and accessories are available on request.

LAYING
& RENEWALsleeper
replacement

Ballast cribs clearing beam



Associated products

- this attachment is best used with the road-rail loader-excavators KGT (pages 106-107) ; spot work can also be done with the OBP clamshell buckets (page 182)

*an attachment for KGTs (pages 106-107);
can also be fitted to other road/rail excavator types subject to specification.
Warning this attachment has restrictions in use, contact us.*

- used prior to sleeper replacement **to prevent “high points”**
- **4 or 6 paddles with 4 t power** clear all types of ballast
- from 300 to 600 mm clearing depth
- 540 mm clearing stroke

5
ODC



MRT 2/4 SR



Weight 5 t

A variety of consumables, tools and accessories are available on request.

LAYING &
RENEWAL

sleeper
replacement

Sleeper changing machine



- removes and inserts **up to 40 sleepers per hour with one single operator**
- handles the heaviest of wooden or concrete sleepers
- over 40° adjustment of the beam and clamp **enables the handling of sleepers to or from irregular track side** conditions.
- 30 kmph speed on rail
- **quick and easy off & on-tracking** through clamp action and 2 pneumatic wheels
- **180° pivoting clamp and “kicker”** are available as options
- **closed cabin** providing good visibility and a high degree of comfort to the operator; with or without air-conditioning



Track laying and maintenance equipment

LFT


 Weight 4 t

A variety of consumables, tools and accessories are available on request.



Sleeper fixing machine



Associated products

- after renewal, the sleepers are best tamped by the MB8 AC, the BRAD or the BRM8 AC (pages 130 to 132)

- used after sleepers are inserted
- 4 **mechanised operations with only 2 operators: gauge fixing**, sleeper lifting, positioning, and fastening
- sleeper unit **features lateral and longitudinal positioning and squaring**
- fastening unit features 2 hydraulic heads with **precise torque control**
- 4 retractable rubber-tyred wheels allow **easy off and on-tracking**
- front-end fork** attachment allows the handling of a 500 kg trolley with materials

LAYING & RENEWAL

sleeper replacement

5
LFT



RV100

Track slewing machine


Weight
1.5 t

 • petrol • diesel
Power source

 A variety of consumables, tools and accessories are available on request.

SLEWING

5
RV100



- for lifting and precise positioning of any track
- **20 t lifting capacity**
- **1,150 mm lifting stroke**
- 10 t slewing power
- ± 360 mm slewing stroke
- **off-tracking kit** is available



Track laying and maintenance equipment

LNR 528 - 529

Lightweight track lifting machine



Associated products

• this unit is best-used with hydraulic tampers MB8 AC, BRAD or BRM8 AC (pages 130 to 132)



Weight



Power source

• petrol

from 480 kg to 750 kg,
depending on selected model



A variety of consumables,
tools and accessories
are available on request.



LIFTING

- **accurate lifting** by one operator during tamping operations
- **radio-controlled operation** for:
 - travelling
 - clamping of the rail
 - individual or synchronised rail lifting
- **8 to 15 t lifting capacity**, depending on selected model
- **600 to 800 mm lifting stroke**, depending on selected model
- **± 100 mm slewing stroke**, **LNR 529** only

5

LNR 528
LNR 529



VPS

TAMPING

vibrator


Weight
19 kg


Power source
• petrol 4-stroke
Honda engine

 A variety of consumables, tools and accessories are available on request.

Super lightweight portable self-powered vibrating ballast tamping machine



- lightweight tamping machine with incorporated 4-stroke engine for precise, efficient and quality tamping **under any kind of sleeper** (wooden, concrete, steel);
- **the vibrating tip** (interchangeable) enables good diving in the ballast and quality tamping with minimum ballast deformation;
- ergonomically designed to:
 - lightness and handling of the vibrator;
 - autonomy with incorporated 4-stroke engine;
 - reduce the vibration transmitted to the operator;
 - reduce noise level;
 - transport of the vibrator with a suitable dust cover.
- **SNCF approved** n° DPI 14034



Track laying and maintenance equipment

VBZ

Portable self-powered vibrating ballast tamping machine

**Weight****34 kg**

• petrol
Power source



A variety of consumables,
tools and accessories
are available on request.



- the only self-contained tamping machine, portable and self-powered, with incorporated 2-stroke engine for precise, efficient and quality tamping with minimum ballast deformation
- **multidirectional constant vibration** ballast tamping for better consolidation (as with our whole range of tamping equipment) **under any kind of sleeper** (wooden, concrete, steel)
- exclusive vibration dampening system to protect the operator
- **blade and tip width** enable homogeneous and compact tamping of a **wider ballast area in only one operation**
- ergonomically designed to:
 - reduce the vibration transmitted to the operator
 - provide comfort of use
 - protect against shock
 - reduce noise level through optimized engine soundproofing
 - visibility
- optional carrying trolley

TAMPING

vibrator**5****VBZ**



GHB 2

Hydraulic tamping set

TAMPING

sets

5

GHB 2



Associated products



- hydraulic vibrators can also be powered from the multipurpose GH5 & 5/10 set, (page 103)



• petrol
Power source



A variety of consumables, tools and accessories are available on request.

- **handy & compact set** mounted on a wheelbarrow frame
- roller available for running on the rail
- hydraulic powerpack:
 - 2 nos 14 l/min outlets, 110 bar
 - 15 l tank
 - weight: 
- **2 nos 70 cycles hand held tampers** with antivibrating handles and 11 m hoses;
 - weight: 
- **various blades & tips** suit any sleeper and ballast size



Track laying and maintenance equipment

GB4 S

50 Hz

electric ballast tamping set



• petrol
Power source

• diesel





A variety of consumables,
tools and accessories
are available on request.



TAMPING

sets



- mounted on a wheel barrow frame
- **5 kVA 3-phase, 4 outlets and 3.7 kVA 1-phase, 1 outlet electric generator**
 - weight: 
- **4 nos 50 Hz vibrators** with antivibrating handles and 11 m cables
 - weight per vibrator: 
- various blades & tips **suit any sleeper and ballast size**
- **50 m drum**
- options: individual switches and rail roller

5

GB4 S



BLH 20

Light tamping machine



Weight

1,100 kg



Power source

• petrol

• diesel



A variety of consumables, tools and accessories are available on request.

TAMPING

light tampers

5

BLH 20



- 4 wheeled frame with 4 electric tamping heads for operation by a single operator
- 60 m per hour output
- the 2 heads featuring **4 positions and diagonal tamping configuration**
- **tamping heads are hydraulically lowered and raised**
- 3.5 kVA, 3-phase electric generator; 42,130 or 220 V
- 70 Hz tamping heads
- **self-propelled**, negative brake and **off-tracking device**



Track laying and maintenance equipment

MB1T



Weight ≈ 800 kg

A variety of consumables, tools and accessories are available on request.



1-head track and turnouts tamping unit



Associated products

this unit is best-used with the road-rail loader-excavators KGT (pages 106-107); can also be fitted to other road/rail excavator types subject to specification

An attachment for the KGT (pages 106-107) ;

Can also be fitted to other road/rail excavator types subject to specification.

Warning this attachment has restrictions in use, contact us.

For mechanical tamping of the ballast on any track configurations

- up to 100 sleepers per hour
- 4 tines with elliptic 46 Hz vibrations ensure **first class consolidation**
- **Manual tamping cycle** operated by one operator from the rail-road excavator
- **1 tamping head** with adjustable plunging depth
- Able to tamp **twin sleepers and turnouts**

TAMPING

hydraulic units

5
MB1T



MB8 AC



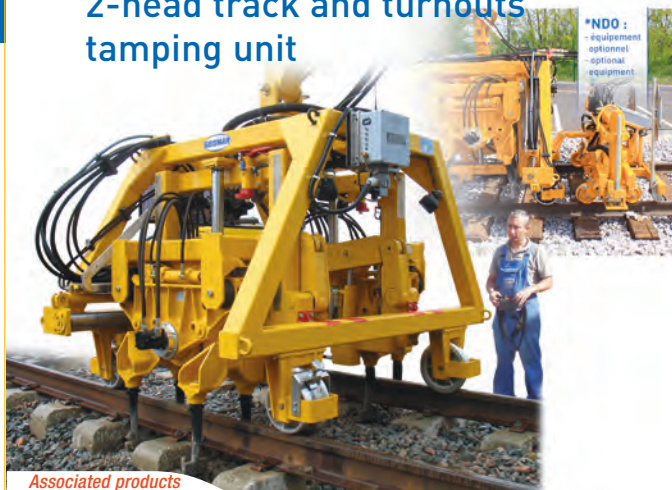
Weight 2.5 t

A variety of consumables, tools and accessories are available on request.

TAMPING

hydraulic units

2-head track and turnouts tamping unit



Associated products

this unit is best-used with the road-rail loader-excavators KGT (pages 106-107); can also be fitted to other road/rail excavator types subject to specification

- up to 240 sleepers per hour
- 8 tines with elliptic 46 Hz vibrations ensure **first class consolidation**
- **manual or automatic control** of the tamping cycles
- **2 independent tamping heads** with variable depth and positioning control
- able to tamp **twin sleepers and turnouts**
- enables tamping of adjacent track and turnout deviations
- **low noise operation**
- optional equipment:
 - **radiocontrol**
 - ***NDO levelling system** which enables to correct track level and cant geometry defects.



Track laying and maintenance equipment

BRAD

 **Weight** 5.8 t


 A variety of consumables, tools and accessories are available on request.



Track off-trackable tamper



Associated products

-  The BRAD ensures the tamping of the sleepers renewed with the Geismar method using the MRT and the LFT (pages 120 and 121)

- **up to 360 sleepers per hour**
- **8 tines** with elliptic 46 Hz vibrations ensure **first class tamping**
- manual or automatic tamping cycles
- **2 tamping heads** with adjustable tamping depth
- able to tamp **twin sleepers**
- **ergonomic and noise insulated cab**
- **easily off-tracked** through 4 retractable rubber-tyred wheels
- **25 kmph** speed on rail
- optional equipment: **LNR 529** track lifting machine and **VPK 1300** view finders

TAMPING

hydraulic
tamper

5

BRAD 



BRM8 AC

Track and turnouts modular tamper

BALLAST
PROFILING

hydraulic
tamper



8 to 10 t
Weight according to version



*A variety of consumables,
tools and accessories
are available on request.*

*NDO :

- équipement optionnel
- optional equipment



- output up to **360 sleepers/h**
- **2 independent tamping heads** with adjustable depth and position control
- capable of tamping **turnouts** and **twin sleepers**
- **4 tines** per tamping head with elliptic 46 Hz vibrations ensure **first class tamping**

modular configurations:

- cab: **opened** or **closed** (with or without air-conditioning)
- autonomous on/off-tracking: **retractable tyred wheels** or **lifting/slewing system** for loading on flat wagon
- wheel arrangement: **axles** or **bogies**; **interchangeable** depending upon gauge and curve radius
- **second driving axle** for steeper ramps
- optional equipment: ***NDO levelling system** which enables to correct track level and cant geometry defects.



Track laying and maintenance equipment

BRV

Track brush



Associated products

▶ this module is best-used with the road-rail loader-excavator KGT (pages 106-107-).

▶ A variety of consumables, tools and accessories are available on request.

BALLAST
PROFILING

Track brush

a dedicated railway attachment for KGTs (pages 106-107) that ensures a fine finish of the ballast profile;

can also be adapted to other road/rail excavator types subject to specification

- up to 2,000 m of track can be cleaned per hour
- mounted on a guiding frame
- 2,500 mm wide brush
- Brush equipped with 50 mm Ø rubber tubes
- 830 mm diameter brush
- **built-in conveyor** to move any excess ballast sideways
- hydraulic motors fed by the road-rail excavator

5

BRV



VMT IOA

Bridge inspection track motorcar

INFRASTRUCTURE
MAINTENANCE

vehicles
bridge



Weight

VMT 900 = 30 t (including vehicle)

VMB = 70 t (including vehicle)



A variety of consumables,
tools and accessories
are available on request.

- available in **900 series and VMB** range (pages 163-164) (subject to review for narrow gauges)
- 90 km/h speed on level track
- optional driving cabs at both ends to comply with UIC visibility requirements
- automatic braking conforming to UIC requirements
- **elevated crane** equipped with:
 - **3 articulating boom** sections for under bridge inspection
 - **self-levelling cradle** for **2 operators** + tools
 - counter-weight
- maximum outreach of the cradle:
 - **vertical:** -14.5 m to 22.5 m
 - **horizontal:** -10.5 m to 20 m
- 5 km/h maximum working speed
- **creep speed** (0.5 km/h) and jib movements controlled from the cradle
- power set for portable tools



Track laying and maintenance equipment

VMT CN

Snow blower track motorcar



Weight 33 t (with VMT 800 CN)



A variety of consumables, tools and accessories are available on request.



INFRASTRUCTURE MAINTENANCE

vehicles
snow



- available for **800 and 900 series** vehicles
(pages 162-163)
- 90 kmph speed on level track
- UIC automatic braking
- removable snow clearing device including:
 - **2 independent rotating clearing heads**
 - **2 adjustable snow ejectors/blowers** (left/right)
- clears up to **1,450 t per hour**
- clearing width: **4.7 m** maximum
- **20 kmph** working speed maximum
- front and lateral clearing blades are also available
- up to 9 t.m hydraulic crane

5

VMT CN



VMT DES

Weed-killing track motorcars

INFRASTRUCTURE
MAINTENANCE

vehicles
vegetation

 **20 to 40 t**
Weight depending on vehicle

 A variety of consumables,
tools and accessories
are available on request.



- available for **700, 800, 900 and VMB** series vehicles (*pages 161 to 164*)
- **self-contained motorised pump** with 4,000 to 12,000 l **stainless steel tank**
- **central and lateral nozzles** can be adjusted to **spray over 6 m** from the track axis
- spraying of 135 to 2,400 l per hectare at **10 to 30 kmph** speed, depending on vegetation & configuration




Track laying and maintenance equipment

VMB DEB

Brush-cutting track motorcars

 **Weight** 70 t

 A variety of consumables, tools and accessories are available on request.




**INFRASTRUCTURE
MAINTENANCE**

**vehicles
vegetation**



Associated products

 KGTs loader-excavators can also be used for brush-cutting (pages 106-107)

- available on **VMB series** (page 164)
- **90 kmph speed** on level track
- driving cabs at both ends to comply with UIC visibility requirements
- UIC automatic braking
- **swivelling turret** in the centre of the frame equipped with:
 - **1 closed cab** with control panel for one operator
 - 1 counterweight
 - **3 strengthened articulating boom sections**
 - **1 pivoting/rotating brush cutting tool**
- maximum outreach:
 - horizontal = **9.5 m**
 - vertical above the level of the rail = **7.2 m**
 - vertical under the level of the rail = **- 3 m**
- **cutting diameter: 200 mm** maximum
- up to 1.5 m cutting width
- **5 kmph working speed** maximum

Track laying and maintenance equipment



5
VMB DEB



ORD

INFRASTRUCTURE MAINTENANCE

attachments
vegetation
ditches



Associated products

Can also be fitted on a heavy-duty track motorcar, VMB DEB (page 137)

Hydraulic brushcutter

For clearing trackside vegetation:

- cutting width: **1,500 mm**
- optimum productivity
- **various cutters** available to suit every type of vegetation
- able to **cut up to 80 mm diameter**



Track laying and maintenance equipment

ODL



Blade grasscutter

For clearing trackside over-growth of grass :

- tool fitted with **horizontal blades**
- suitable to clear grass over large areas
- cutting width: **1,000 mm**

OTC



Ditch cleaning rotor

For the maintenance of drainage ditches:

- **up to 1,000 m** of earth ditches can be cleaned in one hour
- the powerful **hydraulic rotor** features **carbide tools** and waste deflectors for safety
- 450 mm maximum cleaning depth

5

ORD - ODL
OTC

The attachments for KGTs (pages 106-107) ; can also be fitted to other road/rail excavator types subject to specification



OGC



Clearing buckets

For maintenance of the trackside:

- the clearing retro buckets feature **150 to 1,000 l capacity**
- **standard or "V" shaped** to clean and shape back drainage ditches
- up to 2,000 mm wide
- **tilting versions** available for re-ballasting purposes

OGR



Retro buckets

For civil works, clearing and excavation:

- a range of buckets **up to 600 l** capacity suits conventional tasks

OBR



Hydraulic hammer

For civil works in quarries and rock breaking:

- up to **900 blows per minute**
- **various points and hammers** up to 100 mm diameter

INFRASTRUCTURE MAINTENANCE

**attachments
ditches
civil works**

**OGC - OGR
OBR**

The attachments for KGTs (pages 106-107) ; can also be fitted to other road/rail excavator types subject to specification



OPV

INFRASTRUCTURE MAINTENANCE

attachments
civil works
magnet



Vertical drill

For excavation works:

- **able to drill in standard soil;** various sizes are available **up to 800 mm diameter**
- the hydraulic tool is able to drill down to a **2 m depth** (or more when fitted with extensions)

OEA



Magnet

For collecting ferrous materials:

- **up to 2 t lifting capacity**
- fed from the hydraulic circuit of the KGT-4RS or KGT-E
- **220 V tension**
- **950 mm diameter** magnetized shoe

*The attachments
for KGTs
(pages 106-107) ;
can also be fitted
to other road/rail
excavator types
subject to
specification*



Track laying and maintenance equipment



TRANSPORT

● OF PERSONNEL FOR INSPECTION OR SPOT WORKS

Off-trackable trolleys

● OF EQUIPMENT AND MATERIALS

Trolleys

Transport trolleys

Trailers

LWRs transport - *train*

- *mini-wagons*

● MULTIPURPOSE VEHICLES

Track motorcars

Road-rail vehicles

● TOWING VEHICLES

Road-rail shunters

Shunters





RH2

Inspection motor-trolley

PERSONNEL

motortrolleys

RH2
6

 **Weight**
±360 kg

 **Power source**
• petrol engine

 A variety of consumables, tools and accessories are available on request.



Associated products

-  track maintenance gangs are transported by the VMT track motorcars, (pages 160 to 163)

- **light frame**, 2.5 m long with **roof and front end**
- 2-speed mechanical transmission, drum brakes, rubber + oscillating arms suspension
- Ø 406 mm pressed steel wheels
- **45 kmph speed** (forward)
- **2 or 4-seater**
- options: reverse drive, canvas sides, electric package, off-tracking and turning device



Track laying and maintenance equipment



MINI 4

Multipurpose lightweight motor-trolleys - off-trackable



Weight MINI 4-2: ≈ 100 kg

MINI 4-4: ≈ 185 kg



A variety of consumables, tools and accessories are available on request.



- ideal for track inspection and interventions
- welded lightweight tubular steel frame
- aluminium wheels, 1,435 mm gauge (other on request)
- 4-stroke petrol engine, **4 HP** power with centrifugal clutch, disc brakes
- ≈ 4 h autonomy (≈ 40 km)
- speed 16 kmph
- **2 models:**
 - **MINI 4-2: 2-seater**, automatic transmission
 - **MINI 4-4: 4-seater**, transmission - bi-directional gearbox
- tools tray and lighting pack available
- **Mini BT:** trailer available with the **MINI 4-4**

PERSONNEL

motortrolleys

MINI 4
6



VT 438

Maintenance trolleys

PERSONNEL

motortrolleys

VT 438
6



Weight
4.5 t

A variety of consumables, tools and accessories are available on request.

Track motor trolleys designed for the transport of material and persons

- power 80 to 120 HP
- sturdy frame 4 to 5 m length
- **hydrostatic drive** with axles, hydrostatic braking
- forged steel wheels of 550 mm Ø
- speed: up to 50 kmph bi-directional
- various cabs are available for **seating 4 to 11**: steel construction fully enclosed or semi open with foldable canvas sides
- various seats are available: individual benches or foldable seat
- load capacity: 800 to 1,000 kg according to version
- suitable for **towing up to 2 t**




Track laying and maintenance equipment

VT 4141

Inspection vehicle


Weight
1,300 kg


• 13 HP petrol
Power source

 A variety of consumables, tools and accessories are available on request.



PERSONNEL

motortrolleys



- vehicle with insulated wheels **for inspecting the track and its components**
- **hydrostatic drive**
- features turning ram and **radio-controlled** off-tracking with retractable wheels
- **4-seater cab** with 360° overall view and doors with **direct access to the track**
- pivoting **safety panels protect the inspectors** when they step down on the track
- 2 speeds: 30 kmph when travelling
0-10 kmph for the inspection
- **2,000 W powerful lighting** for night inspection

VT 4141 
6



CMM 476

Multipurpose monorail trolley



A variety of consumables, tools and accessories are available on request.

EQUIPMENT
AND MATERIALS

trolleys

CMM 476
6



- the **modular design** enables equipment and materials to be transported
- 850 x 400 mm loading deck
- removable 2 positions side bar
- retractable pushing handle
- **2 trolleys in line** are suitable to transport sleepers or closure rails
- 2 trolleys **can also operate in parallel** with connecting bars
- reinforced 110 mm Ø nylon rollers
- **CMM 476** can also be **used upside down** as a **temporary rail roller**



Track laying and maintenance equipment

CH

Trolleys



A variety of consumables, tools and accessories are available on request.



EQUIPMENT AND MATERIALS

trolleys

A wide range available to meet all requirements

- **steel or aluminium** decks and frames, one-piece models and **break-down models**
- wheels and rollers from 58 to 280 mm Ø, made of steel, aluminium or nylon, insulated or not
- **up to 5 m² standard decks**
- **up to 3,000 kg payload**
- with single or double brake; negative brake version also available
- **special versions:** with gas bottles racks, **stretchers and medical care variants**, motorized version with self-contained power set, guided version for track-way systems

CH
6



LLF 471



A variety of consumables, tools and accessories are available on request.

EQUIPMENT
AND MATERIALS

trolleys

Lightweight braked trolley



Very lightweight unit for the transport of tools and materials on the worksite

- steel chassis with steel or timber platform
- plastic or insulated steel rollers 63 mm Ø
- **loading platform 1.60 x 0.90 m**
- **load Capacity 500 kg**
- reversible Push Bar with auto braking

LLF 471
6

LLM 401

Self-propelled trolley



Weight
120 kg



• petrol
• electric
Power source



A variety of consumables,
tools and accessories
are available on request.



EQUIPMENT AND MATERIALS

trolleys



Motorized version for transporting materials and tools to site

- 5 kmph speed
- steel frame with **500 kg capacity** deck
- **removable drive unit**
- safety: circuit breaker, negative braking

LLM 401
6



MA, TR

Transport trolleys



Weight 65 to 900 kg



A variety of consumables, tools and accessories are available on request.

EQUIPMENT
AND MATERIALS

transport
trolleys

MA, TR
6



MA3, MA5, MA8, MA10, TR10 etc...

- 3 to 20 t useful load
- insulated or non insulated **cast steel wheels**, Ø 100, 190 or 250 mm (TR 10 up to 400 mm)
- 275 to 540 mm wheelbase
- brakes available depending on models
- Aluminium special manufacturing
- link bars to tow panels
- **pivoting and sliding platform an option**
- central or lateral **loading jib with 1 t winch and rail clamp**

TR10: can be towed at 30 kmph

SPECIAL TRANSPORT TROLLEYS up to 400 t load



Track laying and maintenance equipment



A variety of consumables, tools and accessories are available on request.

RTM6



Weight 1.8 t version all options

Modular transport trailer



Associated products

the KGT road-rail loaders, (pages 106 to 107) can be used for towing equipment and materials to the site

- **adaptable to all types of transport equipment**
- **6 t** payload
- 1,435 mm Track gauge (others on request)
- **7.5 m²** loading platform
- **up to 25 kmph** towing speed
- pin-type coupling (others on request)
- forged steel wheels of 400 mm diameter
- **auto-locking**, air brake release or mechanical standby system
- optional Boards, Ranchers and Canvas

EQUIPMENT AND MATERIALS

trailers

RTM6
6



RT


 Weight 3 to 8 t

▶ A variety of consumables, tools and accessories are available on request.

EQUIPMENT
AND MATERIALS

trailers

RT10



RT10 GR

- 10, 15 and 25 t payload
- 11 to 28 m² loading platform
- 60 to 100 kmph speed with leaf or double helicoidal springs suspension
- **automatic braking;**
mechanical wheel **parking brake**
- Pin-type or railway **coupling**
- trailers with bogies available on request

Associated products

- ▶ the VMT track motorcars, (pages 160 to 163) can be used for towing equipment and materials to the site



Track laying and maintenance equipment

RTB

Tilting trailers


Weight 3 to 9 t

A variety of consumables, tools and accessories are available on request.

EQUIPMENT
AND MATERIALS

trailers

*Associated products*

▶ the VMT track motorcars, (pages 160 to 163) can be used for towing equipment and materials to the site

- **10, 15 and 25 t payload**
- **11 to 28 m²** loading platform
- **60 or 100 kmph** speed with leaf or double helicoidal springs suspension
- **automatic braking** activated by track motorcar, mechanical wheel **parking brake**
- Pin-type or railway **coupling**
- optional gangway
- **2 or 3-side tilting platform**
- the hydraulic tilting is fed from the track motorcar or from an onboard self-contained pack

RTB
6



R10BAL

Weight 7 t

A variety of consumables, tools and accessories are available on request.

EQUIPMENT AND MATERIALS

trailers

Ballast hopper trailer



- 10 t payload
- 10 m³ ballast hopper
- 60 kmph with leaf springs suspension
- wheel-actuated **lateral or central unloading** of the ballast
- **automatic braking** activated by track motorcar, mechanical wheel **parking brake**
- Pin-type or railway coupling

Associated products

- the VMT track motorcars, (pages 160 to 163) can be used for towing equipment and materials to the site



Track laying and maintenance equipment

RTA

Workshop trailers



Weight

7 to 10 t depending
on configurationA variety of consumables,
tools and accessories
are available on request.EQUIPMENT
AND MATERIALS

trailers



- 10 and 15 t payload
- 17 m² loading platform
- 60 kmph speed
- various versions are available: **fully equipped workshop, gang accommodation base, storage container**
- sliding lateral **doors**
- self-contained **power generator** available
- **automatic braking** activated by track motorcar, mechanical wheel **parking brake**
- Pin-type or railway coupling

RTA
6



R25TR

Heavy plant transport trailer



A variety of consumables, tools and accessories are available on request.

EQUIPMENT
AND MATERIALS

trailers

R25TR
6



- **25 t capacity** to transport the KGT or other **civil works machinery**
- features 770 mm low deck
- 9 x 2.6 m loading area
- **80 kmph** speed
- loading ramps feature spring return
- **automatic braking** activated by track motorcar, mechanical wheel **parking brake**
- 2 pin-type couplers and one railway coupler enables **towing at the rear of train**
- 3-seater cabin available




Track laying and maintenance equipment

UTE 400

Dismountable transport unit
for vehicles


Weight
4.5 t

 A variety of consumables,
tools and accessories
are available on request.



**EQUIPMENT
AND MATERIALS**

trailers



- **30 t capacity**, for plant machinery with rubber tyres or caterpillars
- 715 mm low deck
- loading platform: **6 x 3 m**
(other dimensions on request)
- towing speed: **20 kmph**
- loading ramps secured by retaining rods when folded
- railway trolleys with forged steel wheels Ø 400 mm for 1,435 mm track (others on request)
- **auto-locking**, air brake release or mechanical standby system
- ability to use trolleys for transporting container
- towing coupler with eyed end Ø 40 mm

UTE 400 
6



LWR transport train

A variety of consumables, tools and accessories are available on request.

EQUIPMENT AND MATERIALS

LWRs transport



Associated products

the EMD trailer (page 179) can be used when LWRs just need to be unloaded

- for safe and long haul **transport**
- components are fitted onto customer's wagons to transport **LWR**
- horizontal and vertical rollers accommodate 10 rails per layer; 2nd and 3rd layers are mounted on pivoting supports
- **fixed point** clamping wagons
- **driving and guiding station**
- loading & unloading ramps + crane
- loading through gantries or driving station at LWR workshop
- **discharging** of LWR is achieved when the train drives away

TMW

LWR transport mini-wagons

A variety of consumables, tools and accessories are available on request.

EQUIPMENT
AND MATERIALS

LWRs transport



- **modular formation** of coupled and braked (1 out of 2) mini-wagons to transport **20 LWR up to 150 m long**
- capacity of each mini-wagon: 10 t
- 400 mm Ø cast steel wheels
- vertical and horizontal rollers accommodate 10 rails per layer; 2nd layer mounted on pivoting supports
- one fixed **clamping point** mini-wagon
- first wagon features **railway coupling**
- **driving station** with unloading ramps
- loading through gantries or driving station at LWR workshop
- LWR are unloaded on site as the train drives away

Track laying and maintenance equipment

TMW
6



VMT 400

Light
motorcars


Weight
9 to 11 t

 A variety of consumables, tools and accessories are available on request.

MULTIPURPOSE
VEHICLES

track
motorcars

 VMT 400
6



- **80 HP** enables speed up to **50 kmph** and **towing of 10 t at 50 kmph** on level
- 5.5 m frame; up to **15-seater personnel** version or **cab + 6 sqm platform for track-works** version
- 3 m wheelbase
- **4 t payload**; up to **5 t.m crane**
- hydrostatic drive
- **dual-mode version** incorporating diesel + electric (*rechargeable batteries*) drive is also available: **zero pollution and noise**



Track laying and maintenance equipment



A variety of consumables, tools and accessories are available on request.

VMT 700

Maintenance motorcars

Weight
12 to 15 t



Associated products

The VTL-VTB shunters (pages 169-170) enable towing of heavy worktrains

- **128 to 240 HP** enables speeds up to **75 kmph** and **towing of 20 t at 70 kmph** on level
- **8 m frame; 25-seater personnel version, cab + 10.7 m² platform for track-works versions**
- **5 m wheelbase** allowing to negotiate radius of 50 m curvature
- **2 to 5 t payload; up to 7.5 t.m crane**
- hydrostatic or hydraulic transmission; up to 10 kmph optional creep speed
- **automatic brake**
- available with bolted **railway coupling**
- **dual-mode version** incorporating diesel + electric (*rechargeable batteries*) drive is also available: **zero pollution & noise**

MULTIPURPOSE VEHICLES

track motorcars

VMT 700 **6**



VMT 800

Worksite motorcars

Weight
18 to 23 t

MULTIPURPOSE
VEHICLES

track
motorcars

VMT 800
6



Associated products

 The VTL-VTB shunters (pages 169-170) enable towing of heavy worktrains

 A variety of consumables, tools and accessories are available on request.

- **180 to 380 HP** enables speeds up to **100 kmph** and **towing of 150 t at 60 kmph** or more with multiple units
- 8.5 to 10.5 m frame; **40-seater personnel** version and **15-seater cab + 16 m² platform** for track-works versions
- 4.5 to 6.5 m wheelbase
- **14 t payload; up to 14 t.m crane**
- hydro-mechanical or hydrostatic transmission; optional **creep speed**
- **dual-mode version** incorporating diesel + electric (*rechargeable batteries*) drive is also available: **zero pollution & noise**
- available with bolted railway coupling
- **VMT 863: Europe version;** wheelbase > 6 m, **100 kmph** suspension, **UIC** braking, draw-gear and coupling, **approved by SNCF**



Track laying and maintenance equipment

VMT 900

Heavy-duty
motorcars



Associated products

▶ The VTL-VTB shunters (pages 169-170) enable towing of heavy worktrains


Weight
22 to 30 t

▶ A variety of consumables,
tools and accessories
are available on request.



**MULTIPURPOSE
VEHICLES**

track
motorcars
with bogies

- **370 to 500 HP** enables speeds up to **100 kmph** and **towing of 250 t at 60 kmph** on level and **140 t on 20‰** gradients, more when used as multiple units
- 12.4 to 14 m frame: **18 m² platform** and **15-seater cab**
- 7 to 9 m wheelbase
- **16 t payload; up to 20 t.m crane**
- hydro-mechanical or hydrostatic transmission; optional **creep speed**
- **railway braking, UIC draw-gear and coupling**
- **dual-mode version** incorporating diesel + electric (*rechargeable batteries*) drive is also available: **zero pollution & noise**
- 900 series are **UIC class** motorcars

VMT 900 
6

Track laying and maintenance equipment





VMB

MULTIPURPOSE
VEHICLES

track
motorcars
with bogies

VMB
6

Heavy-duty motorcars with bogies


Weight
40 to 50 t



 A variety of consumables,
tools and accessories
are available on request.

- **640 to 900 HP** enables speeds up to **120 kmph** and **towing of 400 t at 60 kmph** on level or **160 t at 20 kmph on 25‰** gradients, more when used as multiple units
- 18 to 23 m frame assembled on 2 articulate bogies, offers many **possibilities of configurations**
- 14 m wheelbase
- 75 m minimum curve radius
- 2 driving positions secure a perfect visibility in the bi-directional travel
- **30 t payload; up to 22 t.m crane**
- complete hydrostatic drive to the 4-axle; **0 to 10 kmph creep speed**
- railway coupling and braking system
- VMB series are **UIC class** motorcars



Track laying and maintenance equipment

V2R 700



Weight GWVR up to 16 t



A variety of consumables, tools and accessories are available on request.



Maintenance road-rail vehicles



Specially designed for inspection or track and/or catenary works

- **4x2 or 4x4** on RENAULT TRUCK frame/cab base or other brand on request
- vehicles preserve the entire basic characteristics of the road rigid
- for all type of track gauge
- **power: 280 HP**, Turbo Diesel engine conforms to the last road gas emissions standards
- **railway transmission** (following track gauges):
 - **by rail/tyres friction**
 - **by axles/bogies** powered by hydraulic motors
- **maximum speed:**
 - on road: **90 kmph*** - on rail: from 0 to **40 kmph***
- working creep speed
- minimum curve radius : up to **17 m**
- Standard driving cab for **3 persons**

TOWING VEHICLES

road-rail vehicles

V2R 700
6

* following country standards



V2R 800



Weight **18 or 19 t of GWVR**



A variety of consumables, tools and accessories are available on request.

MULTIPURPOSE VEHICLES

road-rail vehicles

V2R 800

6

* following country standards

Worksite road-rail vehicles



Specially designed for inspection or track and/or catenary works

- **4x4 or 4x2** on RENAULT TRUCK frame/cab base or other brand on request
- vehicles preserve the entire basic characteristics of the road rigid
- for all type of track gauge
- **power: 430 HP**, Turbo Diesel engine conforms to the last road gas emissions standards
- **railway transmission** (following track gauges):
 - by rail/tyres **friction**
 - by drums/tyres **friction**
 - by **axles and/or bogies** powered by hydraulic motors
- **maximum speed:**
 - on road: **90 kmph*** - on rail: from 0 to **40 kmph***
- **working creep speed** - possibility of dual-mode's use on electric batteries (up to 5 kmph)
- minimum curve radius : up to **17 m**
- Standard driving cab for **3 persons**



Track laying and maintenance equipment

V2R 900



Weight GWVR: 26 t



A variety of consumables, tools and accessories are available on request.



Heavy-duty road-rail vehicles



Specially designed for inspection or track and/or catenary works

- **6x2 or 6x4** on RENAULT TRUCK frame/cab base or other brand on request
- vehicles preserve the entire basic characteristics of the road rigid
- for all type of track gauge
- **power: 480 HP**, Turbo Diesel engine conforms to the last road gas emissions standards
- **railway transmission** (following track gauges):
 - **by rail/tyres friction**
 - **by axles/bogies** powered by hydraulic motors
- **maximum speed:**
 - on road: **90 kmph*** - on rail: from 0 to **40 kmph***
- minimum curve radius: **60 m**
- Standard driving cab for **3 persons**

MULTIPURPOSE VEHICLES

road-rail vehicles

V2R 900
6

* following country standards

Track laying and maintenance equipment





P2R 200 E



Weight 6.5 t

A variety of consumables, tools and accessories are available on request.

TOWING VEHICLES

road-rail shunters

P2R
6

Road-rail shunting vehicle



Bidirectional electric vehicle specially designed for shunting operations

- **electric motor** enables towing on straight and level tracks up to 245 t at 5 kmph
- batteries powered
- **electro-hydraulic transmission** on the four tyre wheels directly on rails
- collapsible lorries with rail wheels
- **4 wheels drive - 2 wheels steering**
- minimum curve radius: **2.75 m**
- 1 driving post with steering wheel or radio remote control
- 1 compatible Network coupler *(to be defined with Customer)*
- **autonomy: 8 h**
- **P2R 200 D:** Diesel version with hydrostatic transmission is available on request



Track laying and maintenance equipment

VTL 200-500

Shunters with axles



VTL 200 = 25 t

Weight

VTL 500 - 500H = 40 t



A variety of consumables, tools and accessories are available on request.



TOWING VEHICLES

shunters



- hydrodynamic (VTL 200), Hydrostatic (VTL 500H) or VOITH-TURBO (VTL 500) transmission type on the two axles
- 176 kW (VTL 200) or 348 kW (VTL 500 and VTL 500H) Turbo Diesel engine enables towing on straight and level tracks up to 630 t at 18 kmph (VTL 200), 1,800 t at 12 kmph (VTL 500H) and 1,800 t at 14 kmph (VTL 500) and more in Multiple Unit
- wheel tractive force: 82 kN (VTL 200), 108 kN (VTL 500H) and 110 kN (VTL 500) with rail minimum friction 0,33
- minimum curve radius: 25 m (VTL 200) and 50 m (VTL 500H and VTL 500)
- visibility conforms to UIC rules
- 1 control panel for each working direction
- Network couplers and automatic braking witch includes Main Pipe and Braking Pipe with connections on each headstock

VTL 6



VTB 1000

 **Weight** 76 t

 A variety of consumables, tools and accessories are available on request.

**TOWING
VEHICLES**

shunters

Shunters with bogies



VTB 1000
6

- **Hydrostatic (VTB 1000H) or VOITH-Hydrodynamic (VTB 1000) transmission type** on the two bogies
- **750 kW Turbo Diesel engine** enables towing on straight and level tracks up to **1,800 t at 24 kmph (VTB 1000H)** and **1,800 t at 24 kmph (VTB 1000)** and more in Multiple Unit
- wheel tractive force: **211 kN (VTB 1000H)** and **245 kN (VTB 1000)** with rail minimum friction 0,33
- minimum curve radius: **25 m (VTB 1000H)** or **30 m (VTB 1000)**
- visibility conforms to UIC rules
- **1 cab at each end** of the vehicle including on each 1 control panel
- Network couplers and automatic braking witch includes Main Pipe and Braking Pipe with connections on each headstock
- locomotive conforms to EN 14033 1/2/3 standards



Track laying and maintenance equipment



HANDLING

7

OF RAILS:

- **track positioning:** *LWRs pullers*
Rail track gauge narrowing device
- **lifting:** Rail changers
Lifting trolleys
Rail loaders
Grabs and girders *for excavators*
- **LWRs unloading:** *Road-rail trailer*

OF SLEEPERS:

Forks and beams for excavator

OF BALLAST:

Buckets for excavator





ATR

Rail pullers



Weight

A variety of consumables, tools and accessories are available on request.

RAILS

positioning

ATR

7



- **double acting hydraulic ram** clamping on the fixed rail
- 1.5 to 3 m long cable (rigid rod on **ATR 20**) clamps onto loose LWR
- **3 models break down** into components carried by 2 men:
 - **ATR 6:** 6 t for up to 120 m long LWR can be powered from the **MPR** rail threader
 - **ATR 12:** 12 t for up to 150 m long LWR
 - **ATR 20:** 20 t for up to 300 m long LWR
- double flow manual or motorised pump, **ATR 6:** 100 bar; **ATR 12:** 390 bar; **ATR 20:** 450 bar



Track laying and maintenance equipment



A variety of consumables, tools and accessories are available on request.

ARR 531

 **Weight** 25 kg

Rail track gauge narrowing device



Associated products

 a similar device is available on the LFT sleeper fixing machine (page 121)

- **compact** design with carrying handles for **ease of handling**
- rollers and pushing handles allow the unit to be **moved along the track**
- pulling cylinder and 700 bar manual pump
- **adjustable thrust for accurate gauge setting**

RAILS

positioning

ARR 531 

7



PSR

Rail changers



Weight 110 to 145 kg



A variety of consumables, tools and accessories are available on request.

RAILS

lifting

PSR

7



- **for lifting and moving short lengths of rail** laterally or longitudinally
- **1 t capacity manual winch** with brake and self-clamping roller grip
- 2 to 3 m beam for slewing of the rail
- 2 lateral supports provide **adjustment of the beam height** from 920 to 1,320 mm
- carrying and pushing handles
- double flange rollers for running on rail or rubber wheels for running off track
- **breaks down into components easily carried** by 2 men
- **PSR-E** : electric version



Track laying and maintenance equipment

PMR

Aluminium rail changers



Weight

57 kg (heaviest
component: 35 kg)



A variety of consumables,
tools and accessories
are available on request.



RAILS

lifting



- **light and sturdy** design for replacing rails, crossings, switchblades and associated components
- **1 t capacity manual winch with rail clamp**
- traversing beam:
 - **PMR 422** = 2 m of length
 - **PMR 423** = 3 m of length
- **the leg is vertically adjustable** over a 400 mm range
- roller for moving the unit on rail
- breaks down into components **easily carried by 1 man**

PMR C

7





A variety of consumables, tools and accessories are available on request.

CR

Rail loaders



Weight 250 to 300 kg



- for loading and unloading rails **from flat wagons**
- use one pair or more
- **manual or motorized winch** (petrol or electric), 1 t capacity, braking device, scissor rail clamp; crank control of lateral displacement
- radio control (depending on version)
- 2 models:
 - **CR: fixed lateral jib** secured onto the wagon side, 2,925 mm boom with foldable end
 - **CR-FP: pivoting central jib to work on either side**; 2,400 mm boom

RAILS

lifting

CR

7



RAILS

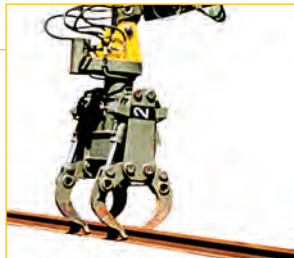
lifting

PAR

Hydraulic rail grab

an attachment for KGTs (pages 106-107);
can also be fitted to other road/rail excavator types
subject to specification.

*Warning this attachment has restrictions in use,
contact us.*



For lifting and positioning rails:

- 3.5 t capacity
- 2 pairs of hydraulic clamps provide **safe** handling for flat bottom rails up to 18 m
- enables the **precise positioning** of the rail onto the sleepers
- to be used with 360° hydraulic rotor
- special hydraulic clamps for grooved rails are available

OMR

LWR roller clamp

an attachment for KGTs (pages 106-107);
can also be fitted to other road/rail excavator types
subject to specification.

Associated products

2 LWRs are ideally positionned quickly and simultaneously by the MPR (page 118)



For lifting and positioning LWRs:

- 2 t capacity
- handling of the rail by 4 bearing mounted rollers;
features a quick cam locking mechanism
- the exclusive design allows the clamp to **move along the rail and the welds** whilst laying the LWR into its required position
- **OMR**: manual version - weight: 44 kg
- **OMR H**: hydraulic version - weight: 55 kg
- a wide **range of other models** with scissor grip are available for lifting Vignole or grooved rails



Track laying and maintenance equipment



A variety of consumables, tools and accessories are available on request.

EMD

Road-rail trailer for LWRs unloading



Associated products

the transport train (page 158) also features LWRs unloading

- **compact** unit, can be **towed by a truck**
- components are **quickly / easily assembled** and set on the track
- LWRs **unloading gauge is adjustable** from 500 to 2,050 mm
- 4 t capacity **lifting platform features rail guides** with 900 mm lateral displacement
- rail guiding & positioning unit fits on the LWR transport train
- continuous LWR unloading **requires only 3 operators**
- **radio controlled**
- lighting for night work
- **EMD R:** version rail only is available

RAILS

LWRs unloading

EMD

7



SLEEPERS

forks

OFF**Front fork***an attachment for the KGTs**(pages 106-107); can also be fitted to other road/rail excavator types subject to specification.***To handle pallets and stacked sleepers:**

- up to **2 t** capacity
- up to **4 m** handling height

OFT**Sleeper fork***an attachment for the KGTs**(pages 106-107); can also be fitted to other road/rail excavator types subject to specification.**Warning this attachment has restrictions in use, contact us.***8 claw reinforced fork, one of our client's favorite attachments with the KGTs:**

- able to handle up to **15 wooden sleepers** of the heaviest types as well as **logs** or bulk wood
- the claws also enables the **handling of one rail** and its precise positioning
- to be used with **360° hydraulic rotor**



SLEEPERS

beams

PCT

Sleeper beam with chains

*an attachment for KGTs (pages 106-107);
can also be fitted to other road/rail excavator types
subject to specification.*

Associated products

- the PTH with travelling beam are used for laying a large quantity of sleepers (page 115)



PTV

Hydraulic beam for sleepers

*an attachment for KGTs (pages 106-107);
can also be fitted to other road/rail excavator types
subject to specification.*

Associated products

- the PTH with travelling beam are used for laying a large quantity of sleepers (page 115)



For lifting and positioning sleepers:

- handling of **all types of sleepers** using **chains and hooks** suited to the fastenings
- up to 10 concrete sleepers 250 kg each** can be handled
- to be used with 360° hydraulic rotor

For lifting and positioning sleepers:

- with hydraulic grips to handle **all types of sleepers**
- variable spacing is available for precise positioning of the sleepers
- Capacity:**
 - **simple version:** up to **8 concrete sleepers** of 250 kg each
 - **variable spacing version:** up to **5 concrete sleepers** of 250 kg each
- to be used with 360° hydraulic rotor

PCT
PTV

*Warning
these attachments
have restrictions in
use, contact us.*

7



BALLAST

buckets

OBF

Front buckets

*attachments for KGTs (pages 106-107);
can also be fitted to other road/rail excavator types
subject to specification.*



**To handle granulated materials
as well as ballast:**

- up to **1,000 l capacity**
- **up to 1,500 mm wide** buckets
- maximum handling height: **3.5 m**

OBP

Clamshell buckets

*attachments for KGTs (pages 106-107);
can also be fitted to other road/rail excavator types
subject to specification.*



**A wide range of clamshell buckets
available for the handling of materials
as well as ballast:**

- **50 to 900 l capacity** covers a wide range of requirements
- **narrow versions** are available **for clearing the ballast crib**
- to be used with **360° hydraulic rotor**



8

LIGHTING

- ▶ Floodlights
- ▶ Generators
- ▶ Standalone portable & rechargeable tracksite floodlight



PCB

Floodlight

 **Weight** 40 kg

 A variety of consumables, tools and accessories are available on request.



Sturdy, waterproof and adjustable

- **PCB:** ballast basket, pneumatic telescopic mast **extends up to 6 m**, 15 m cable, **2 halogen floodlights 1,000 W or 500 W**



Track laying and maintenance equipment

GE

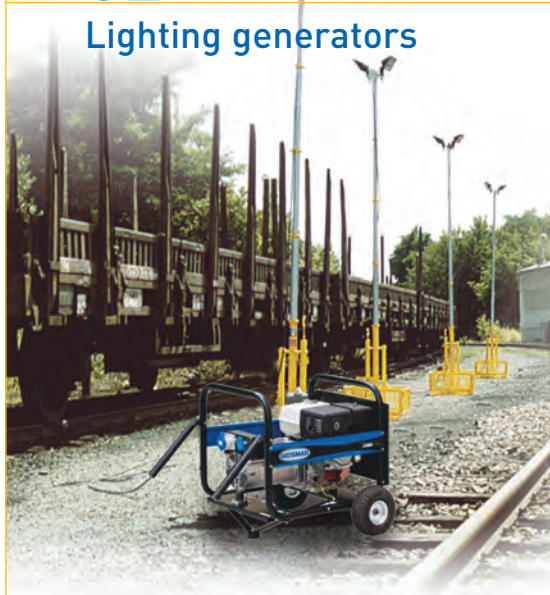
Lighting generators



Weight according to model



A variety of consumables,
tools and accessories
are available on request.



Various models/power are available
to meet your requirements, e.g.:



- Standard electrical power: from **2 kVA**
- **230 V 50 Hz** regulated single phase
- **2 outlets** with or without switch
- Portable or wheel barrow-mounted

GE

8



PCD

Standalone portable and rechargeable tracksite floodlights with LED



Weight

- PCD 1: ≈ 10 kg

- PCD 2: ≈ 25 kg



A variety of consumables, tools and accessories are available on request.



PCD 1

PCD 2

Rechargeable, portable, sturdy, waterproof and adjustable

- **lighting power** depending on use (*high flux LED*) :
 - **PCD 1** : 1,500 to 3,000 lumens
 - **PCD 2** : 500 to 6,000 lumens
- **LED lifetime** = 50,000 h
- **rechargeable battery** with carrying handle used as base, **autonomy** :
 - **PCD 1** : 15 to 8 h
 - **PCD 2** : 40 to 7 h
- **telescopic mast**:
 - **PCD 1** : up to 0.82 m
 - **PCD 2** : up to 1.80 m
- optional: lighter charger for 12/24 V



Track laying and maintenance equipment



SAFETY & RESCUE

• **SAFETY:** *Warning devices*

• **RESCUE:** *Rescue trolley for damaged bogie*
Hydraulic rerailing equipment
Equipment for personnel: *trolleys with stretchers*
Light set *for emergency interventions*
Fire fighting road-rail vehicles



AVS 1-2

Pneumatic warning device

 **AVS 1:** 14 kg
Weight **AVS 2:** 26 kg

 A variety of consumables, tools and accessories are available on request.

SAFETY

AVS 1-2



Powerful warning systems for worksite protection

- over **110 dB at 5 m**
- 307 Hz tone
- manometer, safety and non-return valves are standard features for both models
- 2 models:
 - **AVS 1:** single tone warning device; portable model with shoulder strap, foot-operated pump and **7 l air tank**
 - **AVS 2:** dual tone warning device; wheel barrow frame with hand-operated pump and **10 l air tank**; **387 Hz additional tone**; optional on-rail guiding roller



Track laying and maintenance equipment

AVS 3-4

Lightweight warning device



AVS 3 ≈ 220 g

AVS 4: 1 kg



A variety of consumables, tools and accessories are available on request.



SAFETY



Very light warning system for worksite protection

- 2 models:

- **AVS 3:** call horn

- **AVS 4:** sound case;

very light and powerful warning device of 115 dB, providing up to 300 sounds per charge;

works with a reserve of air under pressure;

rechargeable with any source of compressed air

AVS 3-4

9



C2D

Rescue trolley for damaged bogie



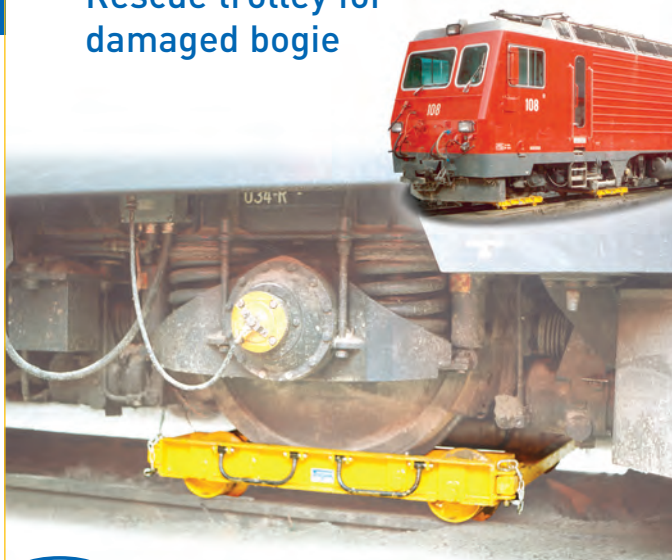
Weight

± 220 kg



A variety of consumables, tools and accessories are available on request.

RESCUE



- **for towing rolling stock with damaged bogies**
- 2 sturdy wheel carriers with adjustable blocks, suitable **for wheels of up to 700 to 1,260 mm Ø**
- 2 connecting frames secure the wheel housing with quick- release type pins
- 190 mm Ø wheels
- 4 carrying handles
- **22.5 t/unit useful load**

C2D

9



Track laying and maintenance equipment

MDR

Hydraulic rerailing equipment

▶ A variety of consumables, tools and accessories are available on request.



RESCUE



- **self-contained** hydraulic pack with 4-outlet control
- telescopic rams can **lift rolling stock** of up to **240 t** weight
- **slewing carriages** feature a take-up system and operate on transfer beams **for rerailing** operations
- 3 articulated cylinders and ladder-type belts are used **to right vehicles** that have derailed on to their sides
- hydraulic cutting tools are also available for emergency and extrication operations

MDR

9



CH

RESCUE

Trolleys for the emergency services




Weight

≈ 100 kg



A variety of consumables, tools and accessories are available on request.

A wide range are available to meet all rescue operations

- **steel or aluminium** decks and frames, one-piece models and multi piece models for easy disassembly
- wheels and rollers from 58 to 280 mm Ø, made of steel, aluminium or nylon, insulated or not
- **up to 5 m² standard decks**
- **up to 3,000 kg payload**
- with single or double brake; negative brake versions also available
- special versions: with gas bottle racks, stretcher variants, motorized version with self-contained power sets, guided versions for trackway systems
- heaviest component: 



Track laying and maintenance equipment

CH

9

MINI 4-4 FF + MINI 1t



Weight

Mini 4-4 FF \approx 295 kg
Mini 1t \approx 150 kg



petrol

Power source



A variety of consumables, tools and accessories are available on request.



Lightweight vehicle for emergency purposes



Transport of emergency equipment and evacuation of wounded persons

- welded lightweight tubular steel frame
- aluminium wheels, 1,435 mm gauge (*others on request*)
- 4-stroke petrol engine; **4 HP** power with centrifugal clutch, disc brakes
- \approx 4 h autonomy (\approx 40 km)
- speed: 25 kmph
- **consisting of:**
 - **MINI 4-4 FF : 4-seater,**
gearbox with bi-directional driving, tools tray and lighting pack available
 - **MINI 1t : 2 towed or pushed trailers,**
mechanical parking brake, maxi load capacity 500 kg/trailer

RESCUE

MINI 4-4 FF
+ MINI 1t

9



V2R LAI

Fire fighting
road-rail vehicles



V2R 500 LAI ≈ 2.7 t
V2R 830 LAI ≈ 26 t



A variety of consumables,
tools and accessories
are available on request.

RESCUE

V2R LAI



Range available from 2.7 to 26 t vehicles

- power: 130 to 370 HP
- **platform or fire fighting equipments** according to requirements
- 2 to 8 seats according to vehicle
- Various transmissions available according to vehicle
- **assistance for driving and on/off tracking provided by cameras** according to vehicle
- speed: **up to 40 kmph** bi-directional **on-rail** according to vehicle and local regulation



Track laying and maintenance equipment



*Our other ranges
of equipments
for all your domains
of railway
interventions ...*



Track tools

A wide range of powered and hand tools dedicated to track maintenance



Plants & engineering

Expertise in rail and sleepers plants: advanced design and high spec. equipment ...



Measurement

From traditional devices to electronic recording systems for the control of track and OHL



OHL laying & maintenance

For 1.500 V DC to 25 kV AC ...

- Motorcars and rolling/unrolling systems
- Road-rail vehicles
- Catenary tools • OHL components

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To fully comply with the latest quality requirements, GEISMAR has made evolve this quality system toward a complete Quality Management System according to the ISO 9001-2008 standard.

This new system includes now all the research development and design activities and is certified since 2003.

Edition 04 - 07/2015

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Printed in France

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Track laying & maintenance equipment



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