

Edition 05 - 08/2018



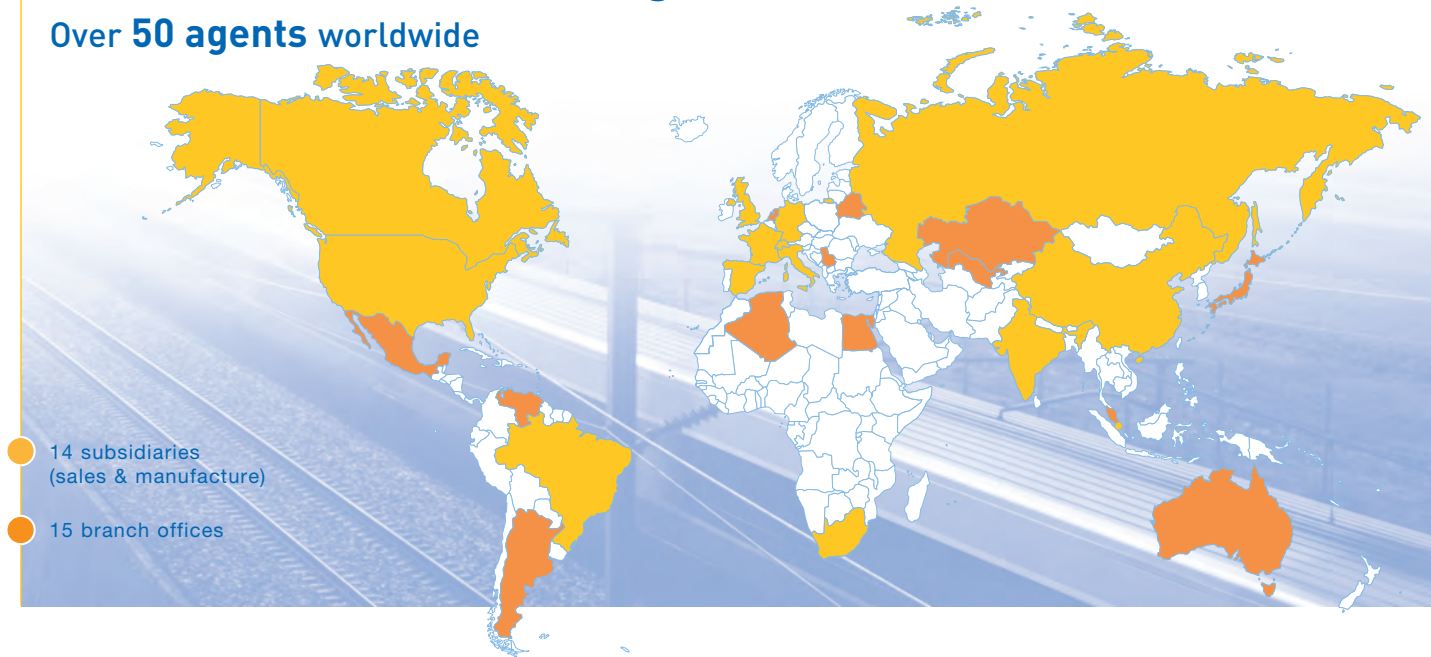
Track laying & maintenance equipment

www.geismar.com



International coverage

Over 50 agents worldwide





Evolution and range

22

Guide of use

27

Contents

2

1 RAIL

2

33 to 70

2 FASTENINGS

4

71 to 90

3 SLEEPERS

6

91 to 98

4 MULTI-FUNCTION

6

99 to 108

5 TRACK WORKS

7

109 to 140

6 TRANSPORT

10

141 to 170

7 HANDLING

12

171 to 182

8 LIGHTING

14

183 to 186

9 SAFETY & RESCUE

14

187 to 196

Index

16



CHAPTER

1 RAIL

MODEL

PAGE

CUTTING

Blade saws



SRH

34

Disc cutters



MTZ*

35

DRILLING

Drills:

• *with hollow drill bits*



PR2

36

• *with carbide tools*



PRZ

37



PRUL*

38

• *with standard drill bits*



PR7 S*

39



PR8

40

• *bond drill powered by a multi-function set*



GMSL

100

WELD SHEARING

Weld shears:



ESN3

41



ESN4

42



1

RAIL

CHAPTER

GRINDING

MODEL

PAGE

Mechanical grinding set



EMX-M

43

Multipurpose portable grinder



PHG 2

44

Off-trackable grinders:

• *profile grinders*



MP5

45



MP12*

46



MP23

47

• *profile and turnouts grinders*



MP6

48

• *turnouts grinder*



MC3*

49

• *vertical rail grinder*



MV3

50

• *fishing table grinder*



MS9

51

• *vertical joint grinder*



MJ18

52

• *corrugation grinder*



MOD 12

53

Preventative grinding vehicle



VMR 445

54



CHAPTER

2 FASTENINGS

MODEL

PAGE

RAIL-SLEEPER

THREAD TYPE : TIGHTENING -UNTIGHTENING

Portable power wrench  **MIW 3*** 72

Mechanical coach-screwing machines:

• *heavy duty*   **TS** 73

  **TB** 74

• *maintenance*  **TEM** 75

Mechanical coach-screwing machines with torque assistance:

• *portable*  **TMI 2*** 76

• *with hydraulic assistance*  **TPAS** 77

• *with pneumatic assistance*  **TC** 78



2

FASTENINGS

CHAPTER

MODEL

PAGE

Hydraulic coach-screwing machine

• *digitale*  **TDH 2** 79

Programmable coach-screwing machine

• *2-head machine*  **T 2002** 80

Coach-screwing track unit

• *sleeper fixing machine with built-in tightening heads* **LFT** 121

Bolt remover

(“k” fastening)  **MEB** 81

CLIPS

Portable clippers  **APL 6** 82

Compact clipper  **AP 3** 83

Clipper  **AP 21** 84



CHAPTER SPIKES

MODEL

PAGE

2

extracting:

- | | | |
|---------------------------------------------------|-------------|-----|
| • <i>Self-contained spike puller</i> | AS 3 | 85 |
| • <i>Hand tool driven
by a generating set</i> | SP3* | 103 |

inserting:

- | | | |
|---------------------------------------------------|-----------------------------------------------------------------------------------------------|-----|
| • <i>Self-contained spike driver</i> |  PSD3 | 86 |
| • <i>Hand tool driven
by a generating set</i> | SD1* | 103 |

*/Hydraulic versions driven by a multi-function set: **GH5/10**

C O N T E N T S

CHAPTER

MODEL









PAGE

FISHPLATES

2

fastening & unfastening

Bolting machines:

- | | | |
|----------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|
| • <i>portable</i> |  MIW 3 | 88 |
| • <i>high power</i> |  BSR8 | 87 |
| • <i>combined bolting - coach-screwing machine</i> | | |
| |   TB | 74 / 89 |
| |  TS | 73 / 90 |
| |  TEM | 75 / 90 |
| |  TPAS | 77 / 90 |
| |  TC | 78 / 90 |

**Magnet for collecting fastenings
and ferrous materials**

OEA 140



CHAPTER

3 SLEEPERS

MODEL

PAGE

DRILLING OF WOODEN TIES

Drills:

• heavy duty		PT8	90
• light		PTSL	93
• portable		PTXL*	94
• drilling with a portable power wrench		MIW 3	72
• self-propelled sleeper fixing machine with built-in wooden tie drilling heads		LFT	121

CUTTING OF WOODEN TIES

Sleeper saw attachment for loader/excavator		TTB 220	95
Re-adzing machine		REEN	96
Chamfering machine		DN80	97



CHAPTER

4 MULTI-FUNCTION

MODEL

PAGE

Multipurpose <i>super light set</i>			GMSL	100
-------------------------------------	--	--	-------------	-----

Multipurpose hydraulic power packs		GH 5 & 5/10	101
------------------------------------	--	------------------------	-----

• Range of tools			102-103
------------------	--	--	---------

Road-rail loaders:		KGT-4RS	104
--------------------	--	----------------	-----

		KGT-E	105
--	--	--------------	-----

		KGT-P	108
--	--	--------------	-----

• Range of attachments			106-107
------------------------	--	--	---------



CHAPTER

5

TRACK WORKS

LAYING & RENEWAL

• turnouts and mounted panels

Modular substitution gantries:

- *radiocontrolled gantries*

PEM 807 111
PWP 112

Trolleys for longitudinal transport: **LEM 460** 110

Trackpanel laying and removal system: **S2PV** 113
SPAC 114

• panels and sleepers

Laying & renewal gantries: **PTH 350-500** 115

• slab track

Slab track positioning unit
radiocontrolled gantries **PRV 550** 116

MODEL

PAGE

CONTENTS

5

CHAPTER

• rails and/or sleepers

Gantries

radiocontrolled gantries **PMC 8101** 117

Rail threader **MPR** 118

• sleeper replacement method

Ballast clearing *attachment for loader/excavator* **ODC** 119

Sleeper changing machine **MRT 2/4 SR** 120

Sleeper fixing machine **LFT** 121

TARCK WORKS

MODEL

PAGE



CHAPTER

5

TRACK WORKS (cont'd)

MODEL

PAGE

SLEWING

Slewing machine **RV100** 122

LIFTING

Track lifting machine **LNR 528-529** 123

TAMPING

Self-powered vibrator  **VPS** 124



VBZ 125

Tamping sets:

• *electric set*  **GB4 S** 127

Tamping tools:

• *vibrators* **VIBH*** 103

• *percussion tamper* **TT1A*** 103



5

TRACK WORKS

CHAPTER

MODEL

PAGE

Light tamper  **BLH 20** 128

Hydraulic tamping unit for loader/excavator :

• *1-head or 2-head*  **MB** 129

• *2-head*  **MB8 AC** 130

Hydraulic tampers:

• *2-head off-trackable tamper* **BRAD** 131

• *2-head modular tamper for track & turnouts* **BRM8 AC** 132

BALLAST PROFILING

Brush mounted on loader/excavator **BRV** 133

INFRASTRUCTURE MAINTENANCE

Vehicles

Track motorcars:

• <i>bridge inspection</i>	VMT IOA	134
• <i>snow-clearing</i>	VMT CN	135
• <i>weed-killing</i>	VMT DES	136
• <i>brush-cutting</i>	VMB DEB	137

Attachments for loader/excavator:

• <i>ditch cleaning rotor</i>	OTC	138
• <i>ditch clearing buckets</i>	OGC	139
• <i>brushwood cutter</i>	ORD	138
• <i>grass cutter</i>	ODL	138
• <i>retro buckets</i>	OGR	139
• <i>hydraulic hammer</i>	OBR	139
• <i>vertical drill</i>	OPV	140
• <i>magnet</i>	OEA	140




OF PERSONNEL, FOR INSPECTION OR SPOT WORKS

Track motorcars:





• <i>with cab of personnel transport</i>	VMT 400	160
	VMT 700	161
	VMT 800	162
	VMT 900	163
• <i>with bogies</i>	VMB	164

Motortrolleys:

• <i>off-trackable</i>	RH2	142
	 MINI 4	143
	VT 4141	145
• <i>maintenance and transport rail car</i>	VT 438	144



Trolleys:

• <i>monorail</i>	 CMM 476	146
• <i>classical</i>	 CH	147
• <i>auto braking</i>	 LLF 471	148
• <i>self-propelled</i>	 LLM 401	149

Transport trolleys (up to 400 t payload)	MA, TR	150
-------------------------------------------------	---------------	-----

**Trailers:**

	RT	152
• modular	RTM	151
• tilting	RTB	153
• ballast hopper	R10BAL	154
• workshop	RTA	155
• heavy plant transport	R25TR	156
• heavy plant transport	UTE 400	157

LWRs transport:

• LWR TRANSPORT TRAIN		158
• mini-wagons	TMW	159

Turnouts longitudinal transport:

LEM 460	110
----------------	-----

**MULTIPURPOSE VEHICLES****Track motorcars:**

• light	VMT 400	160
• track maintenance	VMT 700	161
• worksite track	VMT 800	162
• heavy-duty	VMT 900	163
• with bogies	VMB	164

Road-rail vehicles

 V2R range	165/6/7
------------------------------------------------------------------------------------------------------	---------

TOWING VEHICLES**Road-rail shunters**

P2R 200 E	168
------------------	-----

Shunters

VTL-VTB	169-170
----------------	---------



CHAPTER

7 HANDLING

OF RAILS

• track positioning

<i>Rail pullers</i>		ATR	172
---------------------	-----------------------------------------------------------------------------------	------------	-----

Gauge adjuster		ARR 531	173
-----------------------	-----------------------------------------------------------------------------------	----------------	-----

<i>Sleeper fixing machine with built-in gauge adjusting device</i>		LFT	121
--------------------------------------------------------------------	--	------------	-----

• lifting

<i>Sleeper fixing machine with built-in rail lifting and positioning device</i>		LFT	121
---------------------------------------------------------------------------------	--	------------	-----

<i>Rail changers</i>		PSR	174
----------------------	-----------------------------------------------------------------------------------	------------	-----

		PMR	175
--	-----------------------------------------------------------------------------------	------------	-----



7

HANDLING

CHAPTER

Rail loaders mounted on wagon

MODEL	PAGE
CR	177

<i>Trolley with handling jib</i>	MA, TR	150
----------------------------------	---------------	-----

<i>Grabs for loader/excavators</i>		PAR	176
------------------------------------	-------------------------------------------------------------------------------------	------------	-----

		OMR	176
--	-------------------------------------------------------------------------------------	------------	-----

<i>Short rail handling with a sleeper fork</i>	OFT	180
------------------------------------------------	------------	-----

Multipurpose road-rail loaders for handling and track works		KGT-4RS	104
--------------------------------------------------------------------	-------------------------------------------------------------------------------------	----------------	-----

		KGT-E	105
--	-------------------------------------------------------------------------------------	--------------	-----

		KGT-P	108
--	-------------------------------------------------------------------------------------	--------------	-----

• LWRs unloading

<i>Road-rail trailer</i>	EMD	178
--------------------------	------------	-----


System to tow & unload rail	STR	179
----------------------------------------	------------	-----

7

CHAPTER




MODEL

PAGE



HANDLING

OF SLEEPERS


Carrying beam with track laying gantries	PTH 350-500	115
Replacement by extracting and inserting	MRT 2/4 SR	120
Forks and beams for loader/excavator:		
• front fork	OFF	180
• sleeper fork	OFT	180
• chain girder	PCT	181
• hydraulic girder	PTV	181
Multipurpose road-rail excavators		
for handling and track works 	KGT-4RS	104
	KGT-E	105
	KGT-P	108

7

CHAPTER

MODEL

PAGE






HANDLING

OF BALLAST

Attachments for loader/excavator:

• Front buckets	OBF	182
• Clamshell buckets	OBP	182
• Cribs clearing tool (prior to resleepering)	ODC	119
• Finish brush	BRV	133

Multipurpose road-rail loaders
for handling and track works

	KGT-4RS	104
	KGT-E	105
	KGT-P	108

Ballast-moving vehicles:

• Unloading from ballast-hopper	R10BAL	154
---------------------------------	--------	-----



CHAPTER

7 HANDLING [cont'd]

MODEL

PAGE

OF FASTENINGS

Magnet for collecting fastenings
and ferrous materials

OEA

140



8 LIGHTING

Floodlights

PCB

184

Generators

GE

185

*Standalone portable rechargeable
tracksite floodlight*



PCD

186



CHAPTER

9 SAFETY & RESCUE

MODEL

PAGE

SAFETY

Warning devices



AVS 1-2

188



AVS 3-4

189

RESCUE

Equipment for personnel:

• *trolleys with stretchers*



CH

192

Hydraulic rerailing equipment

MDR

191

Rescue trolley for damaged bogies

C2D

190

Lightweight vehicle for emergency purposes **MINI 4-4**

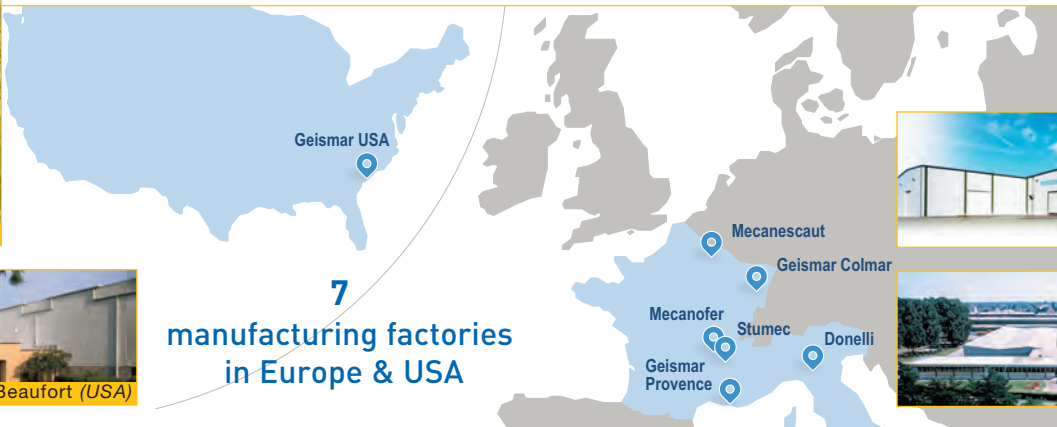
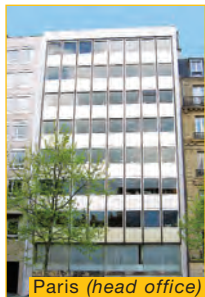
193

Fire fighting road-rail vehicles

V2R LAI

194

A manufacturer with substantial resources



INDEX OF EQUIPMENT

	MODEL	PAGE
B		
Ballast cribs clearing beam.....	ODC	119
Ballast hopper trailer.....	R10BAL	154
Sleeper beam with chains.....	PCT	181
Hydraulic beam for sleepers.....	PTV	181
Vertical rail joint benders	JA	67
Horizontal rail benders	JB - JC	65
Light switch blade bender	JL30	69
Light horizontal rail bender	JLP 75	66
Rails and switch blade benders	JP 90	68
Stationary benders	VO 406	70
Rescue trolley for damaged bogies	C2D	190
High power bolting machine.....	BSR8	87
Bridge inspection track motorcar.....	VMT IOA	134
Track brush	BRV	133
Hydraulic brushcutter	ORD	138
Brush-cutting track motorcars.....	VMB DEB	137
Front buckets	OBF	182
Clamshell buckets	OBP	182
Clearing buckets	OGC	139
Retro buckets	OGR	139
C		
Chamfering machine.....	DN80	97
Rail changers	PSR	174
LWR roller clamp	OMR	176
High pressure cleaning wagon.....	W40N HP	57

	MODEL	PAGE
Compact clipper	AP 3	83
Multipurpose clipper	AP 21	84
Portable hydraulic clipper	APL 6	82
2-head programmable coach-screwing machine.....	T 2002	80
Combined mechanical coach-screwing and fishbolting machine.....	TB	74/89
Maintenance coach-screwing machine with pneumatic torque assistance.....	TC	78/90
Digital hydraulic coach-screwing machine.....	TDH 2	79
Mechanical maintenance coach-screwing machine.....	TEM	75/90
Portable coach-screwing machine with pneumatic assistance.....	TMI 2	76
Heavy duty coach-screwing machine with hydraulic torque assistance.....	TPAS	77/90
Heavy duty mechanical coach-screwing machine.....	TS	73/90
Safe disc cutter	MTZ	35
D		
Rail descaling machine.....	DER 672	56
High output rail descaling machine.....	DK3	55
Ditch cleaning rotor.....	OTC	138
Vertical drill	OPV	140
Super light weight rail drilling machine for hollow drill bits.....	PR2	36
Super light weight rail drilling machine with carbide bits.....	PRZ	37
Double feed drill	PR8	40

	MODEL	PAGE
The reference rail drills	PR7 S	39
Carbide tools rail drill	PRUL	38
Heavy duty sleeper drill	PT8	90
Maintenance light sleeper drill	PTSL	93
Portable sleeper drill	PTXL	94
E		
Lightweight vehicle for emergency purposes.....	MINI 4-4	193
Road-rail loader/ excavator	KGT-4RS	104
Powerful road-rail excavator	KGT-E	105
Powerful road-rail loader/ excavator	KGT-P	108
F		
Portable hydraulic clipper for Fastclip insertion and extraction.....	APL 6	82
Floodlights	PCB	184
Standalone portable rechargeable tracksite floodlight	PCD	186
Front fork.....	OFF	180
G		
Radiocontrolled self-propelled substitution gantries	PEM 807	111
Switches laying and removal gantries	PWP	112
Gantries for replacement of S & C units.....	PMC 8101	117
Track laying and renewal telescopic gantries	PTH 350-500	115
Rail track gauge narrowing device.....	ARR 531	173
Lighting generators	GE	185

	MODEL	PAGE
Blade grasscutter	ODL	138
Hydraulic rail grab	PAR	176
Mechanical grinding set.....	EMX-M	43
Turnouts grinder	MC3	49
Rail joint grinder	MJ18	52
Corrugation grinder	MOD12	53
Ergonomic rail profile grinder	MP 23	47
Multipurpose portable grinder	PHG 2	44
Rail profile grinder	MP12	46
Light rail profile grinder	MP5	45
Profile grinder for rails & turnouts.....	MP6	48
Rail web and fishing table grinder	MS9	51
Vertical rail grinder	MV3	50
Preventative grinding vehicle.....	VMR 445	54
H		
Hydraulic hammer	OBR	139
Rail heaters	SH	58
I		
Inspection motortrolley.....	RH2	142
Inspection vehicle.....	VT 4141	145
K		
“K” bolt removing machine.....	MEB	81
Rail knocker.....	FRHP	60
Rail knocker	MR 512	60
L		

	MODEL	PAGE
Hydraulic rail lifter	L2R 522	61
lightweight track lifting machine.....	LNR 528-529	123
Hydraulic rail lifter	LRH	62
Rail loaders	CR	177
Road-rail loader /excavator.....	KGT-4RS/-E/-P	104/6/8
Road-rail trailer for LWRs unloading.....	EMD	178
M		
Magnet	OEa	140
Light multipurpose motortrolleys	MINI 4	143
Inspection motortrolley.....	RH2	142
Light track motorcars	VMT 400	160
Track maintenance motorcars	VMT 700	161
Worksite track motorcars	VMT 800	162
Heavy-duty motorcars	VMT 900	163
Heavy-duty motorcars with bogies.....	VMB	164
Multipurpose hydraulic power packs.....	GH 5 & 5/10	101
Multipurpose super light tool set.....	GMSL	100
P		
Slab track positioning units.....	PRV 550	116
Rail pullers	ATR	172
Multipurpose hydraulic power packs	GH 5 & 5/10	103
R		
Continuous feed horizontal rail bender.....	VO 406	70
Aluminium rail changers.....	PMR	175
Rail changers.....	PSR	174

	MODEL	PAGE
Rail descaling machine.....	DER 672	56
High output rail descaling machine.....	DK3	55
Vertical rail joint benders.....	JA	67
Horizontal rail benders.....	JB - JC	65
Light horizontal rail bender.....	JLP 75	66
Rail joint grinder.....	MJ18	52
Corrugation grinder.....	MOD12	53
Ergonomic rail profile grinder.....	MP 23	47
Rail profile grinder.....	MP12	46
Light rail profile grinder.....	MP5	45
Profile grinder for rails & turnouts.....	MP6	48
Rail web and fishing table grinder.....	MS9	51
Vertical rail grinder.....	MV3	50
Hydraulic rail grab.....	PAR	176
Super light weight rail drilling machine for hollow drill bits.....	PR2	36
Super light weight rail drilling machine with carbide bits.....	PRZ	37
The reference rail drills.....	PR7 S	39
Carbide tools rail drill.....	PRUL	38
Rail heaters.....	SH	58
Hydraulic rail lifter.....	L2R 522	61
Hydraulic rail lifter.....	LRH	62
Rail loaders.....	CR	177
Rail knocker.....	FRHP	60
Rail knocker.....	MR 512	60
Rail pullers.....	ATR	172

INDEX OF EQUIPMENT

	MODEL	PAGE
Blade rail saws	SRH	34
Rail tensors	TH 70 & 120 VL	64
Rail tensor	THR 542	63
Range of attachments	KGT	106/7
Range of tools	GH 5 & 5/10	102/3
2-head ontrack readzing machine.....	REEN	96
"K" bolt removing machine.....	MEB	81
Hydraulic rerailling equipment.....	MDR	191
Road-rail loader/excavator.....	KGT-4RS	104
Powerful road-rail excavator.....	KGT-E	105
Powerful road-rail Loader/excavator.....	KGT-P	108
Road-rail shunting vehicles	P2R 200 E	168
Road-rail vehicles range	V2R	165/6/7
S		
Blade rail saws	SRH	34
Lightweight abrasive rail- saw	MTZ	35
Sleeper saw	TTB 220	95
Mechanical grinding set	EMX-M	43
Multipurpose super light tool set	GMSL	101
Modular weld shear	ESN3	41
Powerful and lightweight weld shear	ESN4	42
Shunters with axles.....	VTL 200-500	169
Shunters with bogies	VTB 1000	170
Road-rail shunting vehicles	P2R 200 E	168
Sleeper beam with chains	PCT	181
Sleeper changing machine.....	MRT 2/4 SR	120

	MODEL	PAGE
Heavy duty sleeper drill	PT8	90
Maintenance light sleeper drill	PTSL	93
Safe & portable sleeper drill	PTXL	94
Sleeper fixing machine	LFT	121
Sleeper fork.....	OFT	180
Track slewing machine.....	RV100	122
Snow clearing track motorcar.....	VMT CN	135
Spike pullers.....	AS 3	85
Spike driver	PSD3	86
System to tow & unload rail	STR	179
Trackpanel laying and removal system	S2PV	113
Swithes laying and removal system	SPAC	114
T		
Light tamping machines.....	BLH 20	128
Track off-trackable tamper	BRAD	131
Track and turnouts modular tamper	BRM8 AC	132
Electric tamping set.....	GB4 S	127
Track and turnouts tamping unit.....	MB	129
2-head track and turnouts tamping unit.....	MB8 AC	130
Rail tensors	TH 70 & 120 VL	64
Rail tensor	THR 542	63
LWRs threader	MPR	118
Road-rail trailer for LWRs unloading.....	EMD	178
Workshop trailers	RTA	155
Modular transport trailer	RTM 6/10	151
Heavy plant transport trailer	R25TR	156

	MODEL	PAGE
Transport trailers	RT	152
Tilting trailers	RTB	153
LWRs transport Train		158
LWRs transport mini-wagons.....	TMW	159
Dismountable transport unit for vehicles.....	UTE 400	157
Rescue trolley for damaged bogie	C2D	190
Trolleys	CH147/192	
Multipurpose monorail trolley	CMM 476	146
Radiocontrolled self-propelled trolleys for transport	LEM 460	110
Lightweight braked trolley	LLF 471	148
Self-propelled trolley	LLM 401	149
Transport trolleys	MA, TR	150
Maintenance and transport rail car	VT 438	144
V		
Inspection vehicle	VT 4141	145
Lightweight vehicle for emergency purposes	MINI 4-4	193
Road-rail vehicles range.....	V2R	165/6/7
Portable self-powered vibrator	VBZ	125
Super lightweight portable vibrator	VPS	124
W		
Pneumatic warning devices.....	AVS 1-2	188
Very light warning devices	AVS 3-4	189
Weed-killing track motorcars	VMT DES	136
Weld shear.....	ESN3/4	41/42
Portable power wrench	MIW 3	72/88

	matériel	PAGE
A		
AP 21	Multipurpose clipper	84
AP 3	Compact clipper	83
APL 6	Portable hydraulic clipper	82
ARR 531	Rail track gauge narrowing device	173
AS 3	Spike pullers	85
ATR	Rail pullers	172
AVS 1-2	Pneumatic warning devices	188
AVS 3-4	Very light warning devices	189
B		
BLH 20	Light tamping machines	128
BRAD	Off-trackable tamper	131
BRM8 AC	Track and turnouts modular tamper	132
BRV	Track brush	133
BSR8	High power bolting machine	87
C		
C2D	Rescue trolley for damaged bogies	190
CH	Trolleys	147
CH	Trolley for the emergency services	192
CMM 476	Multipurpose monorail trolley	146
CR	Rail loaders	177

	matériel	PAGE
D		
DER 672	Rail descaling machine	56
DK3	High output rail descaling machine	55
DN80	Chamfering machine	97
E		
EMD	Road-rail trailer for LWRs unloading	178
EMX-M	Mechanical grinding set	43
ESN3	Modular weld shear	41
ESN4	Powerfull and lightweight weld shear	42
F		
FRHP	Rail knocker	60
G		
GB4 S	Electric tamping set	127
GE	Lighting generators	185
GH 5 & 5/10	Multipurpose hydraulic power packs	101
GMSL	Multipurpose super light tool set	100
J		
JA	Vertical rail joint benders	67
JB - JC	Horizontal rail benders	65
JL30	Light switch blade bender	69
JLP 75	Light horizontal rail bender	66

	matériel	PAGE
JP 90	Rails and switch blade benders	68
K		
KGT-4RS	Road-rail loader/excavators	104
KGT-E	Powerful multipurpose road-rail excavator	105
KGT-P	Powerful road-rail loader/excavators	108
L		
L2R 522	Hydraulic rail lifter	61
LEM 460	radiocontrolled self-propelled trolleys	
.....	for transport	110
LFT	Sleeper fixing machine	121
LLF 471	Lightweight Braked Trolley	148
LLM 401	Self-propelled trolley	149
LNR 528-529	lightweight track lifting machine	123
LRH	Hydraulic rail lifter	62
M		
MA, TR	Transport trolleys	150
MB	track and turnouts tamping unit	129
MB8 AC	2-head track and turnouts tamping unit	130
MC3	Turnouts grinder	49
MDR	Hydraulic rereiling equipment	191
MEB	"K" bolt removing machine	81
MINI 4	Light multipurpose mototrolleys	143

INDEX OF MODELS

	matériel	PAGE
MINI 4-4	Light set for emergency interventions	193
MIW 3	Portable power wrench	72/88
MJ18	Rail joint grinder	52
MOD12	Corrugation grinder	53
MP 23	Ergonomic rail profile grinder	47
MP12	Rail profile grinder	46
MP5	Light rail profile grinder	45
MP6	Profile grinder for rails & turnouts	48
MPR	LWRs threader	118
MR 512	Rail knocker	60
MRT 2/4 SR	Sleeper changing machine	120
MS9	Rail web and fishing table grinder	51
MTZ	Safe disc cutter	35
MV3	Vertical rail grinder	50
O		
OBF	Front buckets	182
OBP	Clamshell buckets	182
OBR	Hydraulic hammer	139
ODC	Ballast cribs clearing beam	119
ODL	Blade grasscutter	138
OEA	Magnet	140
OFF	Front fork	180

	matériel	PAGE
OFT	Sleeper fork	180
OGC	Clearing buckets	139
OGR	Retro buckets	139
OMR	LWR roller clamp	176
OPV	Vertical drill	140
ORD	Hydraulic brushcutter	138
OTC	Ditch cleaning rotor	138
P		
P2R 200E	Road-rail shunting vehicles	168
PAR	Hydraulic rail grab	176
PCB	Floodlights	184
PCD	Standalone portable rechargeable	
	.....tracksite floodlight	186
PCT	Sleeper beam with chains	181
PEM 807	Radiocontrolled self-propelled	
	.....substitution gantries	111
PHG 2	Multipurpose portable grinder	44
PMC 8101	Gantries for replacement of S & C units	117
PMR	Aluminium rail changers	175
PR2	Super light weight rail drilling machine with	
	.....hollow drill bits	36
PR7 S	The reference rail drill	39

	matériel	PAGE
PR8	Double feed drills	40
PRUL	Carbide tools rail drill	38
PRV 550	Slab track positioning units	116
PRZ	Super light weight rail drilling machine with	
	.....carbide bits	37
PSD3	Spike driver	86
PSR	Rail changers	174
PT8	Heavy duty sleeper drill	90
PTH 350-500	Track laying and renewal	
	.....telescopic gantries	115
PTSL	Light maintenance sleeper drill	93
PTV	Hydraulic beam for sleepers	181
PTXL	Portable sleeper drill	94
PWP	Switches laying and removal gantries	112
R		
R10BAL	Ballast hopper trailer	154
R25TR	Heavy plant transport trailer	156
REEN	2-head ontrack readzing machine	96
RH2	Inspection motortrolley	142
RT	Transport trailers	152
RTA	Workshop trailers	155
RTB	Tilting trailers	153

	matériel	PAGE
RTM 6	Modular transport trailers	151
RV100	Track slewing machine	122
S		
S2PV	Trackpanel laying and removal system	114
SH	Rail heaters	58
SPAC	Switches laying and removal system	114
SRH	Blade rail saws	34
STR	System to tow & unload rail	179
T		
T 2002	2-head programmable coach-screwing machines	80
TB	Combined mechanical coach-screwing.....and fishbolting machine	74/89
TC	Maintenance coach-screwing machine.....with pneumatic torque assistance	78/90
TDH 2	Digital hydraulic coach-screwing machine	79
TEM	Mechanical maintenance coach-screwing machine	75/90
TH 70 & 120 VL	Rail tensors	64
THR 542	Rail tensor	63

	matériel	PAGE
TMI 2	Portable coach-screwing machine.....with pneumatic assistance	76
TMW	LWRs transport mini-wagons	159
TPAS	Heavy duty coach-screwing machine.....with hydraulic torque assistance	77/90
LWRs transport Train		158
TS	Heavy duty mechanical coach-screw	92
	.....machine	73/90
TTB 220	Sleeper saw	95
U		
UTE 400	Dismountable transport unit for vehicles	157
V		
V2R	Road-rail vehicles range	165/6/7
V2R LAI	Road-rail vehicles for the rescue operations	194
VBZ	Portable self-powered vibrator	125
VMB	Heavy-duty motorcars with bogies	164
VMB DEB	Brush-cutting track motorcars	137
VMR 445	Preventative grinding vehicle	54
VMT 400	Light track motorcars	160
VMT 700	Track maintenance motorcars	161
VMT 800	Worksite track motorcars	162

VMT 900	Heavy-duty motorcars	163
VMT CN	Snow clearing track motorcar	135
VMT DES	Weed-killing track motorcars	136
VMT IOA	Bridge inspection track motorcar	134
VO 406	Continuous feed horizontal rail benders	70
VPS	Super lightweight portable vibrator	124
VT 438	Maintenance and transport rail car	144
VT 4141	Inspection vehicle	145
VTB 1000	Shunters with bogies	170
VTL 200-500	Shunters with axles	169
W		
W40N HP	High pressure cleaning wagon	57

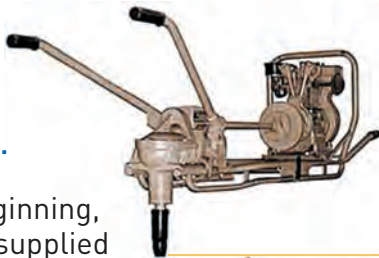
T R A C K L A Y I N G A N D

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.



2018



A new generation of sleeper coach-screwing machines, the **TDH 2** 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 **130** 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.*



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

• hydraulic
• pneumatic

Power source



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

CUTTING

saw

SRH



- **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**

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



Power source

• petrol-2-stroke



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

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

RAIL



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

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



PRUL



Weight



Power source

• petrol

• electric



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

DRILLING

drills

Carbide tool rail drill



- **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

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)



ESN4

Powerful and lightweight weld shear



Weight

37 kg without cutters



Énergie

• petrol 4-stroke Honda engine

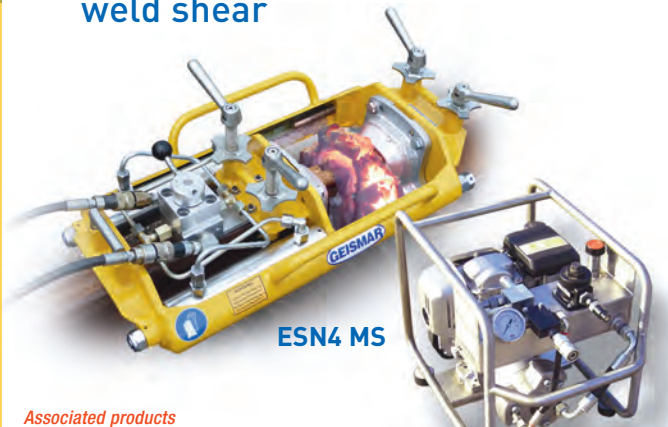


A variety of consumables, tools and accessories are available on request.

WELD SHEARING

weld shears

ESN4



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

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

GRINDING

portable grinder

PHG 2

Weight
9 kg• petrol 2 or 4-stroke
Power sourceA variety of consumables,
tools and accessories
are available on request.

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



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



petrol
2-4-stroke
Power source

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 outrigger
- options: - **power take-off** for flexible drive hand tools
- transformation **kit** in the **MOD 12**

MP23

Ergonomic rail profile grinder



Weight



Power source

- petrol
- diesel

- electric
- hydraulic



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

RAIL



1

GRINDING

off-trackable grinders

MP23



Associated products

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

- 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



MP6



• petrol
2-4-stroke
Power source

• electric
• hydraulic



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

GRINDING

off-trackable
grinders

Profile grinder for rails & turnouts



- 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



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



- petrol
- diesel

- electric

Power source



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

RAIL



1

GRINDING

off-trackable
grinders

MS9



Rail web and fishing table grinder

- 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



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

MOD12

Corrugation grinder



Weight



Power source

- petrol
- electric
- hydraulic



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

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

GRINDING

vehicle

Preventative grinding vehicle



- 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 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



• petrol

• electric

Power source



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**

W40N HP

High pressure cleaning wagon



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

- **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

RAIL



1

CLEANING

wagon

W40N HP



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 distressing 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 distressing.





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**

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**

DESTRESSING

knockers

MR 512 FRHP

L2R 522

Hydraulic rail lifter


Weight
170 kg


Power source
• petrol

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



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

 **Weight**
250 kg

 • petrol
Power source

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

DESTRESSING

rail lifters

LRH



- 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

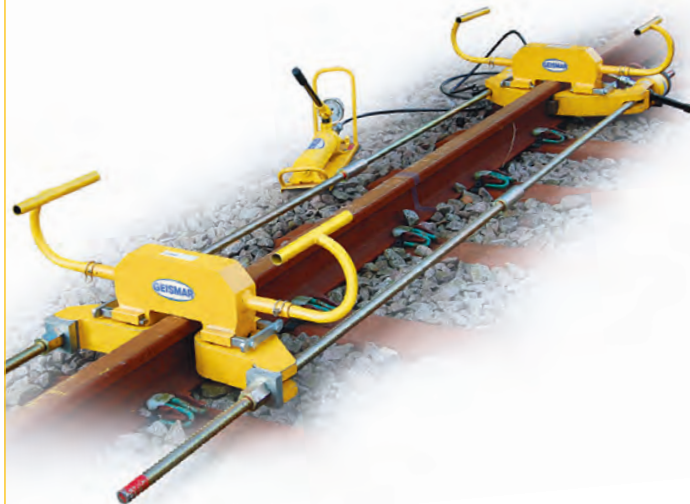
 A variety of consumables, tools and accessories are available on request.



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.

DESTRESSING

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**

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 C

**JP 90****Weight**
290 kg

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

BENDINGswitch 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

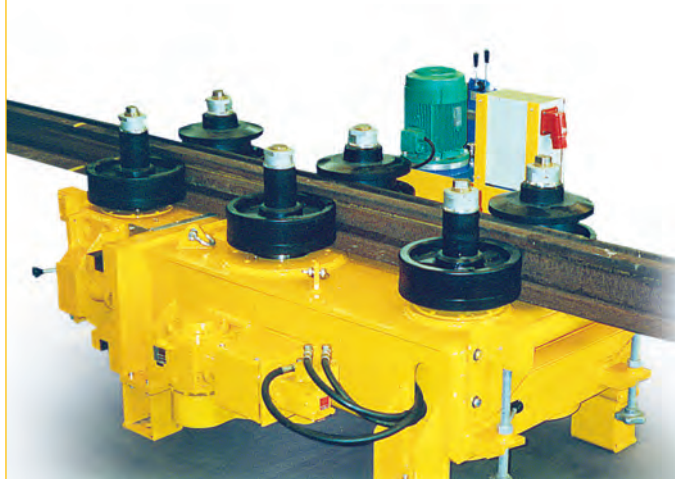


A variety of consumables, tools and accessories are available on request.

BENDING

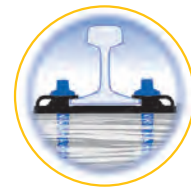
continuous
feed horizontal
bender

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



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



• 2-stroke
petrol

• electric
• hydraulic



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

2

RAIL
SLEEPER

THREAD
TYPE

portable
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.

FASTENINGS



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

TEM

Maintenance mechanical coach-screwing machine



Weight



Power source

- petrol
- diesel

- electric



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

FASTENINGS



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



Power source

- petrol
- diesel
- electric



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

- 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

FASTENINGS



RAIL
SLEEPER

2

THREAD
TYPE

controlled
coach-screwing
machines

TPAS



TC

Compact coach-screwing machine



Weight



• petrol
• diesel
• electric

Power source



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

TDH 2

Digital ergonomic hydraulic coach-screwing machine



USB



Bluetooth



GPS



DTC



Weight

≈ 110 kg



Power source

• petrol



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

- **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
- 16 to 55 daNm screwing torque adjustment
- 110 daN.m maximum unscrewing torque
- **fully automatic speed selection** for fast or precision tightening
- **up to 500 fastenings per hour**
- LED lighting for night-works;
- recording of data with GPS positioning
- foldable carrying arms and integrated handle for easy transportation and stocking
- Options: - **DTC:** digital torque control accessory connected by Bluetooth
- 4-wheel trolley

FASTENINGS



RAIL
SLEEPER

2



THREAD
TYPE

hydraulic
coach-screwing
machine

TDH 2



T 2002

2-head programmable coach-screwing machine



• petrol
• diesel

• electric

Power source



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

2

RAIL
SLEEPER

THREAD
TYPE



programmable
coach-screwing
machine

T 2002



- **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

MEB

"K" bolt removing machine



Weight



• petrol
• diesel
• electric

Power source



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

FASTENINGS



RAIL
SLEEPER

2



THREAD
TYPE

bolt remover

MEB



- 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



APL 6



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

2 RAIL SLEEPER

CLIPS



portable
clippers

APL 6

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

AP 3

Compact clipper



Weight



• petrol
Power source



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

FASTENINGS



RAIL
SLEEPER

2

CLIPS

clippers



AP 3



- **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 21



Weight



• petrol
• diesel
• electric

Power source



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

2

RAIL
SLEEPER

CLIPS

clippers



Heavy duty multipurpose clipper



AP 21

- **3 models with up to 9 heads suit most clips:** E, PR, Fastclip, Safelock, Surelock, SB3, rail anchors, etc.
- **AP 21: 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 3

Spike puller



Weight



• petrol
• diesel
Power source

• electric



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

FASTENINGS



RAIL
SLEEPER

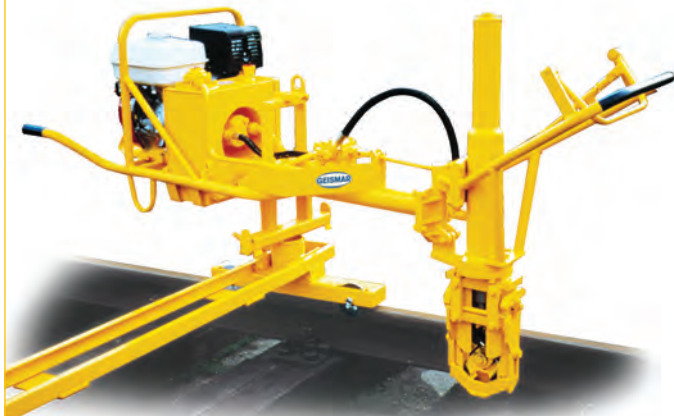
2



SPIKES

extracting
spike puller

AS 3



Associated products

Spikes can also be removed with the hydraulic attachment SP3-GH5/10 (page 103)

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



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 103)

- **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



Weight



Power source

• 2-stroke
petrol• electric
hydraulic

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

2

FISHPLATE

bolting
machines



Portable power wrench



- **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



Weight



Power source

- petrol
- diesel
- électric



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

FASTENINGS



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

TB



TS



Masse

Heavy duty mechanical coach-screwing machine



- with optional fish-bolting device (page 73)

2

FISHPLATE

bolting machines

TS -TPAS
TC - TEM

TPAS



Masse

Precise coach-screwing machine with hydraulic torque assistance



- with optional fish-bolting device (page 77)

TC



Masse

Compact coach-screwing machine



- with optional fish-bolting device (page 78)

TEM

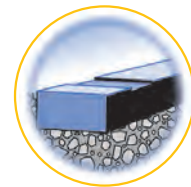


Masse

Maintenance mechanical coach-screwing machine



- with optional fish-bolting device (page 75)



3

SLEEPERS

• DRILLING OF WOODEN SLEEPERS

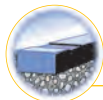
Drill

• 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



Weight



Power source

- 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 $\pm 20^\circ$

PTSL

Maintenance light sleeper drills



Weight



Power source

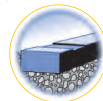
- petrol
- diesel

- electric
- pneumatic



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

SLEEPERS



WOODEN SLEEPERS

drilling

3

PTSL-2T

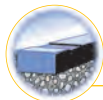


- optimum weight / performance ratio
- drills up to Ø 33 mm; drills **vertically** or at the rail cant angle (1/20 or 1/40)

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

WOODEN
SLEEPERS

drilling

 Weight
14 kg


Power Source

• 2-stroke
petrol• electric
hydraulic

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

Portable sleeper drill



optional

- **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

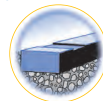


Power Source
• hydraulic



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

SLEEPERS



WOODEN SLEEPERS

cutting

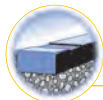
3

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

TTB 220

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

DN80

Chamfering machine



Weight



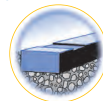
• petrol
Power Source

• diesel



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

SLEEPERS



WOODEN
SLEEPERS

adzing

3

DN80



- **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





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...

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



4

GH 5
GH 5/10

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 94



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

LOADER/
EXCAVATOR

road-rail



Weight
± 20 t

Powerful and versatile
road-rail loader/excavator



Associated products



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

- **129 kW**, water cooled Diesel engine (III to IV)
- power Shift transmission on 4 wheel drive
- **4 wheel steering**,
- **turning radius : 4.2 m**
- dual pneumo-hydraulic brake circuit
- **universal boom**, 2 jibs with telescopic extension
- **up to 7.5 t max. lifting**
- **up to 7.2 m max. horizontal outreach**
- full 360° rotation
- **state-of-the art** on-rail drive system using the tyres/wheels **without infringing gauge**
- articulated rail device to accommodate track twist
- speeds:
- **up to 40 kmph on rail**
- **25 kmph on road**
- a complete range of attachments dedicated to track working are available
- electro-hydraulic rotation and height limiting (adjustable)
- fast on/off-tracking
- track gauges:
from 1,000mm to 1,676mm


**LOADER/
EXCAVATOR**

road-rail

4

KGT-E

KGT-E


 Weight
± 23 t

Multipurpose road-rail loader/excavator



Associated products

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

- **129 kW**, water cooled Diesel engine (IV)
- **dual drive mode:**
 - **on road** = hydrostatic transmission 4 wheel drive and steering, turning radius = 4.2 m
 - **on rail** = hydrostatic transmission with 4 railway driving wheels Ø 630 mm
- dual pneumatic brake circuit
- **triple articulated boom** for excavation
- **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 20 kmph on rail**
 - **30 kmph on road**
- a complete range of attachments and jibs dedicated to track working are available
- electro-hydraulic rotation and height limiting devices (adjustable)
- fast on/off-tracking
- track gauge: 1,435 mm, others on request
- **approved:** NF F 58-003
- **SNCF approved** n° DPI 14221



Range of attachments of the KGT-4RS

LOADER/ EXCAVATOR

road-rail

HANDLING



OBP

Clamshell
buckets
page 182



OFT

Sleeper fork
page 180



PCT

Sleeper beam
with chains
page 181



OFB

Front
buckets
page 182



OFF

Front fork
page 180



PTV

Hydraulic
beam for
sleepers
page 181



OMR

LWR roller
clamp
page 176



PAR

Hydraulic
rail grab
page 176



OEA

Magnet
page 140

INFRASTRUCTURE



ODL

Blade
grasscutter
page 138



ORD

Hydraulic
brushcutter
page 138



OTC

Ditch cleaning
rotor
page 138

KGT-E & KGT-P



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

MULTI-FUNCTION



& 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



MB

1 or 2-heads 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 95

LOADER/ EXCAVATOR

road-rail

4

KGT-4RS
KGT-E
KGT-P



KGT-P

LOADER/
EXCAVATOR

road-rail



Weight
28 t

Extremely powerful and versatile road-rail loader/excavator



Associated products



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

- **129 kW**, water cooled Diesel Diesel engine (IV)
- power Shift transmission with 4 wheel drive and twin tyre wheels
- **4 wheel steering**
- turning radius : 4.2 m
- dual pneumo-hydraulic brake circuit
- **universal boom**, 2 jibs with telescopic extension
- **up to 11 t lifting** capacity
- **up to 7.2 m horizontal outreach**
- full 360° rotation
- spacious and ergonomic cab for 2 persons
- **state-of-the art** non-infringing on-rail drive system using the tyres/wheels **without infringing gauge**
- articulated rail device to accommodate track twist
- speeds:
- **up to 30 kmph on rail**
- **30 kmph on road**
- a complete range of attachments dedicated to track working are available
- electro-hydraulic rotation and height limiting (adjustable)
- fast on/off-tracking
- track gauges :
from 1,435mm to 1,676mm
- **approved:** EN 15746

TRACK WORKS



5

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 positionning 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





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

PEM 807

 **Weight** 4 t

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



LAYING & RENEWAL

turnouts and mounted panels

5

PEM 807



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



PWP

Weight
10 t

LAYING &
RENEWAL

turnouts
and mounted
panels

Switches laying and removal gantries



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

- **Limited obstruction of the adjacent track,**
- S&C lifting and conveying whist remaining flat and in a central position over the track, **no tilting or swin-ging risk;**
- **Precise positioning** of the S&C panel into its final position
- Radio controlled operation **keeps the operator at a safe distance;**
- Able to work **simultaneously in 2 working areas** (laying and reloading), on the same track;
- **Quick and easy clamping** by hydraulic clamps;
- The system can be used on **single line track;**
- **Long slewing distances** possible;
- Alternative **routing by road possible.**

S2PV

Trackpanel laying and removal system



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

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)





SPAC

LAYING &
RENEWAL

turnouts
and mounted
panels

5
SPAC

Switch laying and removal system



Weight

- PEM XL: 4.75 t

- LMC 4611: 13.4 t

- LEM 460: 4.2t

- P2PV: 11 t



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

Modular system to install or remove switches without deformation:

- system configuration:
 - **PEM XL** gantries;
 - **LMC 4611** motorized rail and caterpillar transportation trolley;
 - **LEM 460** motorized rail transportation trolley;
 - **P2PV** loading and transportation beam with connection ramp;
- **Radio controlled and synchronized** by a single operator (transfer, installation, transport);
- Modular and adapted to different lengths of switches, example:
 $33 \text{ m} = 4 \text{ PEM XL} + 2 \text{ LMC} + 1 \text{ LEM} + 1 \text{ P2PV}$



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.



- 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

LAYING & RENEWAL

panels and sleepers

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

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

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

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 104/5/8) ; spot work can also be done with the OBP clamshell buckets (page 182)

an attachment for KGTs (pages 104/5/8);

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

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

LNR 528 - 529

Lightweight track lifting machine



Weight



Power source

• petrol



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



LIFTING



Associated products

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

- **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

VBZ

Portable self-powered vibrating ballast tamping machine



Weight

34 kg



Power source

• petrol



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



TAMPING

vibrator



OPTIONAL



- 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

5

VBZ



GB4 S



50 Hz

electric ballast tamping set



Power source

• petrol

• 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**



MB



Weight MB1T ≈ 800 kg

MB2T ≈ 1,250 kg



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

Single or double headed track and turnout tamping unit



Associated products

- ▶ this unit is best-used with the road-rail loader-excavators KGT (pages 104/5/8); can also be fitted to other road/rail excavator types subject to specification

an attachment for the KGT (pages 104/5/8) ;

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

- **MB 1T:** up to 100 sleepers per hour (both rails)
1 tamping head with adjustable plunge depth
- **MB 2TL:** up to 200 sleepers per hour (both rails)
2 lightweight tamping heads with independent lifting of each head
- **4 tines** with elliptic 46 Hz vibrations ensure **first class consolidation**
- **Manual tamping cycle** operated by one operator from the rail-road excavator
- Suitable for tamping **twin sleepers and turnouts**
- Other model: **MB 8AC**, 2-head tamping unit mounted on frame with guide wheels (up to 240 sleepers/h - 2,540 kg)

TAMPING

hydraulic units

5

MB C



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 104/5/8); 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.

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 tampers

5

BRAD 



BRM8 AC

**BALLAST
PROFILING**

hydraulic
tamperers

5

BRM8 AC



8 to 10 t

Weight according to version



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

- 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

BRV

Track brush


Weight 2,400 kg

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

BALLAST
PROFILING

Track brush



Associated products

▶ this module is best-used with the road-rail loader-excavator KGT (pages 104/5/8).

a dedicated railway attachment for KGTs (pages 104/5/8) that ensures a fine finish of the ballast profile;

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

- up to 1,000 m of track can be cleaned per hour
- 2,500 mm wide brush
- brush consisting of 55 mm Ø thick rubber tubes filaments
- 830 mm diameter brush
- **built-in conveyor** to move any excess ballast sideways
- **adjustable sweeping depth**
- hydraulic motors fed by the road-rail excavator
- optional: power pack for towed stand-alone brush machine

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



5

VMT IOA

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



Weight

20 to 40 t
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

VMB DEB

Brush-cutting track motorcars

 **Weight** 70 t

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



**INFRASTRUCTURE
MAINTENANCE**


**vehicles
vegetation**

5

VMB DEB



Associated products

 KGTs loader-excavators can also be used for brush-cutting (pages 104/5/8)

- 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



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**

*The attachments
for KGTs
(pages 104/5/8) ;
can also be fitted
to other road/rail
excavator types
subject to
specification*

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



**INFRASTRUCTURE
MAINTENANCE**

**attachments
ditches
civil works**

5

**OGC - OGR
OBR**

*The attachments
for KGTs
(pages 104/5/8) ;
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



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 104/5/8-) ;
can also be fitted
to other road/rail
excavator types
subject to
specification*



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



Associated products

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

 **Weight**
±360 kg

 • petrol engine
Power source

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

- **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



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

MINI 4



Weight MINI 4-2: ≈ 100 kg
MINI 4-4: ≈ 185 kg

Multipurpose lightweight motor-trolleys - off-trackable



- 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**



VT 4141

Inspection vehicle



Weight

1,300 kg



Power source

• 13 HP petrol



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



- 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

PERSONNEL

motortrolleys

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



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

CH

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

EQUIPMENT
AND MATERIALS

trolleys

CH
6



LLF 471



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

EQUIPMENT AND MATERIALS

trolleys

LLF 471
6

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

EQUIPMENT
AND MATERIALS

trolleys

LLM 401

6

LLM 401

Self-propelled trolley

Weight
120 kg

- petrol
- electric

 Power source


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

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



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



RTM

Modular transport trailers



Associated products

- ▶ the KGT road-rail loaders, (pages 104/5/8) can be used for towing equipment and materials to the site



RTM 10 = 1.95 t with boards

Weight **RTM 20 = 3.6 t with boards**

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

Adaptable for the transport of all types of equipment

- **payload:** **RTM 10 = 10 t**
RTM 20 = 20 t
- 1435 mm track gauge (*others on request*)
- loading platform: **RTM 10 = 10 m²**
RTM 20 = 13,5 m²
- **up to 25 km/h** towing speed
- rockinger coupling (*others on request*)
- forged steel wheels of 470 mm Ø = **RTM 10 - RTB 10**
machined steel wheels of 600 mm Ø = **RTM 20**
- **auto-locking brake**, défreinage par air ou système mécanique de secours
- optional: boards, stanchions and canvas
- other model: **RTB 10** : trailer, tipping from either side and from the rear, payload 10 t

EQUIPMENT AND MATERIALS

trailers

RTM
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



RTB

Tilting trailers

 **Weight** 3 to 9 t

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



- **10, 15 and 25 t payload**
- **11 to 28 m²** loading platform
- **60 or 100 kmph** speed with leaf or double helicoïdal 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

Associated products

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



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



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



Weight

7 to 10 t depending on configuration

RTA

Workshop 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

EQUIPMENT AND MATERIALS

trailers

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



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

UTE 400

Modular multifunction transport unit

 **Weight**
4.5 t



- **30 t capacity**, for plant machinery with rubber tyres or caterpillars
- 715 mm low deck
- loading platform: **6 x 2.8 m** (*other dimensions on request*)
- towing speed: **up to 20 kmph**
- loading ramps securely held in folded position by retaining rods
- railway trolleys with forged steel wheels Ø 400 mm for 1435 mm track (*others on request*)
- **auto-locking brake**, air release
- **multifunction**, trolleys have Twist-lock fixing and can be used for transporting:
 - containers
 - various tippers or skips types
 - track panels...
- towing coupler with Ø 40 mm eye

EQUIPMENT AND MATERIALS

trailers

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 and the STR system to tow & unload rail (pages 178-179) 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.

TRANSPORT



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

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**

MULTIPURPOSE
VEHICLEStrack
motorcars

VMT 700

6

VMT 700

Maintenance motorcars


Weight
 12 to 15 t

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



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**



VMT 800

Worksite motorcars

Weight
18 to 23 t

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

MULTIPURPOSE
VEHICLES

track
motorcars

VMT 800
6



Associated products

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

- **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**



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

VMT 900

Heavy-duty motorcars

Weight
22 to 30 t



Associated products

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

- **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

MULTIPURPOSE VEHICLES

track motorcars with bogies

VMT 900 **6**



VMB


Weight

40 to 50 t



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

**MULTIPURPOSE
VEHICLES**

 track
motorcars
with bogies

Heavy-duty motorcars with bogies



- **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

V2R 700



Weight GWVR up to 16 t



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



**TOWING
VEHICLES**

road-rail
vehicles

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**

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**



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



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



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

VTL 200-500

Shunters with axles



Weight

VTL 200 = 25 t

VTL 500 - 500H = 40 t



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 C
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



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*
System to tow & unload rail

OF SLEEPERS:

Forks and beams for excavator

OF BALLAST:

Buckets for excavator





ATR

Rail pullers



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



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

PMR

Aluminium rail changers



Weight

57 kg (heaviest
component: 35 kg)



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

HANDLING



RAILS

lifting

PMR

7



- **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



PAR



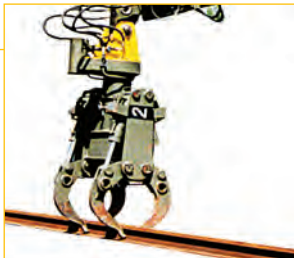
RAILS

lifting

Hydraulic rail grab

an attachment for KGTs (pages 104/5/8);
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 104/5/8);
can also be fitted to other road/rail excavator types
subject to specification.



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

Associated products



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



CR

Rail loaders



Weight

250 to 850 kg
according to modelA variety of consumables,
tools and accessories
are available on request.

- 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)
- 3 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
 - **CR-A:** fully automated version operated from the ground; 2,950 mm boom with foldable end; optional lighting.

RAILS

lifting

CR

7



EMD

RAILS

LWRs
unloading

Road-rail trailer for LWRs unloading



Associated products

▶ the transport train (page 158) also features LWRs unloading

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

- **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

STR

System to tow & unload rail



Associated products

▶ the transport train (page 158) also features LWRs unloading

HANDLING



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

RAILS

LWRs unloading

New 5-piece concept for laying Long Welded Rails (LWR) on new track:

- 1- **ECTR:** Gantry with caterpillar tracks to tow and unload rails
- 2- **RGW:** Guide rollers mounted on wagon
- 3- **LGR:** Rail guide trolley
- 4- **LER:** Rail end trolley (*positioned at the end of the rails*)
- 5- Adjustable **rollers** for rails

- **Output: 1800m/day**

8 hour working shift with 432 meters lengths of LWR - Output can change according to work site conditions

- **Simultaneously laying 2 x LWR** to the right gauge
- **Safe handling** of rails
- **Accurate and direct positioning** on sleepers
- **Maintains the integrity** of the rails and sleepers.

STR

7



SLEEPERS

forks

OFF**Front fork***an attachment for the KGTs**(pages 104/5/8); 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 104/5/8); 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 104/5/8);
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 104/5/8);
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 104/5/8);
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 104/5/8);
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**

PCB

8

GE

Lighting generators

 **Weight** according to model

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

LIGHTING



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





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.



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

PCD

8



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

AVS 3-4

Lightweight warning device



AVS 3 ≈ 220 g

Weight 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

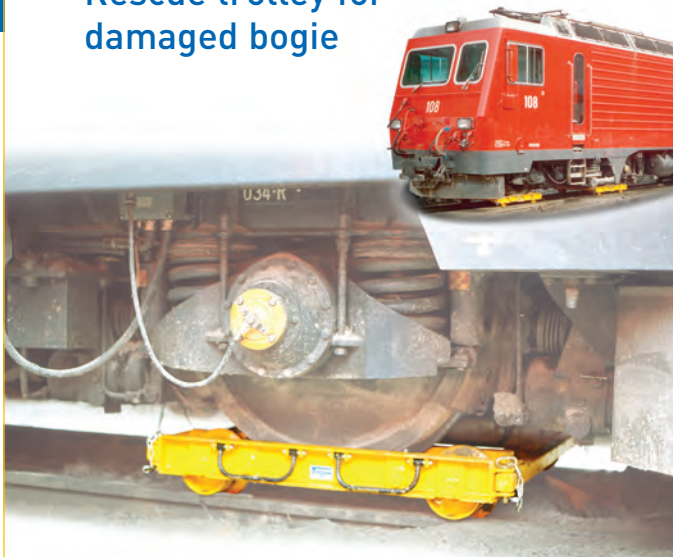
Rescue trolley for damaged bogie


Weight
± 220 kg

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

RESCUE

C2D



- 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

9

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



Weight

≈ 100 kg

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

RESCUE

Trolleys for the emergency services



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:

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



*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

The GEISMAR company is dedicated to excellency

The GEISMAR quality system is certified since 1997.

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 05 - 08/2018

Not a contractual document

Copyright © GEISMAR 2018

Printed France

- *We reserve the right to make any alteration or improvement to the specification, operating and maintenance instructions as well as to the spare parts list.*
- *All rights reserved. Any reproduction, even partial, by whatever process, is forbidden without preliminary authorisation. Any reprography system, photostatic copy, or other, stands for an infringement liable to the penalties provided by the law for copyright protection.*



113 bis avenue Charles-de-Gaulle
92200 Neuilly-sur-Seine - FRANCE

- Tel. : +33 (0)1 41 43 40 40 • Fax : +33 (0)1 46 40 71 70
- E-mail : geismar@geismar.com

YOUR CONTACT

Track laying & maintenance equipment

www.geismar.com