



ECO-TAMPING MACHINES

B35

MATISA



la passion du rail

B 35

Simple and efficient

Specifically designed for the South-American, Asian and African markets, the brand-new MATISA B 35 tamping machine range features one single head universal and two plain line, single and double head, machines. Well adapted for the specific conditions of these markets, this machine range features a simple design and is cost effective to use and to service, due to low maintenance costs and limited fuel consumption. Available in several track gauges, these machines are fitted with the high frequency elliptical tamping technology; a reference in terms of ballast compaction quality.

B 35 C

The universal single head machine

The B 35 C is a universal single head tamping machine. Equipped with four combined tamping units totalling 16 tamping tools and a hook and twin roller clamp, this tamping machine is perfectly suited to work on switches and crossings and on plain line.

Tamping unit advantages

- > Independence of each unit giving a great flexibility of use
- > Lateral swivelling of the units allowing unequalled speed of movement and positioning accuracy
- > Overlaid tamping tools that can be inserted in very narrow spaces
- > Very responsive "single-double sleepers" and "pre-closing" devices optimising the opening of the tamping arms where needed
- > Lateral outer reach of 1,800 mm from the track axis allowing to wedge the diverging track

Lifting and slewing clamp advantages

- > Fitted with twin rollers, this clamp can easily grab tracks with worn rails
- > The hooks replace the rollers in presence of obstacles and in narrow spaces
- > Fitted with a longitudinal movement, this clamp can be ideally positioned between the rail obstacles

The B 35 tamping machines benefit from the latest technologies developed by MATISA, in particular a human-machine interface with touch-screens and multifunction joysticks providing comfort and flexibility of use.

The "CATT" guiding computer combines reliability, flexibility and user-friendliness. Its modular architecture can integrate numerous additional functionalities, whether for known or unknown geometries.

The power unit is driven by a Scania® or CATERPILLAR® engine.

The MATISA unique "NEMO" optical measuring base ensures a very high accuracy and reliability when correcting the track geometry.

The B 35 can be fitted with an optical, laser or total station absolute measuring base, as well as with a "MIRIS" Module optimising unknown geometries.

A trailer added to the tamping machine provides additional functionalities such as ballast profiling or ballast clearing as well as track geometry recording after tamping.



This machine has two air-conditioned cabins fitted with working and driving posts.

The B 35 range can be fitted with devices to load the machine onto a road trailer.

Supported by a carrying axle and a motorised bogie, this machine is available in several track gauges from 1,000 to 1,676 mm.

As additional equipment, the tamping machine can be fitted with diverging track lifting devices. Other additional equipment is available on request.

B 35 A8

The B 35 A8 is a plain line single head tamping machine fitted with a plain line clamp and two tamping units totalling 16 tamping tools.

B 35 D

Supported by two bogies, the B 35 D is a plain line double head tamping machine fitted with a plain line clamp and two tamping units totalling 32 tamping tools.

Technical features

Standard equipment	B 35 C	B 35 A8	B 35 D
Frame on 1 axle and 1 bogie	•	•	–
Frame on 2 bogies	x	x	•
UIC continuous and automatic brake	•	•	•
Central couplers	•	•	•
SCANIA® engine	•	•	•
Hydraulic circuits for machine drive and tools	•	•	•
Pneumatic circuits for direct brake and accessories	•	•	•
24 V DC electrical circuits	•	•	•
230 V AC auxiliary power unit and electrical circuits	•	•	•
Air-conditioned driving and tamping cabins	•	•	•
Tamping units	•	•	•
Lifting and slewing clamp	•	•	•
Human-machine interface with joysticks and touch-screens	•	•	•
"NEMO" relative optical measuring base	•	•	•
"CATT" guiding computer	•	•	•
Driving and working mode lighting	•	•	•
Double track gauge predisposition	•	•	•
Technical data	B 35 C	B 35 A8	B 35 D
Minimum radius in working and driving mode	80 m	80 m	80 m
Travelling speed in self-propelled mode	80 km/h	80 km/h	80 km/h
Bogie wheelbase	9,500 mm	9,500 mm	9,500 mm
Engine power	328 kW	328 kW	354 kW
Driven axles	2	2	2
Basic fuel tank capacity	1,000 l	1,000 l	1,000 l
Tamping tools	16	16	32
Tamping tool vibration frequency	42 Hz	42 Hz	42 Hz
Tamping tool lateral reach	1,800 mm	-	-
Clamp lifting stroke	150 mm	150 mm	150 mm
Clamp lining stroke	± 200 mm	± 200 mm	± 200 mm
Clamp lifting force	2 x 125 kN	2 x 125 kN	2 x 125 kN
Clamp slewing force	150 kN	150 kN	150 kN
Plain line output with 1 insertion	600 m/h	600 m/h	1,100 m/h

Legend: • basic | x optional | – not available



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