

Simplex Track Relaying Machine



**SELF LOADING, UNLOADING,
LAYING & RELAYING OF RAILWAY
TRACK**



39 TRM MACHINES SERVING IN INDIAN RAILWAY

M/s Simplex Engineering & Foundry Works Pvt. Limited

have taken up the challenge for Manufacturing of Track Relaying Machine to growing needs and modernization of Indian Railways.

We offer this special purpose machine for handling, laying & re-laying the broad gauge Rail panel with concrete sleepers. We are confident that this machine will render its best Services to Indian Railways

- **SIMPLEX** machine of relaying shall consist of removing of the old track in panel length of 13 meter and placing in position new sleepers / pre-fabricated panels of the 13 meter length.

- **Our** machine shall be lifting one fabricated panel of 60 kg Rails with 13 meter length on 21 concrete sleeper and 4 To 6 numbers released rails of 60 kg at one time for unloading from the wagon.

- **The** time taken in lifting 13 meter concrete sleeper panel from wagon carrying it to 100 meter distance, laying in position, lifting the old panel next to newly laid panel and placing it on empty wagon at 100 meters distance shall be within 5 minutes.

- **Set** of two cranes shall be capable of relaying at least 200 meter per effective hour of working.

Technical Parameters for our Machine

Overall Length	: 3150 mm
Width	: 3850 mm
Height max.	: 4450 mm
Auxiliary Track Gauge	: 3400 mm
Wheel Base	: 2400 mm
Wheel Diameter	: 450 mm Tread dia
Weight approx.	: 12 Tons
Traveling speed	: 15 Km/hr.
Lifting capacity	: 12 Tons



Track Relaying Machine is Four-wheeled Hydraulically driven Machine, which consists of two basic structure units.

POWER SUPPLY

Engine: Air-cooled diesel engine made by Kirloskar Oil Engine Limited, HA 69495 BHP At 2000 rpm.

Arrangement : The power supply unit (Engine, pumps etc.) rests on And vibration mounting pads which are mounted on a sub frame, rigidly connected to the cross frame on the front side.

Fuel Tank : 240 Liters capacity.

BRAKES

: Hydraulically operated shoe Brakes acting On all four wheels.

Hand Brakes : Acting on one side on two wheel's tread diameter Controlled by hand wheel.

Control System : Brake cylinders are opened and closed through Directional Control Valve which helps braking and releasing of brakes on all four wheels.

ELECTRIC SYSTEM

24 Volt-DC System : Engine self-starter warning system, lighting system and working circuit. Two 12 V batteries connected in series capacity 80 Amp. hr. For rail clamps adjustment one lateral movement switch is provided in operating panel. All the 4 clamps can be adjust according to the panel position laterally.

RAIL CLAMPS

Working Method : Panel lifting (4 point attachment) : This is made of four in dependent sets of hydraulically locked and unlocked levers. Each set has two levers. Levers open and close by hydraulic cylinders.

Lateral Adjustment : Two rail clamps of rear are linked together and two clamps of front are linked together. It is controlled by hydraulic cylinder. Lateral movement of 100 mm



SIMPLEX ENGINEERING & FOUNDRY WORKS PVT. LTD.

65, Industrial Estate, Bhilai - 490026 (C.G.) India

Tel : +91-788-2283054/5/6, Fax : +91-788-2283058/9, Cell : +91-9229170105

E-mail : simplex@simplexengg.in , Visit us at : <http://www.simplexengg.in>

