

T2400FS

GENERAL CHARACTERISTICS

- **Engine**

Diesel PERKINS engine direct injection, turbocharged, 4 strokes, 4 cylinders, 74.5Kw power (99HP) at 2200 rpm, displacement 4400 cm³, liquid cooling electric starting. Low exhaust emission according to 2004/26/EU Step III and EPA Nonroad CFR 40 Tier III.

- **Transmission:**

All wheels drive with epicyclical reduction gear on hub wheels of the axle.

Hydrostatic transmission with hydraulic motor axial piston variable displacement fitted on the speed gear.

Machine provided with a three (3) speed gear box forward and reverse selected by hydraulic control from the cab

Front axle steering by hydraulic power steering unit.

Locking steering in rail travel operation.

Speed of machine on-road and on-railway is of 0-22 km/h

- **Rail – guide system and Stabilizers**

The rail wheel is driving by friction to tires.

The rail system axle is draft in a way that with the same operation, when lowering the axle, there is the contact between iron and tyres.

Adjustable pressure of contact between tire-steel wheel by threaded device, mechanical and hydraulic blocking of the steering axle.

The machine with road and rail axels permits a great versatility on the use.

In the short time the machine switch from rails operating state to the road operating state and vice-versa.

- **Tyres**

The loader is equipped with eight (8) tyres model 9.00 R20 XZM.

- **Stabilisers:**

When the machine is working as lifting equipment, must be to lock the swinging of the front axle by inserting, from the cabin, the hydraulic jacks.

The machine on all working condition doesn't use the hydraulic stabilizer leg.

- **Brakes**

Service brake, servo-assisted by hydraulic pump, independent front and rear brakes circuits controlled by pedal.

The braking system is in accordance to the CEE rules for road vehicles.

Release of parking brake by hydraulic switch.

Therefore a lack of pressure in the hydraulic system causes the parking brake operation.

- **Turret**

The rotation of the turret is given by a hydraulic axial piston motor coupled with an epicyclical reduction gear.

Mechanical safety locking of the swing turret for travel on the road and electro hydraulic locking at 180° for rail operation.

Counterweight swing turret radius: 1575 mm.

- **Boom**

Boom in two pieces, arm with hydraulically extension (stroke 700 mm).

- **Machine hydraulic system**

The machine is equipped with two (2) axial piston pumps variable displacement power control and four (4) gear pumps.

The two axial piston pumps feed oil to main control block to operate the boom, arm, swing, travel, bucket, telescopic extension and rail axle positioning.

Maximum capacity: 121 L/min lifting circuit + 121 L/min operation circuit

Maximum pressure at elevation circuit: 260 bar

Maximum pressure at operation circuit: 280 bar

The axial piston pumps circuit has the pressure indicator.

Gear pump n°. 1 feed oil to servo-control circuit

Maximum pressure at servo-control circuit: 30 bar

Gear pump n°. 2 feed oil to power steering circuit

Gear pump n°. 3 feeds oil to brake system and auxiliary operation.

Maximum pressure at auxiliary circuit: 150 bar

Air cooling system coupled at the engine.

Two control block valve hydraulic by means pilot device (joystick / pedal)

The total capacity of hydraulic system is 340 litres

- **Electrical Installation and Illumination**

The working voltage rating is 24 V and the plant is provided with a couple of accumulators of 100 Ah. The accumulators are fed by the alternator which supplies current at 27 A.

There is a light system to obtain excellent light during night work and tunnel work. The machine is equipped with front & rear light, stop lamp, working light, rotating strobe light on the cabin and lights and acoustic warning for reverse travelling.

- **Cabin**

The cabin is located on the side turret; it permits a very good visibility of the operation area

The front cabin glazed wind screen is protected with a metallic grid.

The seat of the operator is provided with shock absorbers and it is anatomically designed.

The machine has wide rear mirrors to get complete visibility of the whole working area

- **Controls and Work Safety**

All the operations of the machine must be operated only if the operator is sitting on his seat. Moreover all the levers for loading are provided with safe devices against undesired manoeuvring.

The machine is equipped with safety device to prevent the overload of machine.

- **Paint**

All components being exposed to surrounding conditions are painted with RAL 1003 numbered yellow paint on a layer of anticorrosive paint.

All warnings and labels written on the machine and in the cabin are in English language.

- **Performance**

Service weight: **17 t**

Lifting service capacities (without safety factor):

- On tires:
At side at max. reach **3200 daN**
- On level rail:
At side at max. reach **2150 daN**