

Dynamic Track Stabilizer



Frame

High strength boxed beam welded steel construction. Computer designed and analyzed for stress and deflection.

Physical Data

- Weight: 104,000 lbs. (47,170 kg).
- Wheelbase: 26.8 feet (8.1 m)
- Length: 513 inches (13.03 m)
- Height: 150 inches (3.8 m)
- Width: 55 inches (1397mm) from centerline to widest point (on right-hand side)

Wheels/Axles/Suspension

30 inch (762 mm) cast steel (AAR profile) wheels, solid forged steel axles, trunion mounted front axle and fixed rear axle equipped with shock pads at each wheel.

Drive Train

The final drive is essentially the same for both axles and consists of a hydraulic motor direct coupled to a 2 speed power shift transmission. The rear traction motor has 2 speeds which results in a total of four travel speeds. The operator can manually shift speeds "on the move" or he can allow the computer to handle the shifting automatically. Full time 4 wheel drive is a standard feature.

Brakes

Air operated with cobra type shoes. Equipped with failsafe feature at each wheel for automatic brake actuation in case of air pressure loss. Also acts as a parking brake.

Cab

Large, fully enclosed and climatized, mounted on air bags, accessible from either side of the machine via a rear platform and rear entry door. The air bags provide excellent ride comfort and added protection for the electronic components. The cab provides excellent visibility in work and travel.

Electrical System

24 VDC with a 175 amp alternator.

Controls

All working and travel functions are under the control of the onboard Motorola based computer. A color monitor displays work and travel windows as well as diagnostic information, instructions and help screens.

Hydraulic System

Two variable displacement piston pumps and 3 fixed displacement gear pumps. Left and right Downfeed valves as well as Work Traction valves are proportional type and all others are 24 volt.

Air System

Up to 28 SCFM depending on speed and turbo boost pressure. 100 psi operating pressure. 3 cubic foot reservoir with ASME certification.

Hydraulic Tank Capacity

243 gallons (920 L).

Fuel Tank Capacity

200 gallons (757 L).

Travel Speed

35 mph (56 km/h).

Work Parameters

- Work speed: 0–3 mph (1 mph is recommended)
- Vibration frequency: 0–45 Hz (33 Hz suggested)
- Horizontal force: 50 tons @ 45 Hz.
- Vertical force including workhead weight: 50,000 lbs. (22,680 kg) maximum.

Operation

The operator sets the desired downfeed pressure for each rail and the machine maintains that “Constant Pressure” until the operator changes it. The operator can monitor the crosslevel at the leading axle (before stabilizing) and at the trailing axle (after stabilizing), and increase or decrease the down pressure on either rail to ensure that the established crosslevel is maintained. The machine can work in either direction