# HARRYBILT ENGINEERING







## THE S SERIES RAIL SYSTEM

Harrybilt Engineering have partnered with Hitachi Construction Machinery to develop the S Series Rail Machine. This machine has been developed for the operator. Operators need a machine that can withstand the most severe working conditions while remaining safe, versatile, efficient and simple to operate. Harrybilt Engineering have developed this machine with the concept for safety first. The S Series is one of the safest Rail Machines on the market, manufactured in Australia for Australian conditions.

Harrybilt Engineering offer a "Turnkey Solution" with the S Series. This includes managing the purchase of the machine and installation of the Hi Rail or Rail Guidance System. It also includes supporting registration for required networks around Australia so the machine is Rail Ready when it leaves the workshop. The team also handles the purchase and installation of a Tiltrotator along with Harrybilt Engineering's own wide range of Rail Maintenance Attachments.



The S Series is one of the safest rail machine on the market. Built to withstand the most severe working conditions while also being reliable, versatile and efficient.



The S Series Rail Guidance System has retractable rail wheel assemblies that are installed on the excavator, positioning the vehicle on the rail while allowing the tires to continue to provide traction and braking. The blade has a mechanical twist mechanism to meet Australian Standard.



The S Series **Hi Rail System** can be set to either narrow, standard or broad gauges. A single manually operated valve is installed to switch from track to rail mode while still allowing the excavator to operate in travel mode.



## **RAIL GUIDANCE SYSTEM FEATURES**



- · The Rail wheels are adjustable to Standard and Broad Gauges.
- All wheels comply with Australian Standard AS 7514.4.
- · All wheels meet the P/D ratio.
- · The rail wheel bearings installed are the highest quality and are fully sealed against dust and water.
- The twist mechanism in the blade complies with rail regulator & Australian Standard requirements.
- · Rubber tyre contact on rail provides excellent machine breaking, acceleration and stability.
- The Hydraulic cylinders have integrated lock valves.
- Has a break away coupling for the hydraulic trailer brake activation on the stabiliser end.
- · A 50mm pin tow hitch on both ends of the machine to suit ring feeder tow system.
- All four rail wheels are fitted with park brakes to prevent "run aways".
- All the controls are operated from the driver's cabin.
- All hydraulic components are matched to excavator's specifications for flow rate, operating pressure and temperature.
- One emergency hand pump kit in the event of engine failure. This will allow the operator to lift the boom off the ground and raise or lower the front and rear rail system.

- The Machine conforms to all relevant sections of AS7500 series standards.
- Engineering certificates for the rail system through an independent RPEQ qualification Engineer.
- Directional Lighting is offered at the front and rear of the machine. This is a Red / White lighting system mounted to the Undercarriage.

### OPTIONS

- · Harrybilt Engineering are dealers and installers of a number of brands of Tiltrotators, such as Engcon and Steelwrist.
- The Height, Slew, Load and Virtual Wall System features a key lock out system for unauthorised actions. This includes a visual display touchscreen providing the operator with full status information to allow safe operation with all conditions.
- Height and Slew as well as a Slew only system is available for excavator movement control.







### **HI RAIL SYSTEM FEATURES**





- Rail wheels adjustable to Narrow, Standard and Broad Gauges
  - The gauge will be set to the customer's request prior to leaving the Harrybilt plant
- All wheels will comply with Australian Standard AS 7514.4.
- The Hi Rail wheel bearings are the tapered roller type and are sealed.
- · All wheels meet the P/D ratio
- · All wheels are insulated
- Twist mechanism in the drive end complies with rail regulator's requirements.
- Twist mechanism locks while stationary to provide a more stable work platform.
- · Derailment bars are fitted front and rear
- All wheels have a failsafe park brake and hold a minimum 1.30 grade.
- The brakes will provide minimum deceleration at least 0.9m/s2
- Hydraulic cylinders have integrated or hard piped counter balance valves.
- Break away coupling on drive end for hydraulic trailer brake activation.
- GPS speedometer will be installed in the cabin in easy view of the driver.
- 50mm pin tow hitch on the drive end of the machine to suit Ringfeder system.

- Machine conforms to relevant sections of AS7500 series standards
- Wheel sets are raised and lowered hydraulically
- · Hi Rail functions operated from the driver's cabin.
- Gauge change rack to assist when changing gauge.
- Engineering certificates for the rail system through an independent RPEQ qualified Engineer.
- One emergency hand pump kit in the event of engine failure. This will allow the operator to lift the boom off the ground and raise or lower the front and rear rail system.
- Directional Lighting is offered at the front and rear of the machine. This is a Red / White lighting system mounted to the Undercarriage.

#### OPTIONS

- Harrybilt Engineering are dealers and installers of a number of brands of Tiltrotators, such as Engcon and Steelwrist.
- The Height, Slew, Load and Virtual Wall System features a key lock out system for unauthorised actions. This includes a visual display touchscreen providing the operator with full status information to allow safe operation with all conditions.
- Height and Slew as well as a Slew only system is available for excavator movement control.

