

# TRANSIT/SWITCH GRINDERS

RGHC SERIES



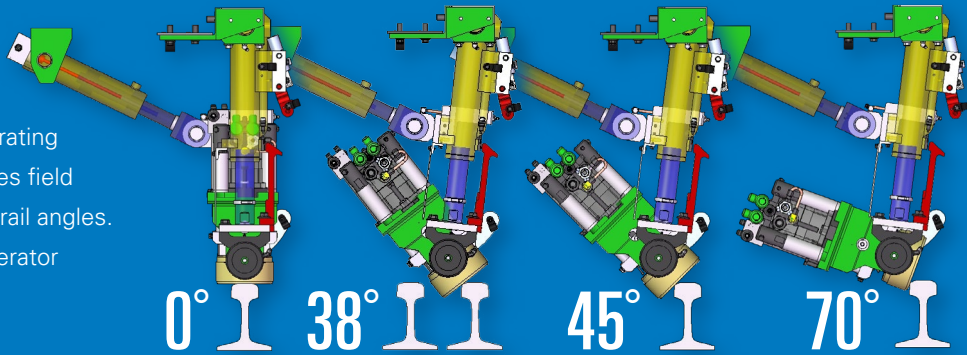
# TRANSIT/SWITCH GRINDERS

## SPECIAL FEATURES

Harsco Rail's RGHC Transit/Switch Grinder series, strives to create the optimal wheel / rail contact while prolonging the lifespan of the track. The machine can effectively grind switches, guarded curves, and road crossings and is available in various gauges including an adjustable gauge version. The Transit/Switch Grinder will extend the track life with enhanced performance at a low overall cost. It can be built as a 10, 20, 30, or 40 stone machine.

### Harsco Rail's Transit Rail Grinder

achieves unparalleled switch capability and is commonly referred to as a Switch Grinder. The grinding heads maintain an operating range of 75 degrees gauge side to 45 degrees field side which allows them to grind a variety of rail angles. Individual head control further allows the operator to set each head at different power rates, achieving maximum grinding efficiency.



### Grinding Units

The grinding system is equipped with independent, hydraulically powered grinding units fitted with abrasive wheels; the hydraulic motor powers the units at 6,000 RPM. The inclination angle for each grinding unit is determined by the operator from a preset pattern control. A patented linkage arrangement rotates the grinding unit at the same time that it translates across the rail. The grinding unit operating range is independently variable from 75 degrees gauge to 45 degrees field.

### Jupiter II Control System

Jupiter II is a distributed input / output control system developed to simplify the electrical control system while improving data management of equipment performance. It combines the latest in asset maintenance with equipment performance optimization. Jupiter II also reduces the risk of electrical malfunction and operational downtime. The control system delivers accurate, repeatable results and effective operator interface for computer-controlled applications.

### Laser Profile Measurement System

The Laser Profile Measurement System is a rail cross section measuring device. It provides accurate and reliable measurement of rail profiles in real time. The system is designed to function on board a grinding machine with minimum operator intervention.

### Dust Collection System

Each machine is equipped with an integral dust collector to evacuate the enclosure around the grinding units. This system collects airborne particles greater than .5 microns that are generated by the grinding process and stores the dust in drawers located at the bottom of the unit for convenient and easy disposal.

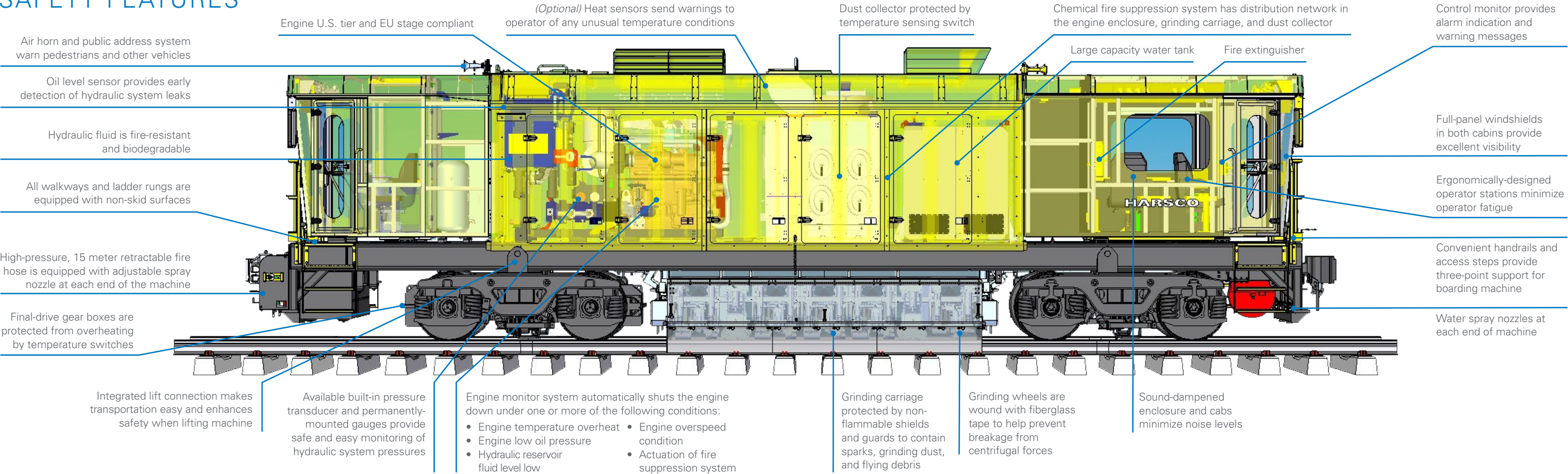
### Fire Suppression

The RGHC Transit/Switch Grinder carriage is skirted with protective shields and spark suppression devices to contain sparks and dust. The machine is also equipped with a 15 meter hose reel with adjustable spray nozzle, side water nozzles, 3,000 liter (790 gal.) water tank on-board, and an optional unit to inject foaming agents into water spray if needed.

### Control Cabins

The control cabins are designed with insulating materials to minimize external vibrations and noise. The windows have tinted, double-pane, argon-filled safety glass, and the cabin has an intercom system for inside and outside communication. There is full internal control of the machine with a computer control system. The auxiliary cabin is located at the rear end of the grinding machine.

## SAFETY FEATURES



# TRANSIT/SWITCH GRINDERS

## RGHC SERIES

### SPECIFICATIONS

#### RGHC-10

Length	13.4 m (44 ft.)
Width	2.64 m (8.7 ft.)
Transport Height	3.80 m (12.5 ft.)
Working Height	3.72 m (12.2 ft.)
Weight Per Car	39,500 kg (87,082 lbs.) Dry / 44,000 kg (97,003 lbs.) Wet
Max Travel Speed	80 km/h (50 mph)
Max Speed on 4% Grade	40 km/h (25 mph)
Max Superelevation	150 mm (5.9 in.)
Min Traveling Curve Radius	20 m (65.6 ft.)
Min Braking Rate on Dry Level Track	3.6 km/h/s (1 m/s <sup>2</sup> )
Max Towing Speed	100 km/h (60 mph)

#### RGHC-20

Length	27.07 m (88.83 ft.)
Width	2.64 m (8.7 ft.)
Transport Height	3.80 m (12.5 ft.)
Working Height	3.72 m (12.2 ft.)
Weight Per Car	39,500 kg (87,082 lbs.) Dry / 44,000 kg (97,003 lbs.) Wet
Max Travel Speed	80 km/h (50 mph)
Max Speed on 4% Grade	40 km/h (25 mph)
Max Superelevation	150 mm (5.9 in.)
Min Traveling Curve Radius	20 m (65.6 ft.)
Min Braking Rate on Dry Level Track	3.6 km/h/s (1 m/s <sup>2</sup> )
Max Towing Speed	100 km/h (60 mph)

#### RGHC-30

Length	40.49 m (132.8 ft.)
Width	2.64 m (8.7 ft.)
Transport Height	3.80 m (12.5 ft.)
Working Height	3.72 m (12.2 ft.)
Weight Per Car	39,500 kg (87,082 lbs.) Dry / 44,000 kg (97,003 lbs.) Wet
Max Travel Speed	80 km/h (50 mph)
Max Speed on 4% Grade	40 km/h (25 mph)
Max Superelevation	150 mm (5.9 in.)
Min Traveling Curve Radius	20 m (65.6 ft.)
Min Braking Rate on Dry Level Track	3.6 km/h/s (1 m/s <sup>2</sup> )
Max Towing Speed	100 km/h (60 mph)

Learn more at [harscorail.com](http://harscorail.com)



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