Progress Rail’s Maintenance-of-Way (MOW) division was born out of the movement toward mechanization in the railroad industry and introduced the first Kershaw® Ballast Regulator in 1945.

Today, Progress Rail supplies Kershaw® MOW equipment, providing machines to all Class I railroads, transit and short lines and contractors around the world.

The Kershaw® Model KSC2000 is a self-contained, self-propelled machine for excavating and cleaning the shoulder ballast, returning the cleaned ballast to the track, profiling the shoulder and sweeping the tie ends in one pass.
Shoulder Excavating System: The excavating (ditching) wheels are 12 ft. 9 in. (3886 mm) diameter with 30 in. (762 mm) wide buckets equipped with bolt-on carbide tipped wear plates. The hydraulic system has separate hydrostatic circuits to each wheel for independent operation. Maximum depth of cut is 15 in. (381 mm) below top of tie.

Conveyors: Two main loading conveyors with 48 in. (1219 mm) wide belts. Spoil conveyor under screen has 60 in. (1524 mm) wide belt. Swing spoil conveyor has 48 in (1219 mm) wide belt. Spoil can be discharged to distances up to 25 ft. (7620 mm) from the track center on either side of the machine or into a spoil wagon coupled to the front of the machine. All four large conveyors are variable speed with reverse control.

Screening System: A 8 ft. x 20 ft. (2438 mm x 6096 mm) single-shaft two-deck screen with multiple screen cloth configurations available. Manual leveling for super-elevated track as well as 20 to 33 degree variable angle operating positions for up to 2900 tons per hour.

Ballast Distribution System: 6.5 cubic yard return hopper with dual cylinder doors to regulate ballast return flow. Machine is equipped with shoulder profiling wings with articulating templates for profiling shoulders after ballast return. Also equipped with tie end plow and tie end broom for removal and sweeping of ballast from tops of ties and fasteners.

Shoulder Profiling System: Hydraulically controlled and adjustable wings profile cleaned ballast deposited on either or both shoulders to the desired width and slope. Hydraulically driven brooms sweep the tops of ties outside of the rails.

Hydraulic System: Independent hydrostatic system on all four main conveyors, excavator (ditcher) wheels, and propel motors. Open-loop system for cross conveyors, brooms, and cylinder functions. 350 gallon (1325 liter) hydraulic reservoir with in-tank return filters as well as suction strainers. In-line fill pump for replenishing hydraulic reservoir and filtering oil as the tank is filled. Twin air/oil coolers with 150 gpm max flow rating each.

Electrical System: 24 volt dc, negative ground for engine starting and solenoid controls. Equipped with Caterpillar D50-6 three-phase generator producing 45 kW output. Generator powered by Caterpillar C4.4 engine with remote in-cab control. Optional backup generator/welder/compressor combined unit available. Machine is equipped with LED AC lighting for night work.

Cabs: Loader car cab has a two-console setup for both travel and work modes with ergonomic seating for two. Loader car cab has controls for propel, excavating (ditcher) wheels, scarifier, screen and loader conveyors. Equipped with camera monitor and two diagnostic displays. Screen car cab has split console with two dual joystick seats for controlling left and right shoulders wings. Screen car cab has controls for tie plows, broom and screen car conveyors. Each screen car operator has an individual camera monitor with a shared diagnostic screen.

Engine: One Caterpillar C32 engine rated for 1125 hp (839 kW) @2100 rpm, Tier IV with dual 750 gallon (2839 liter) fuel tanks plus built-in transfer line to allow fueling from towed fuel car.

Propel System: Four two-speed transmissions powered by hydrostatic motors. Travel speed up to 30 mph (48 kph). Work speed of 2.5 (4 kph) to 3.5 mph (5.6 kph). Equipped with four trucks.

Brakes: One brake cylinder per truck providing equal braking force to all four wheels. Air applied with capability to run independent or in a train-line operable form machine cab or from locomotive when in train service.

Frame: The frames are all welded construction. The loading car is a split-I-beam design and the screen car is a box section design.

Weight: Loading car: 100 tons (90720 kg). Screen car: 107.5 tons (97524 kg).