

JCB boosts mid-range loader performance and comfort

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JCB is upgrading its mid-range wheeled loader range, introducing the proven DNA from its range-topping 457 wheeled loading shovel to the 427 and 437 models, along with the smaller 411 and 417 loaders.

Key features include:

- JCB's CommandPlus Cab delivers class-leading comfort and visibility
- Innovative CommandPlus Control system
- Tier 4 Final/Stage IV compliant engines with no costly Diesel Particulate Filter
- Single-piece bonnet for improved service access
- Range of loader arms to suit various industry applications
- Optional Wastemaster package available

Clean Performance

JCB's new 411 and 417 wheeled loaders are powered by the company's own EcoMax Tier 4 Final/Stage IV compliant diesel engines, delivering 81kW (108hp) in the 411 and a powerful 108kW (125hp) in the 417. The larger 427 and 437 loaders operate with a Tier 4 Final/Stage IV Cummins diesel engine, offering 133kW (179hp) and 136kW (183hp) respectively.

In line with JCB's overall emissions policy, both of these engines meet the latest emissions standards without the use of a costly Diesel Particulate Filter (DPF), reducing operating costs and complexity for the customer. All Tier 4 Final loaders now feature a single-piece engine hood that can be electrically or manually raised to provide improves service access to the engine and cooling pack. The machines drive through automatic powershift transmissions for maximum productivity and efficiency.

All four machines feature fine mesh bonnet grilles to trap larger particles before the air enters a cyclonic pre-filter. The engine cooling fan provides a cyclonic scavenge system to remove dust particles from the pre-cleaner, rather than using hotter exhaust gases to deliver the cyclonic action. Wide core cooling packs reduce dust accumulation, cutting the downtime required to blow out radiator cores. The single-piece bonnet also

helps to provide a seal around the engine bay, cutting dust and dirt ingress. A reversible cooling fan is available as an option.

Operator Comfort

All four of the new wheeled loaders will use the JCB CommandPlus cab, first seen last year on the larger 457. This totally new ROPS structure has B pillar's that have been moved out to the same width as the rear of the cab, providing a larger interior with a panoramic front windscreen. The machines feature JCB's Command Driving Position, with revised pedals, an adjustable steering column and seat-mounted hydraulic controls.

Switches and auxiliary controls have been repositioned on the right hand B pillar, providing the operator with a simplified interior and easy access to all machine controls. The loaders have full colour LCD screens that incorporate access to the loader's operating menus and act as a monitor for a rear view camera.

JCB's CommandPlus Control system allows the operator to adjust auxiliary flow rates on the main screen. It is also possible to use the monitor to adjust SRS boom suspension engagement speeds where fitted, and the timing of cooling fan reversal to clean out the cooling pack cores. The screen also offers an operator help system, that lists switch functions if required.

The cab benefits from increased internal space, as the heating, ventilation and air conditioning system has been repositioned outside the main cab structure. This provides additional storage for the operator, both behind the seat and in pockets in the front and side consoles. The new cab, in combination with on-demand cooling fans and the Tier 4 Final engines contribute to a cut in noise and vibration, reducing operator fatigue and boosting productivity.

Operators benefit from a range of seat and control options, with electro-hydraulic proportional auxiliary controls now fitted as standard. An electric parking brake is standard on the 427 and 437 and available as an option on the smaller models. The exhaust silencers, and air pre-cleaners are all situated below the bonnet to provide maximum visibility for the operator.

Job Specific Design

The 411 and 417 loaders come as standard with HT loader arms for easy load handling and improved tool-carrier performance. The loader arms are available in parallel and non-parallel lift for ultimate shovel handling characteristics. Bucket capacity is 1.4m³ for the 411 and 1.7m³ for the 417. The larger models can be ordered with a choice of HT or power ZX loader arms, in a range of lengths to suit every industry application.

The 427 operates with a 2.4m³ bucket while the 437 is equipped with a larger 2.7m³ shovel.

Source: wynnot GmbH; JCB