

# Repowered Bell Series V Tractor geared to meet customer expectations

After four years of development and testing of the new Bell Series V Haulage Tractor, the company's Product Marketing Manager: Forestry and Sugar, Etienne Terblanche, says "this latest version of an old stalwart is our best ever".

As with all new Bell products, the experienced Bell designers homed in on the key focus areas of functionality, reliability and efficiency. Using only the best components and the latest design software packages, designers on the fifth generation of Bell Haulage Tractors have acted on customer feedback to build on the company's solid haulage heritage by updating the proven 'designed to haul' drivetrain to deliver best performance and productivity benefits, and ultimately lowest cost per tonne.

The new series comprises of four models, the 1406A, 1406AF, 1736A and 1736AF, all designated according to engine power and whether the machine is a 2WD (A) or 4WD (AF) configuration. Together they provide solutions for various operating requirements.

"Across the range we've reintroduced the well proven John Deere 6.8l engine, to deliver more grunt than our outgoing series. Farmers love the John Deere engine and we're confident that this latest turbocharged, common rail diesel powerplant and a superior cooling package will meet and exceed customer expectations. Feedback we've received on our prototype units that have operated in South Africa and several neighbouring countries all indicate that the fuel economy of our Series V Tractor is the most economical in its class."

The engine is available in two power ranges, namely 140HP (104kW) and 173HP (129kW) and achieves the Tier 3 emissions certification without the need for a complex exhaust gas recirculation (EGR) system.

Coupled to the best-in-class Allison transmission, the Series V Haulage Tractor delivers power to the wheels. "The engine and transmission just work so well together," says Etienne. "The transmission is electronically controlled and features the latest hardware and software to deliver exceptional

comfort and fuel efficiency. The minimal torque interruption in the transmission allows the tractor to pull away smoothly and without loss of inertia through the gears even when towing a full 'cane train'. In addition, we have introduced Bell Traction Control as a standard feature on the 4x4 configuration. These tractors normally run in 4x2 but when the system identifies wheelspin in poor underfoot conditions it automatically switches to 4x4. The operator can also manually request changing to 4x4 on the dashboard."

The rear axle drum brakes are another noteworthy feature. "We've upgraded our braking system to increase stopping power by about 15% over our previous series, and any of our competitors," explains Etienne.

Operator comfort has been taken to a whole new level with a redesigned cab that features increased space for the trainer seat, a comfortable flat floor and a standard HVAC system. The internal panels are custom moulded with ABS thermoplastic to enhance the luxurious feel of the cab for the life of the machine. For improved reliability, standalone switches have been incorporated into a single, sealed switch module (SSM), which includes transmission control on the 1736A and AF models. Etienne says: "Behind every traditional switch is a connector, which is a source of potential issues. By comparison, the SSM has only a single connector for all 12 switches, to both reduce the possibility of faults and simplify fault finding in the unlikely event of switch issues in the field."

Importantly the Series V leans heavily on Bell Equipment's tried and tested haulage tractor heritage, with its unique characteristics that make it a better tool for haulage than a typical agricultural ploughing tractor. "The fabricated

steel chassis, heavy duty rear axle and hitch positioning ahead of the axle centre line, for improved steering and traction when trailers are fully loaded have all been retained along with key safety features, such as the ROPS/FOPS certified cab and pneumatic trailer braking," continues Etienne.

While the company prides itself on manufacturing strong, reliable machines, the Series V gets five stars for aesthetics from customers who have run prototype versions in their operations. The shapely composite bonnet opens upwards to 70 degrees

to provide excellent access for servicing, maintenance and daily checks.

"The Bell Haulage Tractor has been around for 45 years and has been trusted by thousands of owners to carry out the toughest haulage work. With our Series V we have been inspired by what our customers want, and we are proud to carry on this proud pedigree while offering our customers improvements over our previous generations," he concludes.

