Municipal Engineering Truck Mounted Crane - Official Technical Overview & Datasheet

EXECUTIVE SUMMARY

Engineered for the demanding environments of municipal construction, mining, and agricultural infrastructure, this Truck Mounted Crane represents the pinnacle of mobile material handling. As an integrated transport and lifting solution, it combines a heavy-duty commercial chassis with a powerful hydraulic crane, streamlining logistics and reducing the need for separate support vehicles on site . This equipment is specifically designed to navigate the tight confines of urban development zones while delivering the brute force required for heavy industrial applications, offering a versatile and efficient response to modern infrastructure challenges.

At the core of its value proposition is a synergy of power, precision, and safety. The unit provides a comprehensive solution for projects ranging from setting highway barriers and utility poles to handling heavy mining equipment components and agricultural silage. By centralizing transport and lifting capabilities into a single, highly mobile platform, it significantly minimizes operational downtime, reduces onsite manpower requirements, and enhances overall job site productivity, offering an exceptional return on investment for fleet operators .

STRUCTURAL INTEGRITY & POWERTRAIN

The foundation of this crane is a purpose-built, high-strength chassis, utilizing reinforced steel to ensure structural integrity under maximum torsional loads. The chassis is engineered with a three-floating structure design, which effectively reduces stress during vehicle transit, thereby prolonging the life of the frame and the crane itself . The powertrain is anchored by a high-performance diesel engine, available from leading manufacturers like Cummins or Isuzu, delivering the necessary torque and horsepower to operate the crane and haul heavy loads simultaneously. Emissions compliance is assured with options meeting stringent EPA Tier 4 Final and Euro VI standards.

Power is transferred through a robust transmission system to the hydraulic

pump, forming the system's beating heart. The fully hydraulic drive mode ensures smooth, precise, and infinitely variable control over all crane functions . This system features a high-efficiency pump and a large-capacity oil tank to ensure consistent flow and cooling, while the integral lifting winch structure minimizes energy loss and maximizes the system's operational lifespan .

KEY FEATURES & OPERATOR COMFORT

- Load-Sensing Hydraulic System: This advanced system delivers high operational efficiency by automatically adjusting hydraulic flow and pressure to match the exact load demand. This results in smoother operation, reduced fuel consumption, and superior control during precision lifts .

- Hexagonal Boom Design: The telescopic boom features a high-strength hexagonal cross-section, providing superior flexural capacity and torsional rigidity compared to traditional designs. This allows for longer reaches and higher lifting capacities at extended radii with enhanced stability .

- 360-Degree Continuous Rotation: A high-torque slewing drive enables smooth and continuous 360-degree rotation, offering unrestricted working coverage. This allows operators to handle loads in any direction without repositioning the vehicle, significantly improving workflow in confined spaces .

- Advanced Operator Cab & Controls: The cab is equipped with a high-back, air-suspended seat and climate control to reduce operator fatigue. The control panel features intuitive joysticks and a digital display for real-time monitoring

of boom angle, length, and load weight, ensuring accurate and safe operation. The crane can also be fully operated via a wireless remote, allowing the operator to stand clear of hazardous loads and maintain optimal visibility .

- Robust Stability System: Outriggers with wide-spanning stabilizers and anti-roll alarms provide a solid working base. The system ensures maximum stability during crane operation, preventing dangerous tipping and protecting the chassis and suspension from excessive stress .

COMPLIANCE & SAFETY STANDARDS

Safety is paramount in the design and manufacturing of this equipment. The crane is engineered to comply with the most rigorous global safety and quality standards. Key certifications include ISO 9001 for quality management systems and ISO 14001 for environmental management. The operator cabin and control stations are built to ROPS (Roll-Over Protective Structure) and FOPS (Falling Object Protective Structure) standards, providing a safe environment for the operator in the event of an accident . The hydraulic system incorporates overload protection and load-holding valves to prevent accidental drops. Furthermore, the vehicle and crane systems meet CE compliance for safety, health, and environmental protection standards, ensuring it is authorized for operation in the global market.

TECHNICAL SPECIFICATIONS

The following table provides an overview of key operational and dimensional parameters for the Municipal Engineering Truck Mounted Crane platform. All values are typical and may vary based on specific chassis and crane configurations.

<table border='1' style='border-collapse: collapse; width: 100%;'><tr><th style='padding: 8px; text-align: left; background-color: #f2f2f2;'>Parameter</th><th style='padding: 8px; text-align: left; background-color: #f2f2f2;'>Specification</th></tr><tr><td style='padding: 8px; border: 1px solid #ddd;'>Overall Dimensions (L x W x H)</td><td style='padding: 8px; border: 1px solid #ddd;'>~ 10,855 x 2,440 x 2,800 mm (Base Model) </td></tr><tr><td style='padding: 8px; border: 1px solid #ddd;'>Cargo Box Dimensions (L x W x H)</td><td style='padding: 8px; border: 1px solid #ddd;'>Up to 7,200 x 2,320 x 800 mm </td></tr><tr><td style='padding: 8px; border: 1px solid #ddd;'>Wheelbase</td><td style='padding: 8px; border: 1px solid #ddd;'>Configurable (e.g., 2000+4800 mm) </td></tr><tr><td style='padding: 8px; border: 1px solid #ddd;'>Engine Power (Typical)</td><td style='padding: 8px; border: 1px solid #ddd;'>Up to 180 kW / 245 HP </td></tr><tr><td style='padding: 8px; border: 1px solid #ddd;'>Gross Vehicle Mass</td><td style='padding: 8px; border: 1px solid

#ddd;'>18,000 - 23,500 kg </td></tr><tr><td style='padding: 8px; border: 1px solid #ddd;'>Max. Rated Lifting Quality</td><td style='padding: 8px; border: 1px solid #ddd;'>6.3 - 10,000 kg </td></tr><tr><td style='padding: 8px; border: 1px solid #ddd;'>Max. Lifting Height</td><td style='padding: 8px; border: 1px solid #ddd;'>Up to 13.2 m </td></tr><tr><td style='padding: 8px; border: 1px solid #ddd;'>Max. Working Radius</td><td style='padding: 8px; border: 1px solid #ddd;'>Up to 12 m </td></tr><tr><td style='padding: 8px; border: 1px solid #ddd;'>Rotation Angle</td><td style='padding: 8px; border: 1px solid #ddd;'>360° (Continuous) </td></tr><tr><td style='padding: 8px; border: 1px solid #ddd;'>Boom Form</td><td style='padding: 8px; border: 1px solid #ddd;'>Hexagonal, Telescopic (Multi-section) </td></tr><tr><td style='padding: 8px; border: 1px solid #ddd;'>Hydraulic System</td><td style='padding: 8px; border: 1px solid #ddd;'>Fully Hydraulic Drive, Load-Sensing </td></tr></table>