



7,000-95 HP NATURAL GAS ENGINE TEST CELL

CAT Remanufacturing Corinth



OVERVIEW

The CAT Remanufacturing facility in Corinth MS. Desired to expand test capabilities. The goal was to construct a new test cell with infrastructure and equipment capable of testing engines from 7,000 hp to 95 hp using both diesel and natural gas fuels. The execution of this project would expand rebuild capabilities and simplify rebuild logistics. First a preliminary engineering study was executed with Dyno-One leading the engineering and supply of the testing equipment. After completion of the engineering study the implementation of the project would begin. Dyno-One fulfilled final engineering and manufacturing of each system required. Once systems arrived on the construction site Dyno-One continued to offer project support throughout the integration process of each system. After completion of project integration, "Test Cell #6" was able to successfully test a greater range of engines than any other test cell has previously been capable of in the North American Market.

KEY FEATURES

EQUIPMENT SUPPLIED

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- 7,000 hp MAX (36,000 ft-lbs torque MAX) engine test
 - 95 hp MIN engine test
 - Diesel and Natural Gas fuel capable
 - 7,000 hp Automatically Coupled Tandem Dyno System
 - Featuring 2x Dyno-One SR3500 Eddy Current Dynamometers
 - Automated Transportation Fixture Pallets and Precision Docking
 - Precisely align engine and driveshaft automatically over a 16 ft length
 - Capable of transporting up to 50 tons of weight
 - Mobile dyno station affixed to pallet allows use of test cell facilities down to 95 hp
 - upgrade of existing test cart design to allow greater range of engine models and usage on mobile dyno station
 - Hydraulically automated sealed exhaust arm
 - Lubrication oil storage and conditioning unit packaged to fit predetermined space
 - 7,000 HP automatically coupled tandem dyno and starting system
 - Hydraulic alignment and docking system
 - Precision transportation and fixturing carts
 - Diesel fuel conditioning panel
 - Natural Gas fuel metering panel
 - Charged air cooling systems
 - Hydraulically controlled articulating exhaust arm
 - Articulating intake air ducts
 - Lubrication Oil filtration and storage unit
 - Lubrication Oil sampling station
 - Cooling water storage tanks
 - Hydraulic power unit
 - Combustion air filter
 - Diesel fuel heater
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