



TACH Systems Solutions for the Construction Industry

Electronic systems and machine automation for off-highway OEMs

Hardware

Software

IOT

SENSORS

CONTROL UNIT

CONNECTIVITY

HYDRAULIC CIRCUITS

ELECTRIC ACTUATORS

MACHINE OVERVIEW



STATUS **OK**

USAGE 82%

FUEL LEVEL 75%



Electronics, software and connectivity work together to provide intelligent, efficient and secure construction machines.



INTUITIVE HMI

Advanced touchscreen display with real-time dynamics, diagnostics and guided assistance in context.



CENTRALIZED CONTROL

Smart functions that control the machine, safety and connectivity with high reliability and security.



RUGGED CONNECTIONS

Sealed connectors and durable wiring to ensure reliable performance in the toughest environments.



INTELLIGENT SENSORS

Monitoring of pressure, position, temperature and other key parameters for predictive performance.



HYDRAULIC INTEGRATION

Seamless integration with hydraulic systems for precise control and maximum energy efficiency.

CAN CAN OPEN J1939



ELECTRONIC CONTROL UNIT (ECU)

Manages engine, hydraulic system and machine functions to ensure safety and intelligent operation.



I/O EXPANSION MODULE

Expands the machine's capabilities with configurable and flexible connections.



RUGGED CONNECTORS & WIRING

IP67/IP69K rated connectors and reinforced wiring ensure reliable communication and power supply in extreme conditions.



INTELLIGENT SENSORS

Smart components and sensors provide critical data for control, protection and predictive maintenance.



CONNECTED MACHINE

Telematics and cloud connectivity enable real-time monitoring, software updates and fleet optimization.



MAXIMUM UPTIME

High reliability and advanced diagnostics reduce downtime.



HIGH PERFORMANCE

Power, control and efficiency optimized.



BUILT FOR TOUGH CONDITIONS

Rugged industrial hardware designed for harsh environments.



READY FOR THE FUTURE

Scalable architecture for new features and technologies.



SECURE & CONNECTED

Cybersecurity, data protection and uninterrupted connectivity.



Connected fleet. Smarter construction.

Real-time data to maximize productivity,
operational efficiency and safety.

EXCAVATOR EX-215
Operating

📍 Utilization

70%

⛽ Fuel level

60%

📍 Location

Zone A

WHEEL LOADER WL-320
Operating

📍 Utilization

62%

⛽ Fuel level

45%

📍 Location

Zone B

TELEHANDLER TH-540
Operating

📍 Utilization

82%

⛽ Fuel level

71%

📍 Location

Zone C

COMPACT TRACK LOADER TS-270
Operating

📍 Utilization

91%

⛽ Fuel level

38%

📍 Location

Zone A

FLEET OVERVIEW

23

Total units

● Operating

16

● Idle

3

● Maintenance

2

● Stopped

2

UTILIZATION

Average utilization

72%

100%

0%

M

T

W

T

F

S

S

MAINTENANCE ALERTS

⚠️ 2 Critical

🔧 5 Upcoming

ℹ️ 3 Informational

DIAGNOSTICS

🔧

System status

🟢 All systems normal

FUEL CONSUMPTION

Last 7 days

Liters per operating hour

%

0

M

T

W

T

F

S

S

POSITION TRACKING

📍

9:41

< Back

Unit details

EXCAVATOR EX-215

Operating

🔧

Real-time data

Utilization

70%

Fuel level

60%

Engine hours

1,320 h

System status

🟢 All systems normal

🟢

Overview

Fleet

Alerts

More

Overview

Fleet

Alerts

More



REAL-TIME VISIBILITY

Monitor position, status
and performance in real time.



PREDICTIVE MAINTENANCE

Reduce downtime with advanced
alerts and diagnostics.



OPTIMIZED UTILIZATION

Improve efficiency
and reduce operating costs.



SAFETY & COMPLIANCE

Improve site safety
and ensure compliance.



CENTRALIZED MANAGEMENT

One platform to manage
your entire fleet.



- ➡ Machine control architecture
- ➡ Motion control and electric actuators
- ➡ Custom system design and operator interface
- ➡ Digitalization and connected services
- ➡ Safety-oriented architecture
- ➡ End-to-end engineering approach
- ➡ OEM-oriented co-engineering





Integrated electronic systems,
more efficient, connected,
and controllable machines.

www.tachsystems.com



MACHINE OVERVIEW



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