

# **MINExpo**

Komatsu America Corp.

Dave Grzelak Chairman Rod Schrader
Vice Chairman & CEO

**September 24, 2012** 

# **Komatsu America Corp**

**Mining Division** 

**Construction and Utility Division** 

**Parts Division** 

















# **Holding Companies & Subsidiaries**















## **Komatsu North America Manufacturing Operations**



### Peoria, Illinois

- Mining Truck Mother Plant
- Worldwide R&D for **Electric Trucks**



## Rolling Meadows, IL

Headquarters



### Ripley, Tennessee

- Parts Distribution Center
- Reman Coordination Center



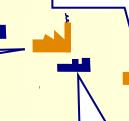
# **Newberry, South Carolina**

- Wheel Loaders
- Forklifts



## Chattanooga, TN

- Excavators
- Forest Equipment
- Supply Chain Div.



## Hensley Industries, Dallas, Texas

- **GET**
- Work Equipment (Buckets / Blades)



- Demo Site
- Training Facility



# Chattanooga Manufacturing Operation Chattanooga, Tennessee

# **Main Products:**

- Medium-sized hydraulic excavators
- Forestry Equipment

# Komatsu America Corp. Chattanooga Manufacturing Operation



PC210LC-10 Tier 4 Excavator

**Assembly Line** 

# Newberry Manufacturing Operation Newberry, South Carolina

# **Main Products:**

- Wheel loaders
- Forklift trucks

# Komatsu America Corp. Newberry Manufacturing Operation







Forklift Assembly Line

**FG30HT Forklift** 

WA380-7 Working at NMO

# Peoria Manufacturing Operation Peoria, Illinois

# **Main Products:**

Super-large dump trucks

Komatsu America Corp.

Peoria Manufacturing Operation







# **Cartersville, Georgia Demo and Training Site**





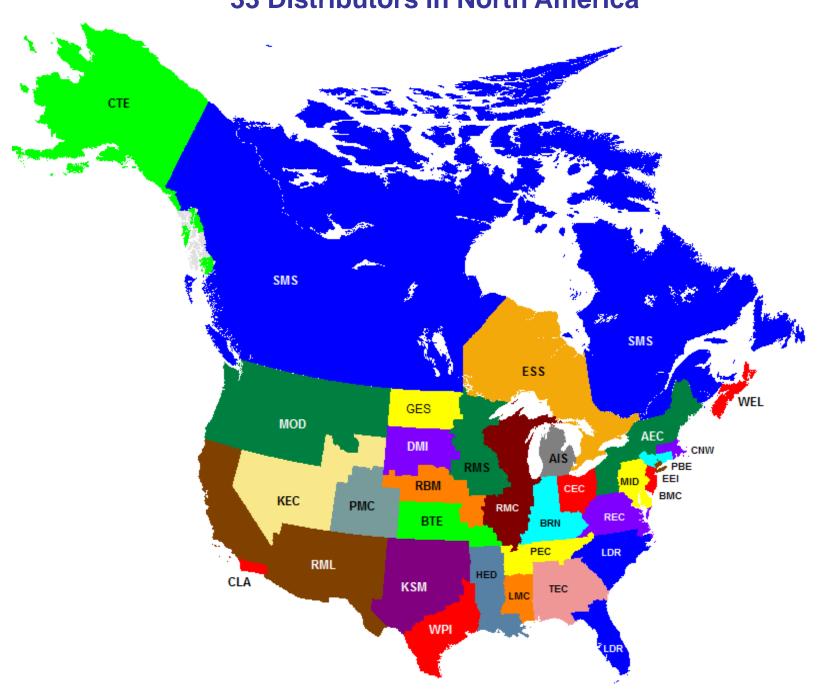








# 33 Distributors in North America



# **Ripley Parts Operation**

- 56 acre site
- 584,000 square feet inside storage
- 15,060 inbound/outbound trucks per day
- Over 2,500,000 line orders shipped annually
- Over 10,200 line orders shipped per day



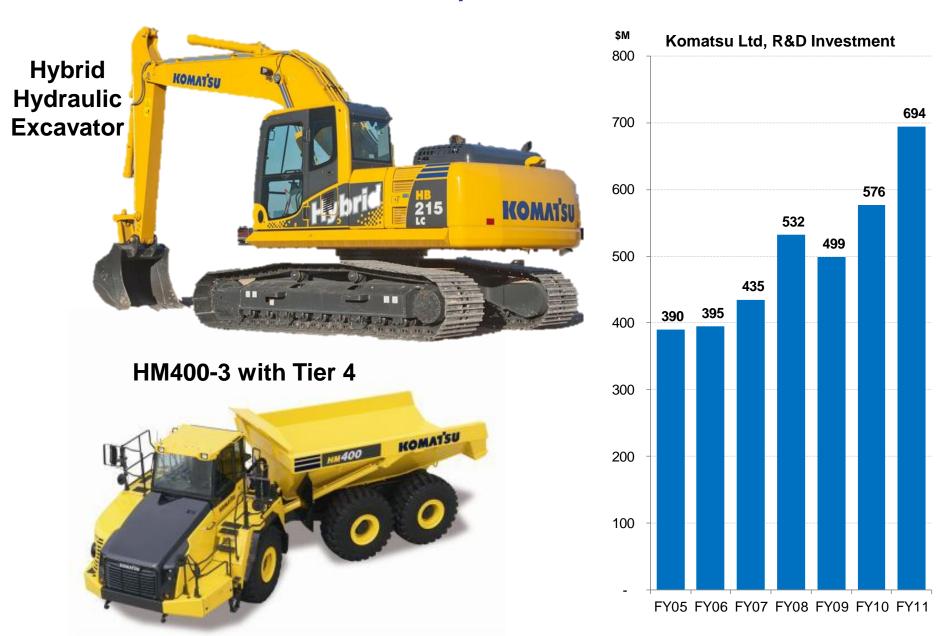
- Inbound preparation
- Packaging, kitting, refurbishing



# **Support from a Strong North American Parts Logistics Network**



# Komatsu Continues to Invest in Research and Development for New Products

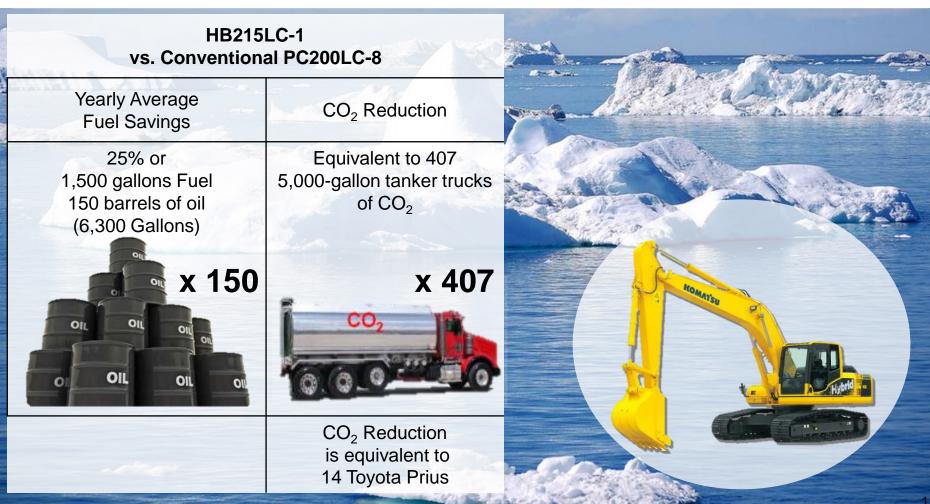


# Second Generation Hybrid HB215LC-1 Introduced in 2011

Continuing its commitment to innovation and environmental focus Komatsu has introduced the second generation Hybrid 20-ton excavator.

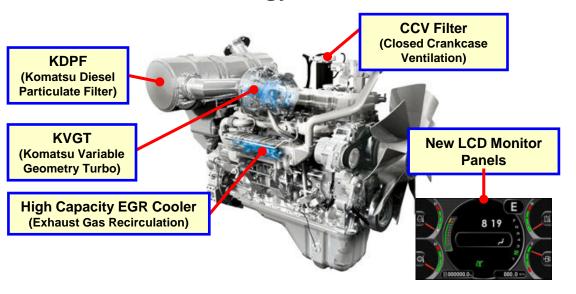
Following the successful milestone of 1,000,000 hours of operation with the first Generation Hybrid, the HB215LC-1 has been improved to continue reducing fuel consumption and emissions.

Environmental stewardship begins with the realization that ecology is intertwined with the economy and our industry. Protecting the environment is not only our responsibility but also our mission.



### Komatsu's Tier 4 Solution

## **Komatsu Technology**



### **Komatsu Performance**

### NON STOP PRODUCTION

- Automatic Regeneration
- Updated Cabins

## **Low Operating Costs**

- Reduced Fuel Consumption
- Komatsu Care

### **Peace of MIND**

- Komatsu Engineering
- Komatsu Care

### **Komatsu Results**

- Successful Introduction
- Over 1,000,000 Hours of Operation In the Field
- NO major quality or reliability issues
- High Performance

### **Tier 4 Products**

### **Dash 10 Excavators**



- Komatsu Tier 4 Interim powertrain
- Increased lift capacity
- Reduced fuel consumption
- New Cab
  - Heated seats
  - Radios with Aux inputs
  - Improved monitor
- Produced in Chattanooga, TN

### **Dash 7 Wheel Loaders**



- Komatsu Tier 4 Interim powertrain
- Lock-up torque converters
- Reduced fuel consumption
- New cab
  - Heated seats
  - Rear view camera
  - Better front visibility
  - Radios with Aux inputs
  - New monitor
- Produced in Newberry, SC

## **Tier 4 Products**

### D65-17 and D155-7 Dozers



- Komatsu Tier 4 Interim powertrain
- Lock-up Torque Converter
- Sigma blade for high production
- Reduced fuel consumption
- New Cab
  - Heated seats
  - Radios with Aux inputs
  - Improved monitor

### **Dash 3 Trucks**



- Komatsu Tier 4 Interim powertrain
- Komatsu Traction Control System
- Increased payload
- Reduced fuel consumption
- New cab
  - Heated seats
  - Rear view camera
  - Radios with Aux inputs
  - New monitor



## **Industry Leading Customer Support for Industry Leading Products**

- Komatsu Care is a complete service and advanced product support solution that Komatsu and our Distributors provide to our customers throughout the entire life cycle of the machine.
- Komatsu Care helps our customers reduce their operating costs and maintain high levels of customer satisfaction.

# **Komatsu Care Programs**

- Complimentary Maintenance
  - 3 years or 2,000 hours
- Complimentary KDPF Exchange
  - 2 exchanges within 5 years



# **Customer Benefits**

# NON STOP PRODUCTION Low Operating Costs Peace of MIND

# **Intelligent Machine Control Technology**

Integration of GPS technology content into many models of Crawler Dozers, Hydraulic Excavators, Motor Graders.

Automatic grading systems transfers 3D grade information to operator without reliance on grade stakes.



#### **Benefits to Customers:**

- Increase Grading Productivity
- √ Control Material Cost
- ✓ Increase Profitability
- ✓ Bid More Competitively
- ✓ Work Faster
- ✓ Use Resources More Effectively
- Achieve Better Results
- ✓ Reduce Grade Staking Costs



### **KOMTRAX & KOMTRAX Plus**

### **Komatsu Machine Tracking System**

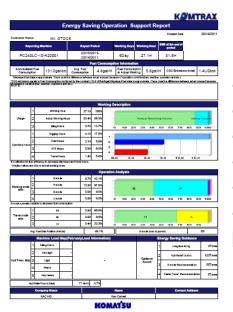
### **KOMTRAX**

- Increased Productivity and Availability
  - Maintenance Alerts
  - Monthly Status Summary
  - ~ Daily Reports
- Asset Utilization and Safety
- Lower Fuel Costs



### **KOMTRAX Plus**

- Monitors health of major components
- Diagnostics of key engine, chassis, and drive system components
- Satellite transmission, wireless bridge or laptop download of data enable technicians to do detailed analysis



## **KOMTRAX 4.0 New Features**

- Altitude and altitude change notices
- Tons of CO2
- Odometer
- Cycle Frequencies
- •Fuel consumption idle
- •Fuel consumption actual working hours









# **2012 Recognition Program**

Target customers to be engaged by distributors for coaching on Idle-Management













# Komatsu Global Mining Equipment Business

















Komatsu Global Mining Strategy

**Broad Product Offering** 

**Shovels** 

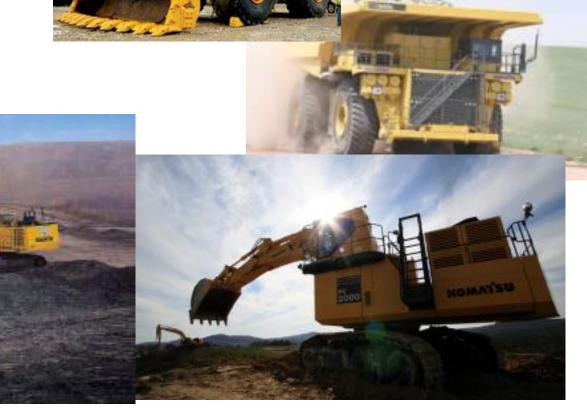
**Trucks: Mechanical & Electric** 

**Dozers** 

**Wheel Loaders** 

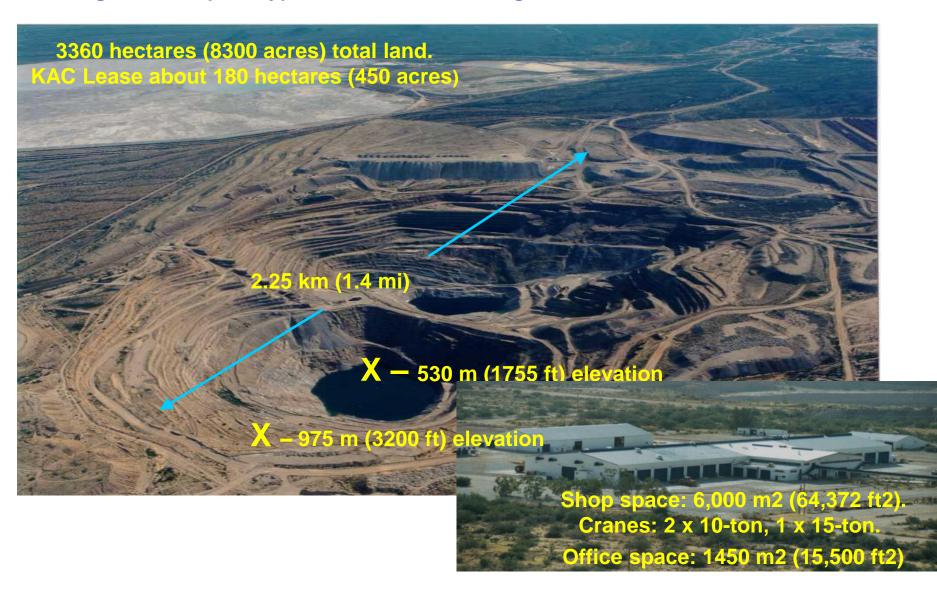
**Graders** 

**Ground Engaging Tools** 



## **Leading Technology Tested at Komatsu's Arizona Proving Grounds**

Komatsu confirms the quality before delivering new equipment to the market by testing ALL new prototype trucks at our Proving Grounds.





# Komatsu Global Mining Strategy Leading Edge Technology

- Autonomous Trucks
- MMS Integrated systems (Dispatch, MineCare, ProVision)
- KOMTRAX Plus







## **Komatsu Autonomous Timeline**



# **Komatsu's Autonomous Haulage System**

#### **Fleet Control**

- Flexible and expandableManual vehicle interaction
- Grader interaction

### **Dumping site**

- Paddock dump (Auto path generation) Crusher dump (Designated location)



### **Master Link**<sup>TM</sup>

### Hauling

- Precise navigationHigh speed and robust control



# **Loading Site** Automatic path

generation to loading machine

- Reliable

### **Proven Value of AHS**



## Safety

- Removes truck operator exposure to mining environment risk
- Reduces risks associated with operator fatigue

### Precision

- Reduces cycle time variability
- Facilitates precise truck spotting

## Productivity

- Increases equipment utilization and fleet availability
- Reduces misdirected loads

### Costs

- Lessens infrastructure and support staff requirements
- Reduces tire, and labor cost per ton
- Extends select components life through operating to design specifications

## 150 Komatsu Autonomous Trucks in Pilbara Iron Ore Mine by 2015

# KOMATSU

Products

Company Info

Press Release

Investor Relation

Komatsu & Rio Tinto Enter into Agreement for 150 Autonomous Truck Deployment into Pilbara Iron Ore operations by 2015

Komatsu Ltd. (President and CEO: Kunio Noji) (hereinafter Komatsu) and Rio Tinto (Chief Executive: Tom Albanese) November 1 in Japan, signed a Memorandum of Understanding (hereinafter MOU) to take the next

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reduce carbon emissions."

Kunio Noji (left), President and CEO, Komatsu Tom Albanese (right), Chief Executive, Rio Tinto mmitting tralia by

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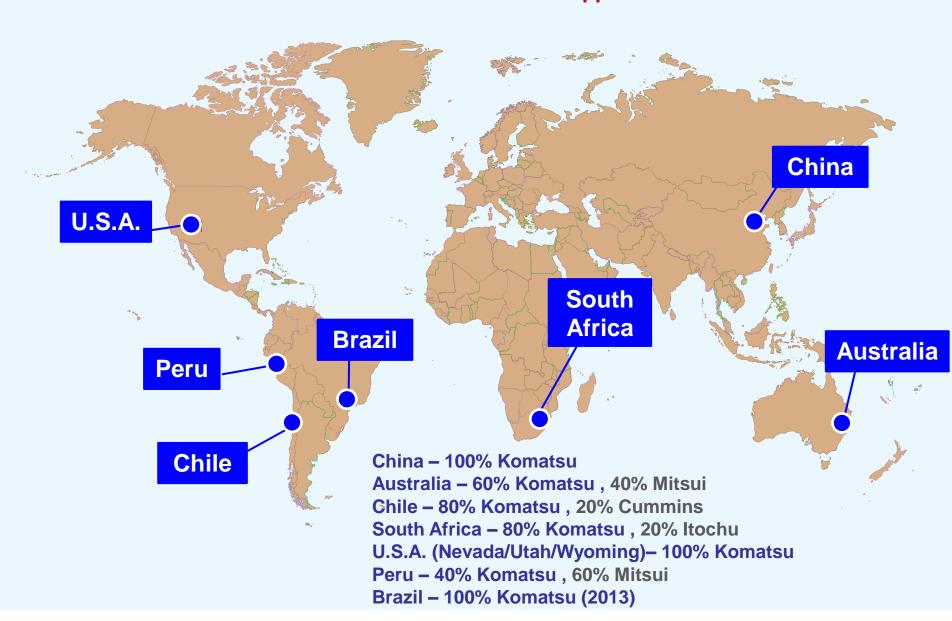
Autonomous haulage is an important component in our Mine of the Future™ programme. These new 150 Autonomous trucks will work with our pioneering Operations Centre that integrates and manages the logistics of 14 mines, three ports and two railways. These technologies are revolutionising the way large-scale mining is done, creating attractive hi-tech jobs, and helping us improve safety and environmental performance, and

2011/11/02

KOMATSU Corporate Communications TEL: 03(5561)2616

# **Komatsu Global Mining Distribution & Support**

Large Mining Markets Served Through Komatsu-owned Distributors for Consistent Global Support

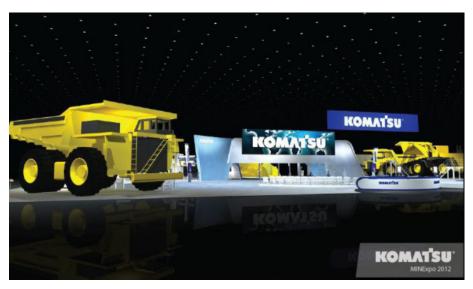


# MINExpo 2012



September 24-26, 2012

Las Vegas Convention Center Las Vegas, Nevada USA





# Explore the Future of Mining





# MINExpo 2012

### **Equipment**

- 960E
- 730E
- D375
- PC4000
- WA900
- HD785



### **Solutions Workshop**

- Extending Machine Life with Komatsu Engineered Products
- Chart Your AE Course With Komatsu Software
- Maximize Efficiency with Komatsu On Board Monitoring--Komtrax Plus
- Trolley Assist Considerations to unearth this hidden gem
- Improving Operator Behavior With Immediate Positive Feedback
- Addressing the Problem of Operator Fatigue in Mining
- Reducing Undercarriage Operating Cost with Komatsu Dual Bushing
- Autonomous Haulage Overview

The "Future of Mining" is not only the latest in Komatsu Equipment, Technologies and Solutions.

The "Future of Mining" truly is greater collaboration between Komatsu, our Distributors and our Customers in order to make them safe, more environmentally friendly and more efficient.

### **Technologies**

- MMSI
- AHS
- KomVision
- Trolley Assist
- Komtrax Plus

# Thank you

