



NEXT-GEN MANUFACTURING: Safe. Sustainable. Scalable.

DAN CAMPION, VICE PRESIDENT OF OPERATIONS / LARGE POWER SYSTEMS DIVISION

CATERPILLAR[®]

AGENDA



WHY DEMAND IS DIFFERENT NOW

HOW WE MODERNIZE

**INSIDE THE FACTORY – SEE MODERNIZATION
IN ACTION FROM START TO FINISH**

Heads & Rods

Big Block Machining

Crankshafts

Packaging

THE POWER OF OUR PEOPLE

WHAT WE CAN DO AS LEADERS

CATERPILLAR®

DAN CAMPION



VICE PRESIDENT OF OPERATIONS

Large Power Systems Division

Dan is responsible for overseeing operations and supply chain for four facilities; Lafayette, IN; Tianjin, China; Mapleton, IL and Hodges, SC.

Over 20 Years of Caterpillar Experience

- Vice President of Operations
- Vice President of Turbomachinery Products
- Director of Turbomachinery Operations
- Director of Lean Manufacturing
- Master Black Belt, Solar Turbines
- Master Black Belt, Caterpillar

- ▶ Prior to this role, Dan served as the vice president of turbomachinery products for Solar Turbines, a Caterpillar company.
- ▶ He started his career at Caterpillar in 2002 after holding leadership roles in increasing responsibility and moved into manufacturing operations in 2008.
- ▶ Dan served in the United States Marines and received his Bachelor Degree in Manufacturing Engineering from Tufts University and an MBA from University of Southern California.
- ▶ He enjoys spending time with his daughter and traveling to San Diego and New Mexico, where he raises cattle on his ranch.

Future-Ready Manufacturing: Safe. Sustainable. Scalable.

Engineering PQVC – People, Quality, Velocity, Cost – into every decision



Customer-Back Reality: AI/data centers and utilities need reliable power, fast



Manufacturing Response: Modernize facilities, automate safely, build flexibility into flow



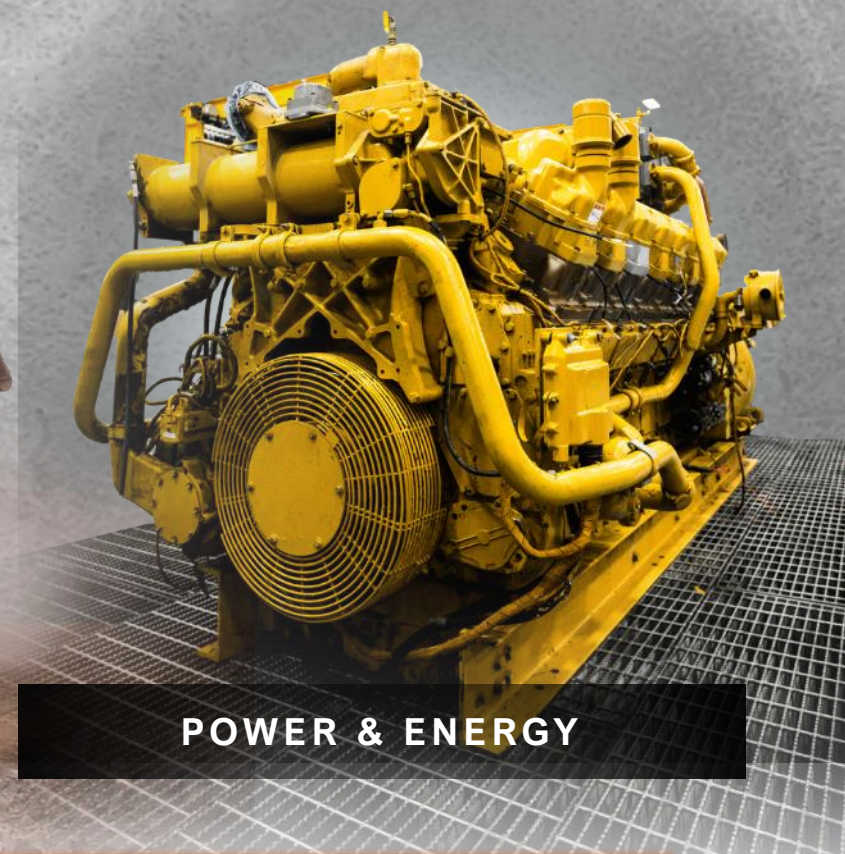
PQVC at Production Scale: A look inside four of our value streams



CONSTRUCTION INDUSTRIES



RESOURCE INDUSTRIES



POWER & ENERGY

\$65B

**2024 SALES
& REVENUES**

140

**LOCATIONS ACROSS
24 COUNTRIES**

112,900

EMPLOYEES

4M+

**CAT® PRODUCTS
AT WORK¹**

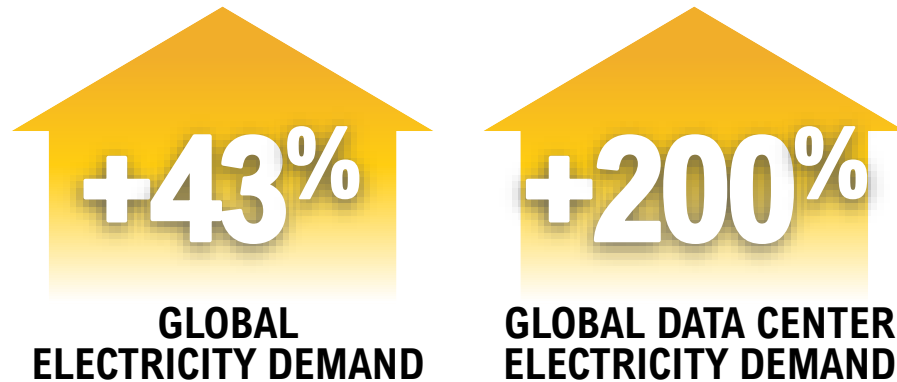
152

**INDEPENDENT
CAT DEALERS**

Ensuring Customer Success with Fast and Reliable Solutions

Historic Electricity Demand Creates Opportunities

FUTURE OF ENERGY 2023 - 2035



GROWTH OPPORTUNITIES



PRIMARY AND BACKUP POWER TO SUPPORT AI AND DATA CENTERS



RELIABLE DISTRIBUTED GENERATION AND GRID SUPPORT

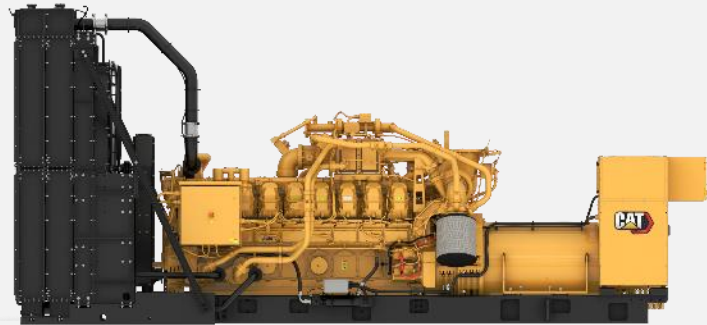


NATURAL GAS AS A CRITICAL SOURCE OF ENERGY

Sources: IEA Stated Policies (2024), World Energy Outlook 2024, IEA, Paris <https://www.iea.org/reports/world-energy-outlook-2024>, License: CC BY 4.0; IEA (2025), Energy and AI, IEA, Paris <https://www.iea.org/reports/energy-and-ai>, Licence: CC BY 4.0

Working Closely With Customers to Align With Demand Outlook

Expanding Capacity to Meet Record Backlog



LARGE ENGINES

**2x
CAPACITY**

PREVIOUSLY ANNOUNCED (REBASED TO 2024)¹



GAS TURBINES

**2.5x
CAPACITY**

ANNOUNCED TODAY (COMPARED TO 2024)

ADDING CAPACITY ANNUALLY THROUGH END OF THE DECADE

¹ Previously announced as 2.25x compared to 2023, now rebased to 2024.



VALUE STREAM 1 / HEADS & RODS

WE HELP OUR CUSTOMERS BUILD A BETTER, MORE SUSTAINABLE WORLD.

CATERPILLAR[®]

The Future of Work: Fewer Strains, More Gains

Robots on Our New Heads and Rods Line Do the Work. People Drive the Results.

People + Safety

Quality

Velocity

Sustainability



The Caterpillar logo, a yellow triangle with a black outline, is positioned behind the letter 'A' in the word 'CATERPILLAR'.

CATERPILLAR



RODS

2 Lines

28 Machines

36 Robots

PQVC BY DESIGN

HEADS

7 Lines

28 Machines

33 Robots

2 Systems



VALUE STREAM 2 / BIG BLOCK MACHINING

WE HELP OUR CUSTOMERS BUILD A BETTER, MORE SUSTAINABLE WORLD.

CATERPILLAR[®]

Big Block Machining – Designed for Flexibility

People + Safety

Quality

Velocity

Sustainability



We Build While We Run – and Safety Always Comes First



**Protected Zones with
Controlled Access**



**Daily Cross-functional
Coordination**



**Cross-platform
Flexibility**

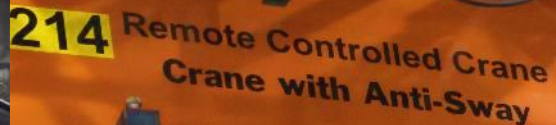


**Zero-surprise Safety
Approach**



A quadruped robot, resembling a dog, is walking through a large warehouse. The robot is orange and black. It is surrounded by stacks of pallets wrapped in clear plastic. The floor is concrete with yellow and blue markings. The ceiling has many lights and structural beams. A yellow box with a white background and a yellow border is on the left side of the image, containing text.

**QUADRUPED ROBOT
MAPS OUT THE FACILITY
FOR QUICK LAYOUT**



**214 Remote Controlled Crane
Crane with Anti-Sway**

4 TON

SMART CRANES: ENHANCED SAFETY AND PREDICTABLE FLOW

**Over 1,000 New Cranes
With 25+ Enhanced Features**

- Push-to-Operate Switch
- Shock Load Prevention
- Overload Protection
- Load Floating
- Sway Control
- Snag Prevention
- Hook Centering
- Sway Control





VALUE STREAM 3 / CRANKSHAFTS

WE HELP OUR CUSTOMERS BUILD A BETTER, MORE SUSTAINABLE WORLD.

CATERPILLAR[®]



WFL MULTI-PROCESS MACHINING: PRECISION AT THE PACE OF DEMAND

ELIMINATES
1000 LIFTS
PER DAY

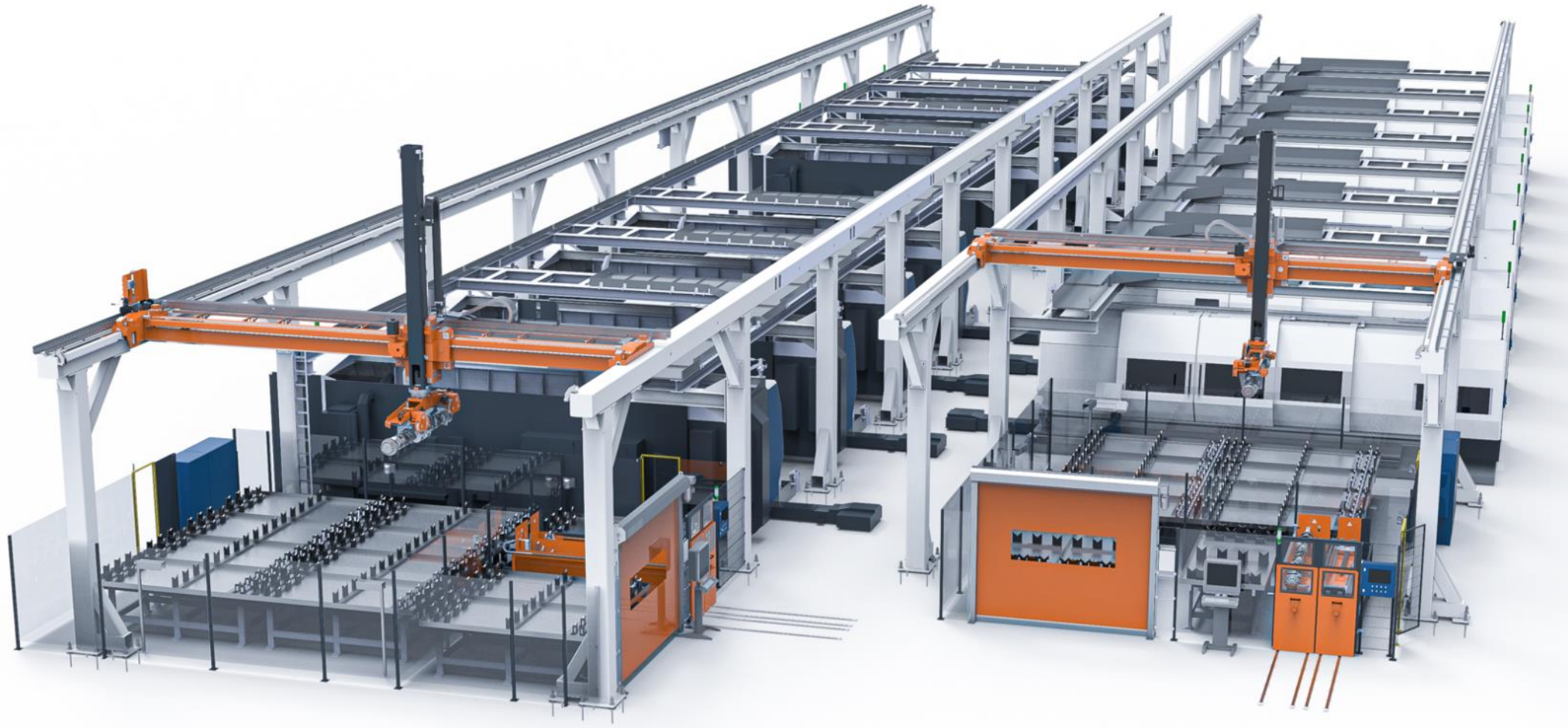
REDUCES
MATERIAL
MOVEMENT

INCREASES
PRODUCTIVITY 2X
CRANKS / TECHS

DELIVERS
FLEXIBILITY /
REDUNDANCY

IMPROVES
PROCESS
CAPABILITY

Auto Mill Turn Layout: Some Assembly Required



Build Process Gantry





VALUE STREAM 3 / PACKAGING

WE HELP OUR CUSTOMERS BUILD A BETTER, MORE SUSTAINABLE WORLD.

CATERPILLAR[®]

From Machining to Packaging: Continuous, Predictable Movement



Proof in Motion: The First Package from the New Conveyor



Automating the Final Stretch: Safe, Precise, Predictable Flow

People + Safety

Quality

Velocity

Sustainability



The Power of Our People: Upskilling Our Workforce



Turn Modernization From A Project Into A Culture

What We Can Do As Leaders

ENGINEERED SAFETY CONTROLS

BUILD FLEXIBILITY INTO THE SYSTEM

MAKE FLOW VISIBLE AND MANAGEABLE

UPSKILL PEOPLE WITH PURPOSE

PQVC MOVES TOGETHER

When leaders focus on flexibility, engineered safety controls, flow, and purposeful upskilling, PQVC improves naturally:

- Enhance safety and work smarter
- Quality becomes repeatable
- Velocity increases
- Cost/Sustainability improves

QUESTIONS



GRACIAS

TERIMA
KASIH

KIITOS

ARIGATO

ありがとうございました

**THANK
YOU**

감사합니다

OBRIGADO

HVALA

MERCI

DANKE

谢谢

BARKA

शुक्रिया

SHAKRAAN

GRAZIE

BEDANKT