Today’s Railway industry is faced with challenging issues surrounding NDT of wheel sets and axles. More stringent materials analysis requirements are moving the industry away from manual NDT to more automated processes offering efficiency, quality and repeatability. AREVA provides a full range of automated NDT systems to meet today’s requirements that are expandable to meet the challenges of tomorrow.

AREVA is a world leader in the energy industry with over 30 years of innovation, development, and commitment to success in advanced NDT solutions. AREVA’s knowledge and experience originated in the nuclear services industry, and for the last 15 years has expanded into other regulated NDT markets including railway, steel forging and aerospace.

- AREVA employs over 50,000 people in three major regions
  - France
  - The United States
  - Germany
- 5,000 of these employees are based in one of our three North American locations
  - Lynchburg VA
  - Charlotte NC
  - Benicia CA
- AREVA’s global NDE Solutions group has 700 employees located within the three major regions
Fully automated under-floor wheel set inspection system offering high productivity and repeatability utilizing advanced phased array technology for optimized detection. Inspections can be performed on stand-alone wheel sets or while installed on the train.

Fully automated stationary inspection system rotates and aligns the wheel assemblies for precise robotic transducer positioning and can be configured to inspect in series or parallel operation. The system features full traceability, high productivity utilizing phased array and patented V-path ultrasonic techniques.
**Solid Axle Inspection System**

- Six fixed phased array probes for full-volume coverage
- Full-length defect detection
- One rotation to achieve full coverage
- Inspection time less than ten minutes per axle
- Accurate placement for sensitive measurement applications such as SAFT

Fully automated stationary inspection system rotates and aligns the axle for precise robotic transducer positioning. The system features full traceability, high productivity and advanced phased array technology.

**Data Acquisition and Control**

**SAPHIRquantum**

- Versatile UT system for phased array, single and parallel multi channel conventional UT
- 32 High-resolution independent channels
- Each channel is designed for configuration flexibility to serve as pulse echo, transmit-receive, SAFT, paint-brush arrays, and other advanced acquisition modes
- Package options include 10-inch rack modules stacked in 32-channel increments
Experience, Innovation and a Commitment to Success

AREVA is a large global company with experience and knowledge in many regulated NDT markets including high-speed rail, steel forging, aerospace and power generation. The strategy of being one of the first to implement advanced techniques like ultrasonic phased array started within our nuclear inspection services has been adapted to many other industries.

AREVA did not get its “NDT World Leader” status by merely reacting to customer requests. AREVA partners with its customers to look years in the future to develop R&D plans to ensure industry advancements are not stifled or complicated by lagging inspection technology and techniques.

AREVA advanced NDT systems for train wheel and axle inspections are in production in various plants throughout the world and have a proven record for quality, durability and performance.