R&D phase | Research **Expected Commercialization** | FY28-

Mehr Licht!
More Photonics for Intelligence

#E11

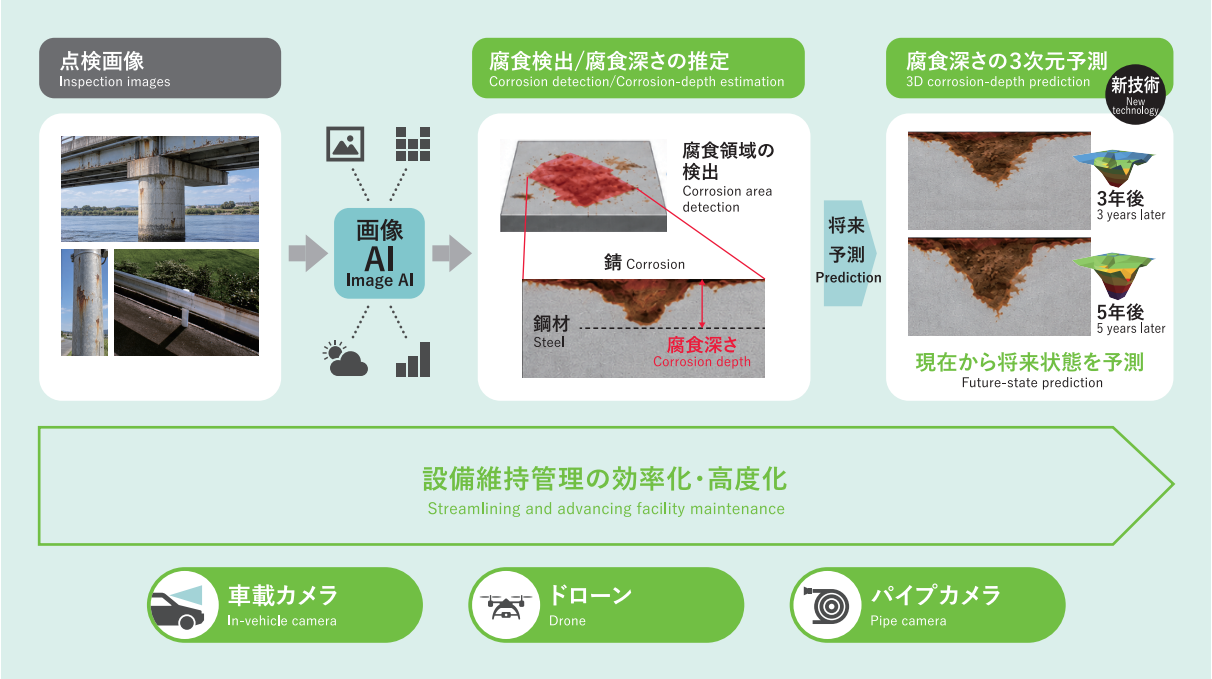
#Digital & AI Transformation#Operational Efficiency#Risk Management

Steel Corrosion-Depth Prediction

3D corrosion prediction for optimized inspection & maintenance

Technical Challenges & Goals

Aging infrastructure and workforce shortages demand efficient maintenance. NTT has developed technologies to detect corrosion, estimate metal loss, and predict corrosion areas. We now predict corrosion depth, enabling 3D visualization for optimized inspection planning and maintenance prioritization.



Key Technologies

Core Technologies

- Appearance-depth correlation
- AI corrosion-depth prediction
- 3D corrosion-prediction technology

Key Differentiators

- Current technologies detect rust areas from image and classify corrosion severity
- World's first 3D corrosion-prediction at each site from steel inspection images

Use Cases

Smart City

For bridges, telecom facilities, and towers, this technology supports optimal repair timing, inspection scheduling, and priority-site selection. NTT Group service integration will enable preventive maintenance and reduce maintenance costs.

Exhibitors

NTT Access Network Service Systems Laboratories