

NDT Products available

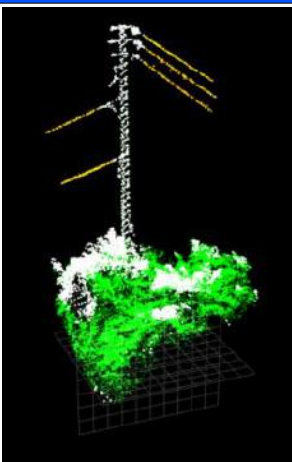
Artificial Intelligence



NDT Products under industrialization



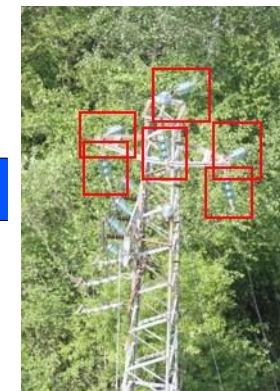
Automated point cloud classification

Code	Name	Description	Use cases	Benefits	
	Automated point cloud classification	Artificial intelligence system for the automatic point cloud classification from a LIDAR inspection	<ul style="list-style-type: none">Automatic point cloud classification	<ul style="list-style-type: none">Reduction of post-processing activities after a LIDAR inspectionReduction of time to delivery classified point cloud to the business	
Type	Business impact		Deployment cost	Relevance	Picture
Technical specifications / System / Product	High / Medium / Low		High / Medium / Low	High / Medium / Low	
Development status	Ready for roll-out	Type of action	I&N unit affected	Technical reference	
Solution prototyping and validation / Industrialization & System integration / Roll-out	Q2-Q3 2020	Integration in Enel internal processes / System integration and deployment / Product deployment in the field	O&M / ND / NCO / HSE / Q&PT / BD / GP	Massimo Maffeis	

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Image recognition for 3D modeling

Code	Name	Description	Use cases	Benefits	
	Image recognition for 3D modeling	Artificial intelligence system for anomaly detection through image recognition	<ul style="list-style-type: none">• Detection of asset components anomalies• Detection of interferences in grid asset	<ul style="list-style-type: none">• Improvement of grid asset maintenance• Early detection of grid anomalies• Reduction of number of grid incidences	
Type	Business impact		Deployment cost	Relevance	Picture
Technical specifications / System / Product	High / Medium / Low		High / Medium / Low	High / Medium / Low	
Development status	Ready for roll-out	Type of action	I&N unit affected	Technical reference	
Solution prototyping and validation / Industrialization & System integration / Roll-out	Q2-Q3 2020	Integration in Enel internal processes / System integration and deployment / Product deployment in the field	O&M / ND / NCO / HSE / Q&PT / BD / GP	Massimo Maffeis	

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Predictive maintenance models for secondary substations



Code	Name	Description	Use cases	Benefits	
	Predictive maintenance models for secondary substations	Predictive maintenance models for secondary substations through artificial intelligence from IoT sensors	<ul style="list-style-type: none">• Partial discharges• Overload in transformers• Anomaly detection	<ul style="list-style-type: none">• Improving predictive maintenance from real time and historic data correlation	
Type	Business impact		Deployment cost	Relevance	Picture
Technical specifications / System / Product	High / Medium / Low		High / Medium / Low	High / Medium / Low	
Development status	Ready for roll-out	Type of action	I&N unit affected	Technical reference	
Solution prototyping and validation / Industrialization & System integration / Roll-out	Q4 2020	Integration in Enel internal processes / System integration and deployment / Product deployment in the field	O&M / ND / NCO / HSE / Q&PT / BD / Elsa Russo GP	