

Article Presentation

A Robot Application for Marine Vessel Inspection

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INTRODUCTION



Overview

Traditional Inspection

MINOAS

Spatial Content Management System (SCMS)

REENGINEERED INSPECTION PROCEDURE

System	Stage 1	Stage 2	Stage 3
Aerial platform	×		
Lightweight inspection system (crawler & localization device)		×	
Heavyweight inspection system (crawler & NDT thickness measurement device)			×
Defect detection system	×	×	
Spatial contents management system	×	×	×

Fast visual inspection

Visual close-up survey

Thickness measurement collection

MINOAS Inspecton Platforms

o terceiro frame

A VISION-BASED SOLUTION FOR DEFECT DETECTION

o quarto frame

SPATIAL CONTENT MANAGEMENT SYSTEM FOR ROBOT-ACQUIRED INSPECTION DATA

o quinto frame

SYSTEM PERFORMANCE EVALUATION

o sexto frame

CONCLUSION AND FUTURE RESEARCH

o setimo frame