

MiRA MIKA

MiRA – Mixed Reality Application

LINKING THE OBJECTS TO THEIR DIGITAL GENOME

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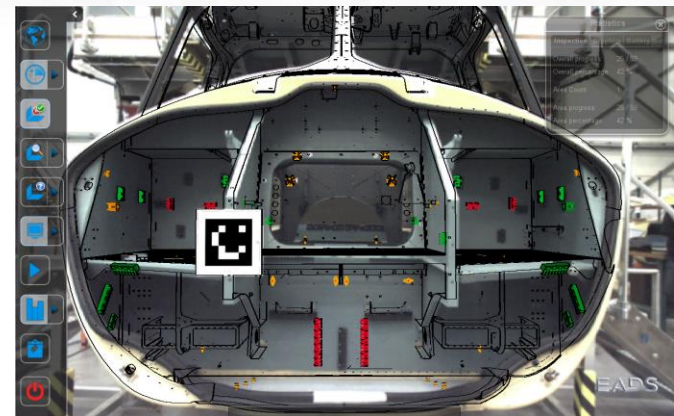
MiRA: Mixed Reality Application

Scope & overview

- Geolocalized Digital Mock Up (DMU) in the production field
- Link with CATIA DMU and SAP
- As designed / As built comparison
- Non conformity investigation in the field
- Early production warnings
- Deployed at Airbus
- Successful evaluations in other EADS divisions



System checks in Augmented Reality



What is MiRA?

What does it mean?

“Augmented reality (AR) is a term for a live direct or an indirect view of a physical, real-world environment whose elements are augmented by computer-generated sensory input”

source: Wikipedia

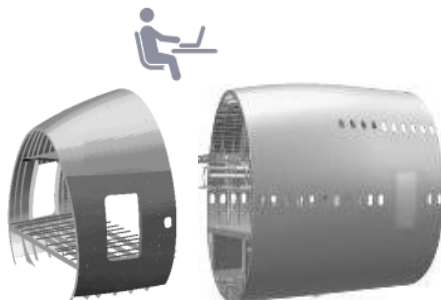


What is it for?

Bring the *Digital Mock Up* in the field

Provide production with a device that *automatically navigates* the DMU according to the users position & point of view in the aircraft

Enable us to compare the manufactured with the designed product and capture its status



Usage of MiRA

Value proposition:

- Full 3D support of production activities
- No waste time for looking for information
- In context presentation of instructions
- Checks are performed ten times faster
- Non conformity avoidance
- Rapid feedback loops with Engineering



IndustrialTablet PC

Dedicated to:

- Manufacturing
- Quality inspection
- Engineering assessment



Trolley

Beyond production: maintenance services

Information access

- No access to technical data sources from working area & large distances
- 20 to 50% of a maintenance task is lost in searching for information

Communication

- Poor communication system on working area
- Large distance to cover to communicate with team members
- No direct access to remote expertise on line - which means lost of time

Information reporting

- Difficulty to have Fast and Easy feedbacks from Shop floor to Engineering



Removal & installation



Trouble shooting



Inspection

Conclusions

MiRA operational deployments are great successes

Airbus 2012 Top Award for Excellence

Moving beyond Factory

**...Opens the way to new and added value applications in other industries
(Nuclear, Oil&Gas, Automobile, ...)**