The activity described in the presentation are developed by AMW in the frame of the contract with F4E

The sentences reported in the presentation not represent necessarily the opinion of ITER
CONSORTIUM MEMBERS AND WORK SHARING

Ansaldo Nucleare

Leader of the Consortium is in charge of project management, engineering coordination, Quality Assurance surveillance and Quality Control programs.

Walter Tosto, Mangiarotti

Are the manufacturers of the Consortium, both in charge of the execution of detail engineering, special processes development and manufacturing and test of the sectors.
ENGINEERING DEVELOPMENT

- Conceptual and Detailed Manufacturing Design
- Welding Book, Atlas, Sequences
- Control Plan, Inspection Plan
- Top Level Manufacturing Plan
- Manufacturing and Test Procedures
- ...
THE SIX PILLARS OF THE AMW’s MANUFACTURING STRATEGY

1. LEARNING BY PREVIOUS RESEARCH EXPERIENCES
2. PILGRIM STEP
3. USING PIECES IN STABLE CONDITION – 3D HOT FORMING AND SOLUTION ANNEALING
4. MAXIMIZING ELECTRON BEAM WELDING AND LOW HEAT INPUT TECHNIQUES
5. MACHINING JUST BEFORE WELDING
6. NOT CONSTRAINED PIECES
ROAD MAP TO NEXT STEPS

LESSON LEARNED

BACKGROUND

SIMULATIONS ANALYSIS

MANUFACTURING ENG

MATERIAL DWG

INSPECTION PLAN
WHERE WE ARE

ENGINEERING AND QUALIFICATION

- Pre-condition for the start of manufacturing activity achieved
- Almost all documents needed for the start of fabrication approved
- Manufacturing and test procedure approved or conditionally approved
- Concept design S5 approved, detail design under approval cycle
- Main manufacturing process qualified
- Manufacturing personnel trained and ready to start fabrication

MATERIALS

- All main materials procured for S5, S4 and S3
- Plates available for first activities, shipment of remaining plate under completion
- Filler metal for production under final acceptance
- Heats for forgings started, delivery of forgings scheduled from Jan ‘14

INVESTMENTS

- All equipment and workshop area are qualified and ready for operation
- Dies and jigs ready for the activities of the first two years
A PARTICULAR THANKS FOR THEIR SUPPORT

THANK YOU FOR YOUR ATTENTION