

The working group is asked to review this draft to amend and possible adopt at the next meeting.

WORKING GROUP FSW PROCESSING – DRAFT WORKING PROGRAM

The purpose of WG FSW Processing is to act as a platform for sharing information and cooperation among the members/participants to promote and encourage the progress and use of FSW Processing in the Nordic region.

The group will aim at having two day meetings, one to two times per year, arranged at the members' sites. Possible meeting ingredients/parts:

- Technical visit with presentation of ongoing work at the meeting site
- Seminar (reports and lectures by the members/participants)
- Formal agenda issues
- Social activities

The group will also be able to have issues resolved by correspondence and if necessary with telephone/internet conferences.

Objectives

- Exchange experience and share information about FSW processing by addressing the list of surveillance fields
- Report and discuss on advancement of the FSW-process and applications
- Arrange technical visits at FSW producers, researchers etc
- Assisting each other (members/participants) in technical issues
- Initiate, plan and/or execute joint R&D projects or other co-operations, to gain maximum leverage from science base to maintain Scandinavian leading position in the field of FSW processing
- Develop FSW and make it more available
- Act as a body that consider, comment and influence standardisation
- Publish guides etc and educational information
- Promote FSW business in the Nordic countries
- Compile test results to create a database
- Address old ideas not realised
- Advertise about the group and its possibilities to resolve FSW issues

Surveillance fields and report topics

- Product applications: Aerospace, Oil & Gas industry, Automotive industry, Off shore, Rail
- Conferences and Publications – New findings
- Researchers – TWI, DVS, VTT, KTH, KIMAB, IS
- R&D (outside the research institutes)
- Process capability and productivity – material thickness, equipment size, process data
- Tool technology – Design, Materials, Life time
- Qualification of procedures and personnel (+ education and training)

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- Standardisation (ISO and corporate) – Terminology, Representation on drawings, Quality levels, Qualification, etc (also, what is used today?)
- Materials – Aluminium, Copper, Steel (and dissimilar)
- Joining steel (and high strength steel)
- Equipment – size, capability, 1,2,3 – 5 axis, etc
- Spot welding
- Joint design
- Weld quality
- Weld properties – Fatigue etc
- Weld economy
- Imperfections and testing - Destructive and Non destructive test methods for FSW welds
- Patent and license issues
- Process modelling
- Implementing FSW in already existing workshop
- Future opportunities for FSW
- Participants – capability, plans, goals, interests