FSW-Tech

Friction Stir Welding European Qualifications

Hands-on Approach Seminar | ROMANIA

18th October 2019

Sibiu, Romania

Project Nr: ***2017-1-SK01-KA202-035415***

This project has been funded with support from the European Commission. This publication reflects the views only of the author, and the Commission cannot be held responsible for any use which may be made of the information contained therein

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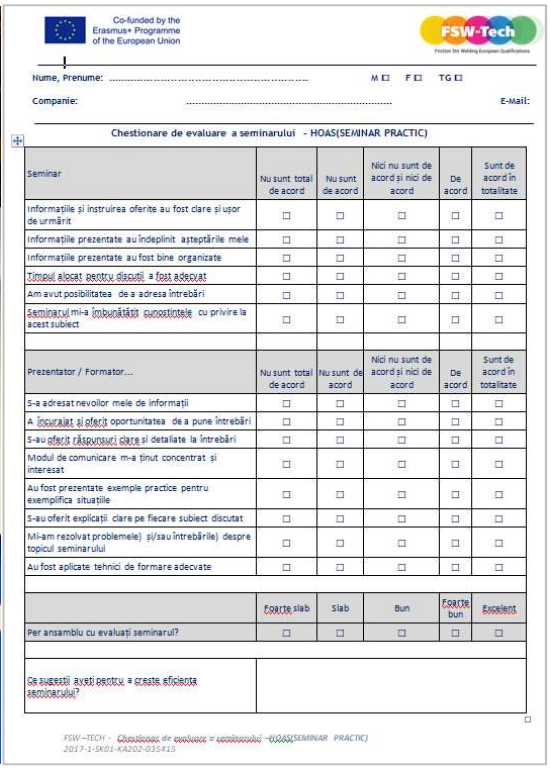
Contents

Contents 1
Introduction 2
1. Methodology 3
Venue and participants 3
Training Program 3
Evaluation 4
2. National recommendations for implementation 6
3. Conclusions 6
4. Annexes 7

Introduction

The event was organized during the "Annual Conference of Welding Coordinators", Sibiu, 17 - 19.10.2019. At the conference were over 120 participants. During the **Hands-on approach seminar,** which counted with 35 trainees, there was the occasion to analyse the training materials, the guideline resulted on the project FSW-TECH.



Co-funded by the Erasmus+ Programme of the European Union

FSW-Tech

Nume, Prenume: ..... M ☐ F ☐ TG ☐

Companie: ..... E-Mail:

Chestionare de evaluare a seminarului - HOAS(SEMINAR PRACTIC)

Seminar	Nu sunt total de acord	Nu sunt de acord	Nici nu sunt de acord și nici de acord	De acord	Sunt de acord în totalitate
Informațiile și instruirea oferite au fost clare și ușor de urmărit	☐	☐	☐	☐	☐
Informațiile prezentate au îndeplinit așteptările mele	☐	☐	☐	☐	☐
Informațiile prezentate au fost bine organizate	☐	☐	☐	☐	☐
Timpul alocat pentru discuții a fost adecvat	☐	☐	☐	☐	☐
Am avut posibilitatea de a adresa întrebări	☐	☐	☐	☐	☐
Seminarul mi-a îmbunătățit cunoștințele cu privire la acest subiect	☐	☐	☐	☐	☐
Prezentator / Formator...	Nu sunt total de acord	Nu sunt de acord	Nici nu sunt de acord și nici de acord	De acord	Sunt de acord în totalitate
S-a adresat nevoilor mele de informații	☐	☐	☐	☐	☐
A încurajat și oferit oportunitatea de a pune întrebări	☐	☐	☐	☐	☐
S-au oferit răspunsuri clare și detaliate la întrebări	☐	☐	☐	☐	☐
Modul de comunicare m-a ținut concentrat și interesat	☐	☐	☐	☐	☐
Au fost prezentate exemple practice pentru exemplifica situațiile	☐	☐	☐	☐	☐
S-au oferit explicații clare pe fiecare subiect discutat	☐	☐	☐	☐	☐
Mi-am rezolvat problemele) și/sau întrebările) despre topicul seminarului	☐	☐	☐	☐	☐
Au fost aplicate tehnici de formare adecvate	☐	☐	☐	☐	☐
	Foarte slab	Slab	Bun	Foarte bun	Excelent
Per ansamblu cu evaluați seminarul?	☐	☐	☐	☐	☐
Ce sugestii aveți pentru a creste eficienta seminarului?					

FSW –TECH - Chestionar de evaluare a seminarului -HOAS(SEMINAR PRACTIC)
2017-1-SK01-KA202-035415

During the **Hands on approach seminar** were some interesting discussion related to the guideline resulted on the project FSW-TECH and some trainees said that they will present the guide in their company and will try to discuss with their superiors in order to make a research in the field of FSW process because for this moment in Romania is only one machine (at ISIM Timisoara).

Figure 0-1: Hands on approach seminar with the trainees and the trainers

1. Methodology

Venue and participants

In Romania the seminar focussed on the evaluation of the developed materials for the Engineer profile. It took place at Sibiu and counted with the presence of 35. The seminar focused on production technologies and was, therefore, aligned with the goals of FSW-Tech Hands-on Approach Seminar.

Training Program

FSW-Tech – Seminar HOAS

Vineri,18 octombrie 2019

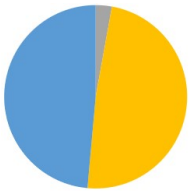
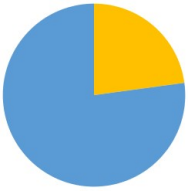
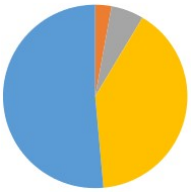
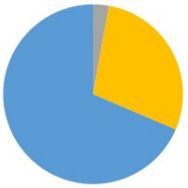
Organizator	Localitate
Asociația de Sudură din România	Sibiu, SC Compa SA

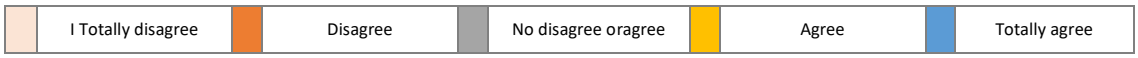
18.10.2019	
10.00	Prezentarea proiectului FSW-TECH(Anamaria FEIER) – Rezultatele proiectului – Ghid de formare FSW "Calificări europene pentru sudarea prin frecare cu element activ rotator. Cerințe minime pentru educație, examinare și calificare" – Prezentarea Handbook-ului pe domeniul procedeului FSW rezultat pe proiect
10.00	Pauză de cafea
10.15	Prezentarea materialelor de învățare pentru operator(Marius BODEA) – Prezentările materialelor de învățare(PPT-urile) pentru cele 6 capitole – Baza de date de întrebări
12.30	Prânz
13.30	Prezentarea materialelor de invatare pentru operator(Anamaria FEIER) – Prezentarile PPT pentru cele 12 capitole – Baza de date de întrebări
15.00	Pauză de cafea
15.15	Moderatori Anamaria FEIER și Marius BODEA – Discutii libere cu participanții – Completarea chestionarului
16.00	Închiderea evenimentului

FSW-TECH Agenda Seminar HOAS, Sibiu, 18.10.2019
2017-1-SK01-KA202-035415

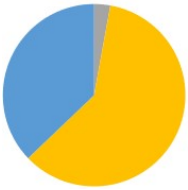
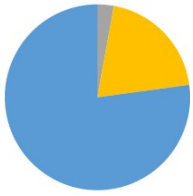
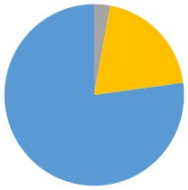
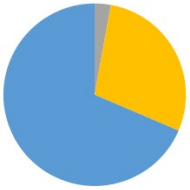
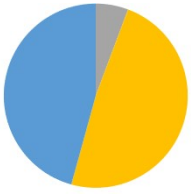
Evaluation

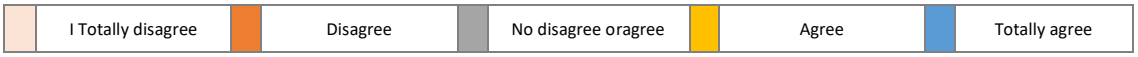
The next graphics summarize the results of the questionnaire of **Hands on approach seminar.**

Information and training provided were clear and easy to follow	The presented information met my expectations	The presented information was well organised
		
Allocated time for the topics discussions was appropriate	**I had the opportunity to adress questions**	**The training Enhanced my understanding on the subject**
		



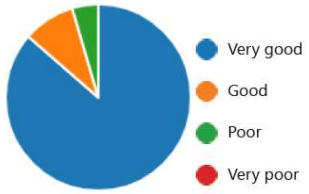
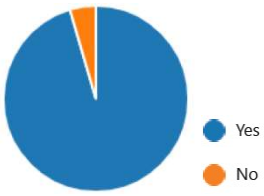
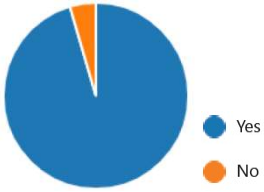
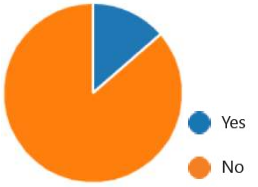
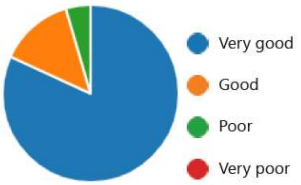
The presenter/trainer …

Adressed my needs of information	Gave opportunity and encouraged questions	Offered clear and detailed answers to the questions
		
Communication style kept me focussed and interested	**Provided practical examples to illustrate the point**	**Provided clear explanation on each topic discussed**
		
Resolved my issue(s) or question(s) about the seminar	**Applyed adequate training techniques**	
		



Regarding the open questions' answers the feedback received was*: "more actions like this are needed"; "information transmitted very useful and well synthesized"; "congratulations to the organizers"; "well-structured course"; "allocating a longer presentation time"; "I think it would have been helpful if we all received a printed guideline"; "well thought guideline"; "examples on several types of equipment"; and "deeper analysis of the aspects related to the identification and measurement of material imperfections".*

Training Materials Evaluation

How do you rate the sequence and flow of the slides presented	Was there a clear separation between the seminars's units?	Did the presentation included adequate number of dynamic resources/elements (e.g. video, exercises, practical examples)
		
Was the quality of the content consistent throughout the seminar?	Did you notice any unnecessary repetitions in the content?	Did you feel that some content was lacking?
		
How do you classify the overall quality of the supporting materials (slides presentation) used in the seminar?	Please highlight 2 positive aspects about the training materials	Please remark 2 aspects for improving the training materials
	Interactive and useful The presentation are very good and I can learned more information The training materials were consistent and very well structured Complet and clear Focus and clarity The worksop was interesting and well structured.The trainers were excellent. The information is very good and accurate Dynamic presentation, very good video A lot of information. Clearly laid out of them Number of participants and discussion with other welding engineers Clear and specific The materials were easy to understand and the the explanations were clear and concise	More concrete case studies The introductory chapters were a bit long Maybe a short project written at the end of the course made by the trainee Even if the FSW does not presumes phase transformations, I think is better to show few metallurgical aspects of aluminium alloys.

2. National recommendations for implementation

Regarding the national recommendations for implementation bellow it can be seen the answer of the National Authority for Qualifications from Romania regarding the implementation of the new profile qualifications.

To: Romanian Welding Society

In the attention of Mrs. Anamaria Feier,

Responsible of the training center of ASR

"Dear Mrs,

Due to your solicitation/request, register at the National Authority for Qualifications under no. 7058/30.09.2019, where you asked for information regarding the procedure that applies when some entity wants to include new qualifications in the field of welding, we communicate you the followings:

According to the present disposition there is necessary to update The Classification of Professions in Romania introducing jobs corresponding to the afore mentioned professions according to *The Order no 270/273/2002 issued by the Minister of Work and Social Solidarity and the President of National Institute of Statistics for the approve of the Actualization procedure of the nomenclature "Classification of Professions in Romania (COR)" - MO (Romanian Official Monitory) no 531/2002.*

Further, for this professions can be issued occupational standards according to *the previsions of the Common Order of the National Education Minister and Work and Social Justice Minister no 3712/1.721/2018 from 21 may 2018 regarding the approve of The Methodology for Elaboration, Validation, Approve, and Management of Occupational Standards and of the Occupational Standard Model,* published in the Official Monitor, Part I, no 480 from 11 June 2018.

In the situation that for the professions envisaged by you will be establish qualification levels between 1 and 5, according to The National Framework of Qualifications, approved by HG (Govern Decision) no 918/2013, with further modifications and adds, based on approved occupational standards, in agreement with The Common Order of the National Education Minister and the Minister of Work and Social Equality no 3177/660/2019 from 18 February 2019 regarding the approve of Methodology for elaboration, update, and management of the National Register of Professional Qualification in Romania, ANC will proceed to the introduction of that qualifications in the RNCP.

For further clarifications of the above issues mentioned do not hesitate to contact us.

Best regards,

President,

Tiberiu Gabriel DOBRESCU"

3. Conclusions

The final recommendation after the HOAS event would be to carry out the new events such this from Sibiu in order to disseminate the results of the project in the future, because they were very well received by the trainees from Romania. The next step would be to try to present the results of the project within the master courses at welding specialization to open the possibility of understanding the process and its implementation at the levels of Romania.

The learning materials (PPTs) were presented briefly at the HOAS event, maybe in the future a larger time should be allocated to such an event, maybe 2 days at least considering the volume of the project results (12 chapters for the engineer, book, guide, question databases, etc.).

4. Annexes

CU 1 - FSW Fundamentals				
Objective – Introduction to FSW – FSW equipment – FSW design – Parent materials				
Objective for Specialist: NA				
Objective for Operator: NA				
Scope	**Qualification** **Teaching hours**	**Engineer**	**Specialist** **NA**	**Operator** **NA**
Factual and broad knowledge of: – FSW fundamentals – Welding equipment and processes – Parent materials		4		
Learning Outcomes for Engineer: Highly specialised and forefront knowledge including original thinking, research and critical assessment of: – FSW fundamentals – Welding equipment and processes – Parent materials				
Learning Outcomes for Specialist: NA				
Learning Outcomes for Operator: NA				