

**SESPP**  
**2<sup>nd</sup> Grade Lathe Vocational Training Method Seminar**  
**in Vietnam**

21<sup>st</sup> to 25<sup>th</sup> of August 2017, Vocational Training Method Seminar on 2<sup>nd</sup> Grade Lathe took place in Hanoi, Vietnam. The course/seminar received a good feedback from the applicants. I'd like to give a report on this seminar.

**■Implementation details**

- 1 .Course name : Vietnam. 2<sup>nd</sup> Grade Lathe Vocational Training Method Seminar
- 2 . Vietnam
- 3 . Duration : 21<sup>st</sup> to 25<sup>th</sup> of August 2017
- 4 . Trade : 2<sup>nd</sup> Grade Lathe. Course : Vocational Training Method Seminar

Lecture on making standard worksheet using practical exam of trade skill test for 2<sup>nd</sup> grade Lathe and guidance on how to do a practical training along with the standard worksheet.

- 5 . Venue : Hanoi University of Industry (Hau) i
- 6 . Number of participants : 11 persons
- 7 . Assessor: Mr. Fumio Inagawa. Mr. Kimitaka Minami

**■Outline of SESPP Implementation**

Please refer to the attachment for the schedule.

**<the essence of this seminar>**

- 1 ) Identify the degree of understanding of Standard work sheet.
- 2 ) Introducing the Japanese national skill trade test, explained the importance of Standard worksheet, and effectiveness of using it in the training.
- 3 ) Using "Model of Standard worksheet for 2<sup>nd</sup> Grade Lathe" as a teaching material, taught the trainees how to make Standard worksheet from scratch. (Processing procedure、Process chart, cutting condition, essential factors)
- 4 ) Made pairs (one group consisted of 3 people) , assigned each pair/group to create their own Standard worksheet.
- 5 ) Using Trade Skill Test, practical exam for Lathe 2<sup>nd</sup> grade, and Analysed Processing procedure.
- 6 ) Before the trainees were told to create Standard worksheet, they needed to make sequence diagram (flow chart) , and each group presented it.
- 7 ) The trainees created their Standard worksheet based on their sequence diagram.

8) Handed out 5 sheets of blank form of Standard worksheet for the trainees to work on it to create their own Standard worksheet.

9) Explained relations and interactions of cutting condition for rough cutting and finishing (spindle speed, depth of cut, feed rate), feed rate, and finishing. Instructed the way to set the require angle for taper turning using a dial gauge/ indicator.

Explained interrelation between x axis depth of cutting per cut/revolution, Z axis depth of cutting per cut/revolution, and total depth of cut for thread cutting.

10) After all the groups completed their own Standard worksheet. Handed out " trade skill test 2<sup>nd</sup> grade LathePerformance improvement training (in Vietnamese)".

11) moved to the training room and prepared for cutting operation.

12) Based on their own Standard worksheets processed component/part 1 and component/part2.

13) Swapped the roles and processed component/part 1 and component/part2.

Trainees proceeded the process with amended cutting condition (spindle speed, depth of cut, feed rate) .

14) After the all cutting procedure was completed and finished product was made, each group did a presentation on the outcome of machining which was operated along with their original standard worksheet. They also analyzed and discussed the best ways to decide the most appropriate cutting condition and how to adjust the setting on the machine. Everybody agreed on the effectiveness of using standard worksheet for the lecture, and suggested that the instructor should use Standard worksheet for the practical trainings.

## ■Participants impressions/Questionnaire result

### The results of recovered 10 people are as follows

Satisfied : Very satisfied=10people

Level of satisfied 100%

Useful : Very useful=9people Useful=1people

Level of useful 100%

Continuity: Very much like to continue=10ppl.

Level hope to continue 100%

### 【Opinion • Impressions】

- Thanks to this training, participants could build up a great deal of experience, would like to work on practice in accordance with lecture they had.
- Participants wish the organizers to carry out more advanced courses, so that participants have opportunities to develop their expert knowledge and being able to teach other students in their school what they have learned from the SESPP course.
- Participants could learn about how to operate of lectures, to streamline increasing the concentration and interests , and about KYT not only the skills
- Period of training was not enough for 1 week, participants would like to be much longer.
- Participants would like to join to Japanese skill building course like CNC, CAD/CAM.
- It was very useful. Participants could absorb lots of knowledge at the training and would like to participate to other teaching methods.

### 研修風景



### ■Feedback from the tutor

- ①The trainees have been taught how to create Standard worksheet, and they experienced analyzing milling conditions based on the standard worksheet for the first time. It can be said that it was a useful experience for them. (Referencing the questioner.)
- ②The level of the trainees are very high. In fact, there are two trainees who have passed Lathe 2<sup>nd</sup> grade, the seminar went well thanks to them. They said that giving an instruction using Standard worksheet make it easier for trainees to understand and give them a custom to think of the ways to identify the right cutting condition.
- ③The tutors teach their trainees without using Standard worksheet in Vietnam. Vietnamese tutors just gave instructions writing it down on a white board and do not normally use

Standard worksheet. Tutors do not usually pay that much attention to the details to make sure if the procedure and the cutting condition are suitable for the end result for the finishing they want to achieve.

Moreover I have witnessed that chatter and tear on the finished surface and turning tools were worn out and chipped at the training. It can be said that in reality the standard of the training is not very sophisticated.

I wish that the trainees understand the importance of Standard worksheet and make full use of it when they do training and generalize the concept of using it at all the time. I believe this should enable them to teach the right processing condition while they have better understanding and control over the processing phenomena

If this can be realized, I'd expect that more tutors will pass the skill trade test for the 2<sup>nd</sup> grade and more trainees will pass 3<sup>rd</sup> grade.

It was very instructive and timely that I introduced the way to make Standard worksheet and showed how to do a practical training using it.

④It is proved that focusing on a specific effective study topic/ theme and providing a short Vocational Training Method Seminar can be a meaningful skill transfer support in developing countries.



After the whole seminar was finished

**2<sup>nd</sup> Grade Lathe Vocational Training Method Seminar in Vietnam Schedule**

	Date	Implementation Schedule
1	21 <sup>st</sup> August Mon 8:30~16:30	<p align="center"><b>[ Vocational Training Method Seminar ]</b></p> <p>Opening ceremony</p> <ul style="list-style-type: none"> <li>① What is Stand worksheet and why it is important</li> <li>② Contents of Standard worksheet</li> <li>③ How to make Standard worksheet</li> <li>④ How to use Standard worksheet in the training</li> <li>⑤ How to make Standard worksheet which should work with 2<sup>nd</sup> grade lathe assignment</li> </ul>
2	22 <sup>nd</sup> August Tue 8:30~16:30	<p align="center"><b>[ Vocational Training Method Seminar ]</b></p> <p>Start creating original Standard worksheet which should work with 2<sup>nd</sup> grade lathe assinment</p>
3	23 <sup>rd</sup> August Wed 8:30~16:30	<p align="center"><b>[ Vocational Training Method Seminar ]</b></p> <ul style="list-style-type: none"> <li>① Create Standard worksheet which should work with 2<sup>nd</sup> grade lathe assignment</li> <li>② Process materials following the Standard worksheet</li> <li>③ Check processing procedure, condition, and time</li> </ul>
4	24 <sup>th</sup> August Thur 8:30~16:30	<p align="center"><b>[ Vocational Training Method Seminar ]</b></p> <ul style="list-style-type: none"> <li>④ Process materials following the Standard worksheet</li> </ul> <p>Check processing procedure, condition, and time</p>
5	25 <sup>th</sup> August Fri 8:30~16:30	<p align="center"><b>[ Vocational Training Method Seminar ]</b></p> <ul style="list-style-type: none"> <li>① Process materials following the Standard worksheet</li> <li>② Amendment based on the outcome</li> </ul> <p>Summary</p>

Venue

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