

Intellectual output O1: “Experts Program Toolkit”

The partners of “Refitting Machine” project are working to develop the intellectual output O1 “Experts Program Toolkit” that consists of training materials on several fields relevant for machinery revamping. The output will provide the skills and knowledge needed to perform activities like design simple parts for revamping applications, software update, automation upgrade, new hardware addition, etc. Furthermore, information on economic, social and environmental advantages of obsolete machines refitting as well as a collection of 12 case studies will be included.

“Experts Program Toolkit” comprises the following chapters:

1. Design and Engineering of simple parts needed for machinery revamping
2. 3D printing for production of the parts needed for machinery revamping
3. Open source hardware relevant for machinery revamping
4. Open source software relevant for machinery revamping
5. Design of software interfaces
6. Economic benefits of machinery revamping
7. Social benefits of machinery revamping
8. Environmental benefits of machinery revamping
9. Case-studies related to successful old machinery modernization

The training materials are designed for trainers, students, recent graduates in scientific and technological field, people who have lost their jobs and need to update their skills, long-term unemployed and other people that may be interested in machine revamping. We want to provide these persons with high quality knowledge and skills needed to modernize existing machineries in order to make them “smart” and more adapted to the nowadays requirements of the manufacturing industry.

The partners believe that open-source phenomenon and maker’s movement can contribute to a sustainable growth in Europe, in both environmental and social terms, through extending the lifecycle of countless machineries used in various workshops around the Europe. Consequently, the “Experts Program Toolkit” is focusing on open-source software and hardware while promotes a maker mindset.

“Experts Program Toolkit” will be released as Open Educational Resource, thus allowing its use, re-use or adaptation by VET providers, companies, Youth workers, professionals, consumers, etc. The “Refitting Machine” partners are encouraging individuals, companies, education institutions, etc. to use the toolkit for training activities, in any form: self-training, internal training, training sessions organized for various target groups, etc. The goal is to help more and more VET graduates and other persons to become able to apply open-source technology in order to give new life and capabilities to old machineries. This in turn will increase the number of revamped machines, with great benefits for environment and society. In addition, the skills and knowledge provided by the toolkit can bring substantial economic advantages to those owning or revamping the machineries.

Please follow our website to get updates on the upcoming release of the “Experts Program Toolkit”.