

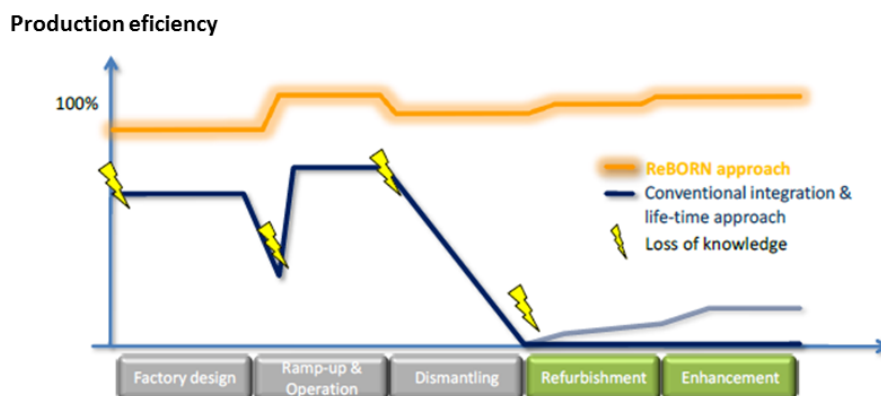
Project acronym: ReBorn

Funded under: THEME FoF.NMP.2013-2 FoF.NMP.2013-2 - Innovative re-use of modular equipment based on integrated factory design

Project acronym: ReBorn

Project full title: " Innovative Reuse of modular knowledge Based devices and technologies for Old, Renewed and New factories "

During its lifetime manufacturing equipment passes several stages starting at initial incorporation into the production line, operation, maintenance to end-of-use and disassembly. On that way there is a number of critical intersections, which potentially come along with time and resource costly downtimes of a machine or even of the entire production system. On of such "cracks" in the production efficiency is found when equipment is to be abandoned and substituted (graph), which usually implies a considerable drop in production efficiency for days or weeks. This is where the ReBorn concept kicks in: ReBorn intends to demonstrate strategies and technologies that enable the re-use of production equipment in old, renewed and new factories. The idea is to save valuable resources by re-using equipment in another constellation instead of discarding it: re-cycling vs one way use. This requires new concepts and strategies for repair and upgrade of equipment, the (re-) design of factory layouts and flexible, adaptable and ready to plug-in modules. Such new strategies will contribute to sustainable, resource-friendly and green manufacturing and, at the same time, deliver economic and competitive advantages for the manufacturing sector.



Production efficiency as a function of life cycle stages of production equipment. Several points bear the risk of a considerable drop in efficiency. The central focus of ReBORN is to counteract such losses at equipment end-of-use by enabling its re-use and refurbishment (green bars)