

COMET: K1 Centre

CDP	
Austrian Center for Digital Production	
Main location	Seestadtstrasse 27 / 1220 Wien
Other locations	Stadtstraße 33 / 6850 Dornbirn
Research programme	Virtualisation of product design, process planning and control, orchestration of production networks, flexible and reconfigurable automation, machine-to-machine communication, socio-economic impacts of digital production
Planned realisation and outcomes	
<p>The fourth industrial revolution will require manufacturing companies to support a seamless integration of all process steps including automation, control and documentation. Therefore, the envisaged centre will cover all process steps ranging from acquisition to delivery: The virtualisation of product and production systems allows for a comprehensive product specification and a reliable process planning. The (further) development of design automation accelerates not only the design process but also the work planning. Standardised protocols for machine-to-machine communication support the implementation of flexible and reconfigurable automation systems, which by the support of flexible and intelligent clamping and tool systems are effective also for small lot sizes and facilitate fully automated operations. Digital platforms and networks for production allow the dynamic formation of virtual smart factories enabling low tier manufacturers to provide a combined and therefore value-added service.</p>	
History of establishment	The Institute of manufacturing technology at TU-Wien supports to a continuously growing extent the innovation-based improvement of productivity in discrete manufacturing. By joining forces with R&D-partners in IT, design automation and mechanical engineering informatics, a team covering a broad range of expertise, could be set-up. The so-formed consortium will be able to address comprehensively the upcoming challenges of industry 4.0.
Selected company partners (max. 10)	Selected scientific partners (max. 5)
<ol style="list-style-type: none"> 1. Hoerbiger 2. TTTech 3. EMCO 4. EVVA 5. ProAutomation 6. Liebherr 7. bs model shop vienna 8. Welser 9. OeKB 10. Fried v. Neuman 	<ol style="list-style-type: none"> 1. TU-Wien 2. v-research 3. Univ. Wien 4. WU-Wien 5. Secure-Business Austria
	Selected international partners ¹ (max. 5)
	<ol style="list-style-type: none"> 1. ETH-Zürich 2. KIT - Karlsruhe 3. policecnico Milano 4. Federal Mogul 5. Nematik
Duration of the K1 Centre	COMET K1 4 th Call: Jan 2017 – Dec 2020 (4 years, 1 st funding period)
Staff employed at the Centre	81 FTE (thereof 63 scientists) ()
Total cost	COMET K1 4 th Call: EUR 17.3 Mio (4 years, 1 st funding period)
Management of the Centre	Chairman Strategy Board: Univ. Prof. Dr. techn. Friedrich Bleicher, Institute for Manufacturing Technology, Head Managing Directors: Dr. Christoph Pollak, Christian Schuckert
Contact:	Seestadtstrasse 27/10, 1220 Wien +43-1-774027440 bleicher@ift.at, www.ift.at

¹ Partners with headquarters outside Austria