

## COMET: K1 Centre

<b>CDP</b>	
<b>Austrian Center for Digital Production</b>	
<b>Main location</b>	Seestadtstrasse 27 / 1220 Wien
<b>Other locations</b>	Stadtstraße 33 / 6850 Dornbirn
<b>Research programme</b>	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
<b>Planned realisation and outcomes</b>	
<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 <b>virtualisation of product and production systems</b> allows for a comprehensive product specification and a reliable process planning. The (further) development of <b>design automation</b> accelerates not only the design process but also the work planning. Standardised protocols for <b>machine-to-machine communication</b> support the implementation of <b>flexible and reconfigurable automation systems</b>, which by the support of <b>flexible and intelligent clamping and tool systems</b> are effective also for <b>small lot sizes</b> and facilitate <b>fully automated operations</b>. <b>Digital platforms and networks for production</b> allow the <b>dynamic formation of virtual smart factories</b> enabling low tier manufacturers to provide a combined and therefore value-added service.</p>	
<b>History of establishment</b>	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.
<b>Selected company partners</b> (max. 10 )	<b>Selected scientific partners</b> (max. 5)
1. Hoerbiger	1.TU-Wien
2.TTTech	2.v-research
3.EMCO	3.Univ. Wien
4.EVVA	4.WU-Wien
5.ProAutomation	5. Secure-Business Austria
6.Liebherr	<b>Selected international partners</b> <sup>1</sup> (max. 5)
7. bs model shop vienna	1.ETH-Zürich
8.Welser	2.KIT - Karlsruhe
9.OeKB	3.politecnico Milano
10.Fried v. Neuman	4.Federal Mogul
	5.Nemak
<b>Duration of the K1 Centre</b>	COMET K1 4 <sup>th</sup> Call: Jan 2017 – Dec 2020 (4 years, 1 <sup>st</sup> funding period)
<b>Staff employed at the Centre</b>	81 FTE (thereof 63 scientists) ( )
<b>Total cost</b>	COMET K1 4 <sup>th</sup> Call: EUR 17.3 Mio (4 years, 1 <sup>st</sup> funding period)
<b>Management of the Centre</b>	<b>Chairman Strategy Board:</b> Univ. Prof. Dr. techn. Friedrich Bleicher, Institute for Manufacturing Technology, Head <b>Managing Directors:</b> Dr. Christoph Pollak, Christian Schuckert
<b>Contact:</b>	Seestadtstrasse 27/10, 1220 Wien +43-1-774027440 bleicher@ift.at, www.ift.at

<sup>1</sup> Partners with headquarters outside Austria