## COMET: K1 Centre

<table>
<thead>
<tr>
<th>CDP</th>
<th>Austrian Center for Digital Production</th>
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</thead>
<tbody>
<tr>
<td>Main location</td>
<td>Seestadtstrasse 27 / 1220 Wien</td>
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<tr>
<td>Other locations</td>
<td>Stadtstraße 33 / 6850 Dornbirn</td>
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<tr>
<td>Research programme</td>
<td>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</td>
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### Planned realisation and outcomes

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.

### 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 et-up. The so-formed consortium will be able to address comprehensively the upcoming challenges of industry 4.0.

### Selected company partners (max. 10)

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

### Selected scientific partners (max. 5)

1. TU-Wien
2. v-research
3. Univ. Wien
4. WU-Wien
5. Secure-Business Austria

### Selected international partners ¹ (max. 5)

1. ETH-Zürich
2. KIT - Karlsruhe
3. poli tecnico Milano
4. Federal Mogul
5. Nemak

### Duration of the K1 Centre

**COMET K1 4th Call: Jan 2017 – Dec 2020 (4 years, 1st funding period)**

### Staff employed at the Centre

81 FTE (thereof 63 scientists)

### Total cost

**COMET K1 4th Call: EUR 17.3 Mio (4 years, 1st 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:

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bleicher@ift.at, www.ift.at

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¹ Partners with headquarters outside Austria  
The COMET Centre is funded within COMET – Competence Centers for Excellent Technologies – by BMK, BMDW as well as co-financing federal provinces. The COMET programme is managed by FFG. >> [www.ffg.at/comet](http://www.ffg.at/comet)

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