Liaising SMEs with Key Enabling Technology Centres across Europe

Speaker:
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KET4 CLEAN PRODUCTION

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KET4CleanProduction Approach

Manufacturing SMEs

- **Stimulate manufacturing SMEs** throughout Europe to increase their understanding and interest in clean production and the potential in adopting KETs

KET4CP Platform

- Build the **KET4CleanProduction platform** for Europe with specific awareness measures on regions where KET access is still not satisfactory

Multi-KET service

- Help SMEs benefit from **multi-KET service** know-how and infrastructure
  - Micro- and Nanoelectronics
  - Nanotechnology
  - Industrial Biotechnology
  - Advanced Materials
  - Photonics
  - Advanced Manufacturing Technologies

Cross-border potential

- Unlock the **cross-border service potential** of EU-certified KETs Technology Centres on clean production

Sustainable eco-system

- Create a **sustainable ecosystem** – one-stop-shop acting as single access point for EU manufacturing SMEs

Micro-grant schemes

- Implement a **micro-grant scheme** boosting clean production in SMEs through KET applications

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Open Call for Micro Grants

www.ket4sme.eu/micro-grants

Scope: Cross-border cooperation projects
1 SME + min. 2 KETs technology centres (KET TCs)
integrate KETs to solve clean production challenges.

Call opening: 1 Jun 2018

Call closing: 29 Apr 2020, 17:00 CET

Cut-off dates: 8 cut-off days at 17:00 CET every 3 months (first 31 Jul 2018)

31/07/18	31/10/18	31/01/19	30/04/19	31/07/19	31/10/19	31/01/20	30/04/20

Expected duration of a micro grant project: up to 6 months

Total EU funding available for third parties: EUR 2.000.000

Financial support for each third party: EUR 50.000 (lump sum)

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KET4CP Consortium

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No	Participant organisation name	Type	Country
1	Steinbeis 2i GmbH – S2i	EEN	Germany
2	Acondicionamiento Tarrasense Associacion – LEITAT	KET TC	Spain
3	Warwick Manufacturing Group – WARWICK	KET TC	United Kingdom
4	Rise ACREO – Acreo	KET TC	Sweden
5	Hahn-Schickard-Gesellschaft für angewandte Forschung e.V. – HSG-IMIT	KET TC	Germany
6	Joanneum Research Forschungsgesellschaft mbH - JOANNEUM	KET TC	Austria
7	Tyndall National Institute – Tyndall	KET TC	Ireland
8	International Iberian Nanotechnology Laboratory – LIL INL	KET TC	Portugal
9	Teknologian Tutkimuskeskus VTT Oy - VTT	KET TC	Finland
10	CEA Liten – CEA	KET TC	France
11	Bio Base Europe Pilot Plant vzw – BBEPP	KET TC	Belgium
12	Fraunhofer-Institut für Produktionstechnik und Automatisierung – Fraunhofer	KET TC	Germany
13	Bay Zoltán Nonprofit Ltd. For Applied Research – BZN	KET TC/EEN	Hungary
14	Jožef Stefan Institute – JSI	KET TC/EEN	Slovenia
15	GIS Transfercenter Foundation – GIS	EEN	Bulgaria
16	PRAXI Network – FORTH	EEN	Greece
17	Væksthus Hovedstadsregionen – VHHR	EEN	Denmark
18	Latvian Technological Center – LTC	EEN	Latvia
19	Slovak Business Agency – SBA	EEN	Slovakia
20	TERA Tehnopolis – TERA	EEN	Croatia

Open Call for Micro Grants

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Type of activities: Integration of AMT and combination of **multiple key KETs** seeking for one or several of the following **clean production objectives**:

- the development of new production processes
- the improvement of the manufacturing of existing products by reducing
  - production costs; or
  - reliance on raw materials; or
  - consumption of energy; or
  - generation of waste and pollution

Technology services:

- research and innovation activities (TRL 4 to 8; focus on higher TRLs)
  including f.ex. demonstration, testing, pilot production and related engineering activities; complemented by feasibility studies

Procedure to apply for a Micro Grant

Step 1:
Registration on the web platform

Step 2:
Submission of a technology request

Step 3:
Submission of a micro grant proposal

Step 4:
Evaluation and feedback to the micro grant proposal

Step 5:
Implementation and follow-up on the micro grant project


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Technology Request Form

I. Company details

Company name:
Address:
City:
Country:
Year established:
URL:
Type of Company:
Double-click on the tick box and choose "activate" to set an "x"
Micro (< 10 staff members)
Small (< 50 staff members)
Medium (< 250 staff members)
Large (> 250 staff members)
Name of contact person:
Function / Position:
Department:
Languages spoken:
Phone:
e-mail:


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Micro Grant Proposal

Application for Third Party Financing according to General Annex K of the Horizon 2020 WP 2018-17.

Official name of company:
Official legal form of company:
Name of contact person:
E-mail address of contact person:
Telephone number of contact person:
Official address of company:
VAT registration number:
Country:
The following KET technology centres (KET TCs) have been chosen to implement the project: (min. 2 KET TCs)
1. Lead KET TC name:
Address:
Country:
Contact person:
Telephone number:
E-mail address:
2. KET TC name:
Address:
Country:
Contact person:
Telephone number:
E-mail address:
Title of Technology Request submitted previously (if applicable):
Project title:
Objectives of the project:

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Check the steps in detail at https://www.ket4sme.eu/micro-grants

Winners examples

THÜRMER

- **Project title:** Design and tailoring of high-speed steel for 3D printing of thread cutting taps
- **Country:** Denmark
- **KET TCs:**
  - VTT (Finland)
  - Leitat (Spain)
- **KETs:**
  - Advanced materials
  - Advanced manufacturing

Reduction of :

- Production cost
- Reliance of raw materials
- Waste generation

Increase of:

- Sales
- Profits

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Check the steps in detail at https://www.ket4sme.eu/micro-grants

Winners examples

RESINO

- **Project title:** Improvement of in-can stabilization of cationic curing flexo-inks
- **Country:** Denmark
- **KET TCs:**
  - Joanneum Research (Austria)
  - Leitat (Spain)
- **KETs:**
  - Advanced materials
  - Advanced manufacturing
  - Photonics

Increase of:

Life-time of ink in product

Reduction of :

Waste generation

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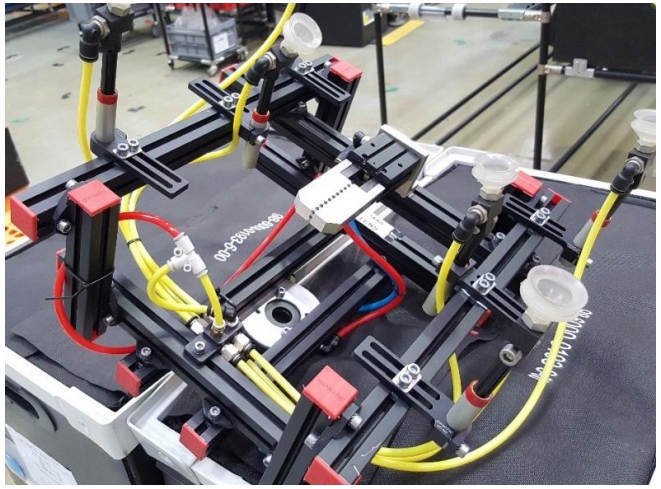
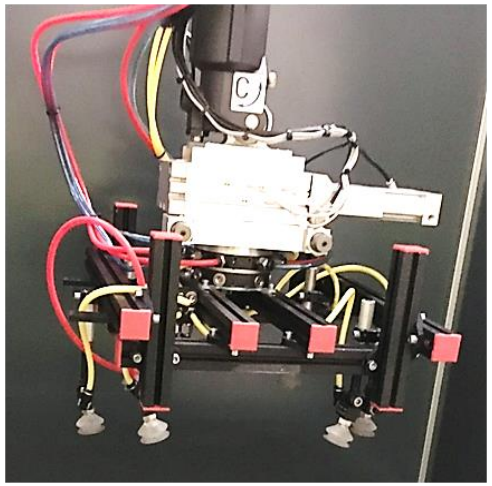
Other example

Grippers, or "Robotic hands"



- Mechanisms, coupled with robotic arms and a control system, usually PLCs, intended for gripping, positioning and transporting of objects.
- Usually they are formed by an assembly of structural elements, articulations, sensors, control elements, ducts of compressed air and vacuum, connection elements, vacuum cups, magnets, etc.

Current "Robotic hands"



- Complex, heavy, bulky assemblies
- Elevated inertias (due to its weight)
- Large number of components, which involve a greater risk of failure
- High acquisition Cost (1.5-3k€)
- Need for maintenance and frequent adjustments

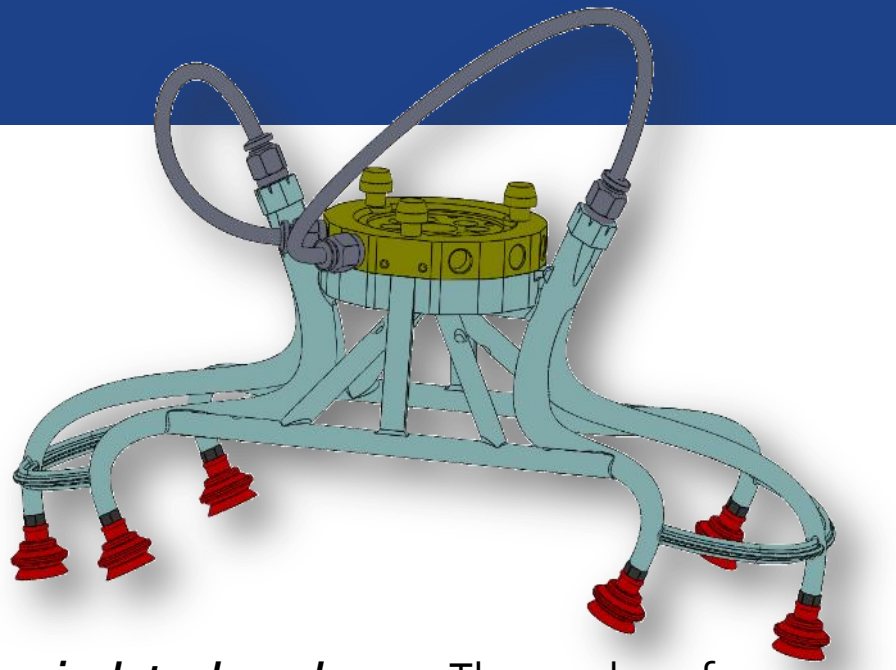
Other example

LEITAT managing technologies

Continental

"Robotic Hands"
Based on 3D printing

- Development of simpler solutions-with a reduction of components -greater than 80%- with a robust functional design without the need for calibration
- Greater robustness and productive reliability, with minimal maintenance
- Easier Connection and control
- Lower associated cost
- Usable with collaborative robots. Possibility of using robots with less load capacity due to the significant reduction in weight and inertia estimated to be higher than 80%



Prior manipulator homologous. The number of components has been dramatically decreased by 85% as well as the weight by 95%.

Some figures

- 1 piece, 6 suction cups and 2 vacuum tubes vs. more than 60 pieces between structural bars, shock absorbers, suction cups, vacuum tubes, bolts and nuts…
- 2.500 g vs. 160 g
- €1.850 vs. €160

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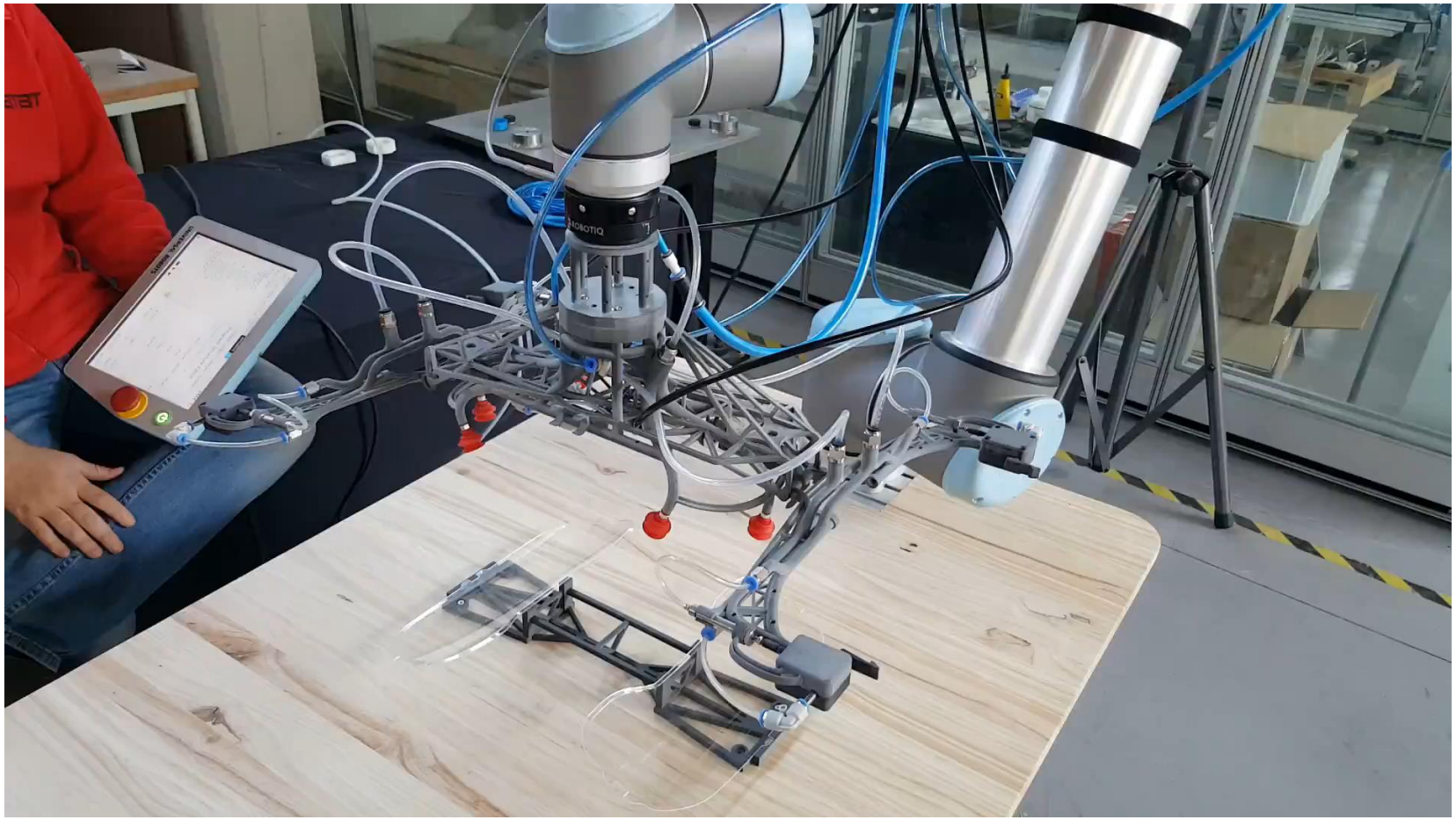
Other example

LEITAT
managing technologies

Continental

The same gripper with additional novel functionalities besides the extraction of the parts from the injection mould.



Hannover Messe 2019. You can see it in Pavilion 5, stand F42

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Contact

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Stay in contact!

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