Integrated framework for a cost-effective and ease of Repair, Renovation and Re-use of machine tools within modern factory

Fact Sheet

Project Information

EASE-R3
Grant agreement ID: 608771
Status
Closed project
Funded under
FP7-NMP
Overall budget
€ 6 212 662
EU contribution
€ 4 429 989
Coordinated by
FIDIA SPA
Italy
Start date
1 July 2013
End date
30 June 2016

Objective

The current maintenance policies, including e.g. RCM (Reliability Centred Maintenance) and TPM (Total Productive Maintenance), can be generally useful in answering questions such as “how much maintenance should be done on this machine?” “How frequently should this part be replaced?” “How many spare parts should be kept in stock?” “How should the shutdown be scheduled?” It is generally accepted that the vast majority of maintenance models are aimed at answering efficiency questions, i.e. questions of the form “How can this particular machine be operated more efficiently?” and NOT effectiveness questions (the top 5 ones!), like:

Q1: “How can reliability, repair and EOL be included in a robust and integrated Life Cycle Cost (LCC) and Life Cycle Assessment (LCA) model of the factory (to be used for decision making along factory life cycle)?”

Q2: “Which maintenance effectiveness indicators should be considered to improve the maintenance policies of the plant?”
Q2: “Which are the most cost-effective and optimal Repair strategies we should tailor for sets of components/machines of the factory?”
Q3: “Which machine and/or components should we improve and how can we reduce repair time and cost?”
Q4: “Which are the most environmental-effective EOL strategies we should tailor for sets of components/machines of the factory?”
Q5: “How can we assess the remaining life of Re-usable components and which are most valuable Renovation technologies for the machine tools?”

the EASE-R3 project aims at developing a novel Integrated framework for a cost-effective and easy Repair, Renovation and Re-use of machine tools within modern Factory (machining shop floor), oriented both to SME and large OEM/end-users, and covering the entire life cycle of the system (from design stage throughout operative life).

Programme(s)

Topic(s)

Call for proposal

FP7-2013-NMP-ICT-FOF(RTD)

Funding Scheme

CP-IP - Large-scale integrating project

Coordinator

FIDIA SPA

Address
Corso Lombardia 11
10099 San Mauro Torinese
Italy

Website

Activity type
Private for-profit entities
(excluding Higher or Secondary Education Establishments)

EU contribution
€ 573 833

Contact the organisation

Administrative Contact
Raffaele Ricatto (Mr.)
Participants (13)

CE.S.I. CENTRO STUDI INDUSTRIALI SRL
Italy
EU contribution
€ 498 700
Address
Via Tintoretto 10
20093 Cologno Monzese
Activity type
Private for-profit entities (excluding Higher or Secondary Education Establishments)
Website
Contact the organisation
Administrative Contact
Franco Taddei (Mr.)

RHEINISCH-WESTFAELISCHE TECHNISCHE HOCHSCHULE AACHEN
Germany
EU contribution
€ 365 040
Address
Templergraben 55
52062 Aachen
Activity type
Higher or Secondary Education Establishments
Website
Contact the organisation
Administrative Contact
Ernst Schmachtenberg (Prof.)

BUDAPESTI MUSZAKI ES GAZDASAGTUDOMANYI EGYETEM
Hungary
EU contribution
€ 265 900
Address
Muegyetem Rakpart 3
1111 Budapest
Activity type
Higher or Secondary Education Establishments
Website
Contact the organisation
Administrative Contact
Istvan Nemeth (Dr.)

NEWBURGH ENGINEERING CO LIMITED
<table>
<thead>
<tr>
<th>Organisation</th>
<th>Country</th>
<th>EU contribution</th>
<th>Address</th>
<th>Activity type</th>
</tr>
</thead>
<tbody>
<tr>
<td>NEWBURGH ENGINEERING CO LTD</td>
<td>United Kingdom</td>
<td>€ 231 200</td>
<td>Bessemer Way S60 1FB Rotherham</td>
<td>Private for-profit entities (excluding Higher or Secondary Education Establishments)</td>
</tr>
<tr>
<td>IDEKO S COOP</td>
<td>Spain</td>
<td>€ 319 200</td>
<td>Calle Arriaga 2 20870 Elgoibar</td>
<td>Research Organisations</td>
</tr>
<tr>
<td>WIRES ENGINEERING SRL</td>
<td>Italy</td>
<td>€ 290 800</td>
<td>Via MarioFranza 1 10010 Lessolo</td>
<td>Private for-profit entities (excluding Higher or Secondary Education Establishments)</td>
</tr>
<tr>
<td>TEKS SARL</td>
<td>France</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
EU contribution

€ 305 000

Address

Rue Du Praya, Les Toits
Blancs 23
05100 Montgenevre

Activity type

Private for-profit entities
(excluding Higher or Secondary Education Establishments)

Website

Contact the organisation

Administrative Contact

Nicola Ridgway (Ms.)

---

MACH4 LAB SRL

Italy

EU contribution

€ 360 096

Address

Corso Roma 4
20093 Cologno Monzese

Activity type

Private for-profit entities
(excluding Higher or Secondary Education Establishments)

Contact the organisation

Administrative Contact

Angelo Merlo (Mr.)

---

POLITECNICO DI TORINO

Italy

EU contribution

€ 334 588

Address

Corso Duca Degli Abruzzi 24
10129 Torino

Activity type

Higher or Secondary Education Establishments

Website

Contact the organisation

Administrative Contact

Francesca Maccario (Mrs.)

---

UNIVERSITY OF HUDDERSFIELD

United Kingdom

EU contribution

€ 256 174
**Administrative Contact**

Denise Ogden (Ms.)

---

**EKIN SOCIEDAD COOPERATIVA**

Spain

EU contribution

€ 112 516

Address

Barrio Boroa
48340 Amorebieta Etxano
Bizkaia

Activity type

Private for-profit entities (excluding Higher or Secondary Education Establishments)

Website

Contact the organisation

Administrative Contact

David Bernar (Mr.)

---

**DIN DEUTSCHES INSTITUT FUER NORMUNG E.V.**

Germany

EU contribution

€ 149 822

Address

Burggrafenstrasse 6
10787 Berlin

Activity type

Other

Website

Contact the organisation

Administrative Contact

Hermann Behrens (Mr.)

---

**KATHOLIEKE UNIVERSITEIT LEUVEN**

Belgium

EU contribution

€ 367 120

Address

Oude Markt 13
3000 Leuven

Activity type

Higher or Secondary Education Establishments

Website

Contact the organisation