Technology Request

Polish rubber granulate producer is looking for colouring technology

Summary

Polish SME from South-West of Poland is a highly specialised manufacturer of rubber granulate. The company is seeking to buy a processing line that will allow them to colour the granulate made from a rubber waste. Target partners will most likely represent a machine producing company Potential cooperation would be held upon technical cooperation agreement.

Details

Description

Polish SME from South-West of Poland is a manufacturer of rubber granulate. The company produces granulate made from an original rubber mixture, as well as a granulate made of rubber waste.

At the moment, the company is looking to buy a specialised processing line that will be used to colour the granulate made from the recycled rubber waste. At the moment, the granulate that the company is producing from this source is gray- in the near future, the company wants to extend the offer to different colours.

The single rubber granulate is a very small object - the company is at the moment working on a method that allows to dye it but at the same time keep it separate (friable), for further processing.

Target partners will most likely represent a machine producing company Potential cooperation would be held upon technical cooperation agreement.

Technical Specification or Expertise Sought

As stated above the rubber granulate made from recycled waste is suitable for rubbery surfaces such as racetracks or paddocks but it also be used for other purposes.

Its usability is mainly limited by its colour which mainly through the manufacturing process is grey and require additional procedure (painting) to change its colours.

The company is looking to expand it's machine park and buy a processing line that will colour the
granulate.

**Keywords**

<table>
<thead>
<tr>
<th>Technology</th>
<th>Description</th>
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<tr>
<td>002002020</td>
<td>Moulding, injection moulding, sintering</td>
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<tr>
<th>Market</th>
<th>Description</th>
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<tr>
<td>008001023</td>
<td>Other chemicals and materials (not elsewhere classified)</td>
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<tr>
<th>NACE</th>
<th>Description</th>
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<tbody>
<tr>
<td>C.22.1.9</td>
<td>Manufacture of other rubber products</td>
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</table>

**Dissemination**

Send to Sector Group
Bio Chem Tech

**Client**

Type and Size of Organisation Behind the Profile
Industry SME 50-249

Year Established
1995

Turnover
1 - 10M

Already Engaged in Trans-National Cooperation
Yes

Langages Spoken
English
German
Polish

Client Country
Poland
**Partner Sought**

**Type and Role of Partner Sought**
Potential partners should be involved with machine building industry - the company is looking to buy a complete processing to colour the granulate made from a rubber waste.

Type of partner sought: business, inventors, R&D.

**Type and Size of Partner Sought**
>500

**Type of Partnership Considered**
Technical cooperation agreement
Technology Request

Manufacturing technology to produce aluminium components with improved properties

Summary

A research center of a Spanish university, specialized in the semisolid state forming processes (SSM) is interested in developing these techniques in this field. These techniques would be used in lightweight alloys and copper alloys. Technical and commercial cooperation with academia and/or industrial companies is sought.

Creation Date 15 October 2014
Last Update 27 October 2014
Expiration Date 27 October 2015
Reference TRES20141014002

Details

Description

The group, based near Barcelona, with wide experience in the research on the field of semi-solid manufacturing, having worked with various techniques such as New Rheocasting (NRC), Sub-Liquidus Casting (SLC) and Semisolid Rheocasting (SSR), is developing new technologies to obtain structures suitable for these processes. It has developed its own methodologies for the design of die cast moulds for these technologies, several of them having industrialized.

Aluminium casting alloys are widely used in the automotive industry because of their good specific mechanical properties.

From these alloys, the research group produces components by Semisolid Metal processing (SSM), with good surface finish and practically free of porosity.

Semisolid Metal (SSM) components are susceptible to be subjected to aging heat treatments that allow increasing their tensile strength and yield strength while preserving a high ductility. For this reason, SSM technology provides several advantages over liquid processing and solid processing.

Partners would provide technical cooperation in order add benefits in order to develop the project, by increasing the corrosion resistance, or the ability to anodize the components obtained, in the utilization of lightweight alloyed materials in automotive, nautical or in general appliances production. Academia and/or industry experience in other sectors will be welcomed.

Technical Specification or Expertise Sought

Industrial partner sought should be able to implement the technology requested and/or to adapt/test
products available for demonstration. Research partner sought should have a wide knowledge of the modelling techniques and/or be experts in the study of fatigue of components and/or corrosion. Specific area of activity of the partner: Research and development/producers of casting and/or extruded lightweight alloys components.

**Stage of Development**

Under development/lab tested

**Comments Regarding Stage of Development**
The group is currently developing its own technology.

**IPR Status**
Secret Know-how

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**Keywords**

- **Technology**
  - 002007010 Metals and Alloys
- **Market**
  - 002007011 Manufacturing/industrial
- **NACE**
  - C.25.5.0 Forging, pressing, stamping and roll-forming of metal; powder metallurgy
  - C.29.3.2 Manufacture of other parts and accessories for motor vehicles

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**Client**

**Type and Size of Organisation Behind the Profile**
University

**Year Established**
0

**Already Engaged in Trans-National Cooperation**
No.

**Languages Spoken**
English
French
Spanish

**Client Country**
Spain
Partner Sought

Type and Role of Partner Sought
- Type of partner sought: Companies and R&D Institutions
- Specific area of activity of the partner: Preferably experienced in utilization of lightweight materials in automotive, nautical or in general appliances production

Type and Size of Partner Sought
>500

Type of Partnership Considered
- Manufacturing agreement
- Technical cooperation agreement
- Research cooperation agreement
Technology Request

Cromium 6 free pre-treatments on zinc surfaces for transparent powder coating applications

Summary

An Austrian company active in the construction sector currently pre-treats galvanised surfaces with Cromium 6 (Cr6) before powder coating to achieve good adhesion and corrosion resistance. Cr6 will have to be removed from production processes following the REACH regulation. The Austrian company is therefore looking for partners that are either able to offer ready-to-use Cr6 free alternatives of the same quality as Cr6 treatments or partners for jointly developing a solution.

Details

Description
For a specific application, the company uses a transparent powder coating (40-80mu) on hot-dip galvanised or electrogalvanised surfaces.

In order to get a good adhesion and sufficient corrosion resistance the surface is chromated before coating, which represents a standard process in coating industry. The powder coating requires a certain alcaline resistance due to concrete applications. If Cr6 containing pre-treatments are used the alcaline tests are passed sufficiently.

According to the REACH regulation Cr6 containing pre-treatments have to be removed from production processes until September 2017.

Alkaline tests with Cr6 free pre-treatments (state of the art of technology proposed by various well-known suppliers) showed that the coating adhesion has tremendously decreased to a level, which is not acceptable any more.

Thus the company is looking for alternative Cr6 free pre-treatments which are applicable in its facilities and show an equal performance as the Cr6 containing pre-treatments.

Deadline for Expressions of Interest: 14th of November 2014!

Technical Specification or Expertise Sought

The company is looking for partners able to provide Cr6 free alternatives or R&D support from
The following work will have to be carried out:

a) Support in finding an adequate solution for this specific pre-treatment problem (in particular on zinc surfaces)
b) Give analytical support for the coating tests (prove the state of the art of technology in the company's facility)

Stage of Development

Already on the market

Comments Regarding Stage of Development

Ready-to-use solution preferred. If such a solution does not exist yet, all other development stages including joint research, will be considered.

Keywords

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<td>002007010</td>
<td>Metals and Alloys</td>
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<td>002007015</td>
<td>Properties of Materials, Corrosion/Degradation</td>
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<td>003004010</td>
<td>Special chemicals, intermediates</td>
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<td>F.41.2.0</td>
<td>Construction of residential and non-residential buildings</td>
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<td>F.42.9.9</td>
<td>Construction of other civil engineering projects n.e.c.</td>
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Client

Type and Size of Organisation Behind the Profile

Industry >500 MNE

Year Established

0

Already Engaged in Trans-National Cooperation

Yes

Languages Spoken

English

German
Client Country
Austria

Partner Sought

Type and Role of Partner Sought
A partner either able to already offer the requested solutions or with extensive expertise to jointly develop a suitable solution.

Cooperation Partner, R&D Partner

Type and Size of Partner Sought
>500

Type of Partnership Considered
License agreement
Commercial agreement with technical assistance
Research cooperation agreement