Technology Request

Fully automated powder coating technology for screws and washers is requested

Summary

Romanian SME specialized in steel solutions for buildings is searching for screws and washers powder coating and packing technology. The technology should offer a fully automated solution (assembling line). The type of collaboration is likely to be commercial agreement with technical assistance.

Creation Date	25 February 2016
Last Update	22 August 2017
Expiration Date	04 March 2018
Reference	TRRO20160208002

Details

Description

The Romanian SME is a private and autonomous company whose main activity is exclusively steel processing. The company develops, manufactures and markets semi-finished steel components and systems for construction, engineering and industry.

Established in 2000, the company increased its activity in a spirit of continuous improvement, knowing a strong and rapid development through diversification of activity in the construction sector. The production and sales program of the company includes a wide range of steel solutions, from simple civil and infrastructure components to precision products for construction machine-tools sector.

Today, the company has established and implemented simultaneous measures necessary to fulfill the requirements expressed in ISO 9001: 2008, ISO 14001: 2005 and OHSAS 18001: 2008.

The technology requested must offer an efficient, performant and innovative solution for screw and washers powder coating. The assembly solution technology (powder coating and packing) must be realized in a continuous process.

Regarding the desired type of cooperation, the company is interested in an agreement for the acquisition of a technology and support services for the realization of an assembling line for powder coating screws and washers.

Technical Specification or Expertise Sought

The company is looking for manufacturers with expertise in producing fully automated powder coating for screws and washers solutions.

Machine capacity and detailed technical specifications (screws and washers sizes) will be analysed in the preliminary stage of discussions.

Stage of Development

Already on the market

Keywords

Technology

02002002	Coatings
02007008	Iron and Steel, Steelworks

Market

08002007	Other industrial automation
08003001	Machine tools, other metal working equipment (excl. numeric control)

NACE

C.25.1.1	Manufacture of metal structures and parts of structures
C.25.5.0	Forging, pressing, stamping and roll-forming of metal; powder metallurgy
C.25.7.3	Manufacture of tools
C.25.9.4	Manufacture of fasteners and screw machine products

Network Contact

Issuing Partner

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Open for EOI : Yes

Dissemination

Send to Sector Group

Sustainable Construction

Restrict Dissemination to Specific Countries

Austria, Belgium, Bulgaria, China, Croatia, CzechRepublic, Denmark, Estonia, Finland, France, Germany, Hungary, Ireland, Italy, Japan, Norway, Poland, Portugal, Slovakia, Slovenia, SouthKorea, Spain, Sweden, Turkey, UnitedKingdom, USA,

Client

Type and Size of Organisation Behind the Profile

Industry 250-499

Year Established

2000

Turnover

10 - 20M

Already Engaged in Trans-National Cooperation

Yes

Certification Standards

ISO 14001:2005
ISO 9001:2008
OHSAS 18001

Languages Spoken

Romanian
English

Client Country

Romania

Partner Sought

Type and Role of Partner Sought

The company is looking for manufacturers with expertise in producing automated powder coating machines for powder coating sealing fasteners.

Type of Partnership Considered

License agreement
Manufacturing agreement
Commercial agreement with technical assistance
Technical cooperation agreement
Joint venture agreement

Attachments

123.jpg



A Korean institute is offering an eco-friendly and low-cost CFRP (carbon fiber reinforced plastics) recycling technology for technology transfer.

Summary

A Korean institute is offering an eco-friendly and low-cost chemical recycling methods for epoxy based carbon fiber reinforced plastics (CFRPs) using aqueous solvent with mild recycling condition.The institute is looking for a European partner available for license or technical cooperation agreement.

Creation Date	24 June 2016
Last Update	14 August 2017
Expiration Date	24 December 2017
Reference	TOKR20160624003

Details

Description

For a purpose of improving fuel economy through weight reduction in cars or airplanes, CFRP(carbon fiber reinforced plastic) consumption has been increasing drastically.
The end of life CFRP waste and the scrap came from manufacturing process contain high-volume carbon fiber that is expensive. If they are not to be recycled, it would be a waste of high-priced useful resources as well as it would cause environmental pollution.

However, there are some recycle issue on CFRP applied to automobiles, which are as follows.

- Sustainable manufacturing cost
- Waste of valuable resource
- Environmental pollution
- Lowering properties, limitation of application

Therefore, this Korean institute specializing in the development of the composite materials has developed new CFRP recycling technology.

This recycled carbon fiber maintains more than 90% of the strength of virgin carbon fiber, shows a high electrical conductivity and has the same surface composition to virgin carbon fiber. Also, it uses 15% energy of the new carbon fiber production by consuming lower energy than pyrolysis method.

The institute wants to find a European partner that is available for technology cooperation such as technology transfer or license agreement to make good use of its offered technology. Further details regarding cooperation types are negotiable.

Advantages and Innovations

- Use water as a recycling medium
- Use inexpensive chemical additive: under 0.1 EUR/kg
- Mild operation condition: at 60 ~150 degree Celsius, 1 atm(atmosphere) ~ 8 atm.
- Most low-cost effective recycling cost (including chemical and electric cost): under 1.2 EUR/kg
- No exhaust gases as like CO2(carbon dioxide) or dioxin
- Do not use expensive equipment
- Use 15% energy of the new carbon fiber production

Stage of Development

Prototype available for demonstration

IPR Status

Patents granted

Comment Regarding IPR status

KR, US, CN, EU, JP patents granted

Profile Origin

COSME

Keywords

Technology

02007005	Composite materials
02007014	Plastics, Polymers

Market

08001004	Fibre-reinforced (plastic) composites
08001018	Polymer (plastics) materials
09001005	Motor vehicles, transportation equipment and parts

NACE

M.72	Scientific research and development

Network Contact

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Open for EOI : Yes

Dissemination

Send to Sector Group

Materials

Client

Type and Size of Organisation Behind the Profile

R&D Institution

Year Established

0

Already Engaged in Trans-National Cooperation

No.

Languages Spoken

English

Client Country

South Korea

Partner Sought

Type and Role of Partner Sought

- Type of partner sought : company
- Specific area of activity of the partner : in the field of composite materials that is related to automobiles or others
- Task to be performed : technology transfer (License agreement, Technical cooperation agreement)

Type of Partnership Considered

License agreement
Technical cooperation agreement

Attachments

2.GIF

	Method	Initial Investment	Process Cost	Clean Technology	Productivity	Energy Consumption	Quality of R-CF	Applicability
Chemical Method	The institute's Method	◎	◎	◎	◎	◎	◎	◎
	Hitachi Method	◎	△	△	△	△	△	X
	Supercritical Water	X	◎	○	X	△	△	○
	Hot Steam	X	◎	○	X	○	○	○
Pyrolysis Method	Thermal	△	○	X	◎	◎	△	○
	Microwave	△	○	△	○	◎	△	○
	Fluidized Bed	△	◎	X	◎	◎	X	○
	Electro Chemical	△	○	○	○	△	△	○

Biodegradable materials with improved thermal resistance and acoustic insulation properties

Summary

A Spanish technological centre expert in polymeric materials processing offers their know-how in the development of bio-fibres with improved thermal properties to produce 3D-fibre formed parts that can be applied in acoustic and thermal insulation. They look for partners for a technical and/or research cooperation agreement, to adapt the materials to specific requirements and/or develop new materials for new applications.

Creation Date	24 May 2016
Last Update	27 July 2017
Expiration Date	23 January 2018
Reference	TOES20160524001

Details

Description

Currently in all industrial sectors there is an increasing focus on environmental impact, particularly at the end of service life. With this aim, most of the companies look for alternatives to traditional plastic components. Among them, it is highlighted the automotive industry that looks for an alternative to plastic textile components.

Researchers focus on the development of textiles from fibres made of polylactic acid (PLA) derivatives as a substitute for the conventional polyester fibres. PLA is a biodegradable thermoplastic polymer that comes from renewable sources such as corn starch or sugar cane.

The main limitation of conventional PLA is the thermal resistance: PLA softens at a temperature around 52ºC, which limits its use in applications that require temperature resistance at pressure and conditions of environmental and chemical stress.

A Spanish Technological Centre with broad experience in polymeric materials processing and involved in many R&D projects related to modification of polymer properties, has developed a compound from PLA fibers that is able to fulfil the requirements for automotive interior applications, including aspects such as thermal resistance, fogging, odour emissions, VOCs and antimicrobial resistance.

The PLA blend formulation and the processing conditions are key factors that determine the performance of the materials. It has been proved as possible to increase the softening temperature from 52ºC to 102ºC, without compromising the viscosity of the material, which can then be processed by extrusion melt spinning in order to obtain the fibers.

These fibers can be successfully converted into fabrics and non-woven samples in order to obtain a final prototype of a moulded door panel. Two non-woven layers and a woven fabric are

combined into a composite consisting of 100% bio-based material (See attached picture).

These results were obtained in the framework of the BIOFIBROCAR project, funded by the 7th European Framework Programme, in which the centre explored the feasibility of substituting the polyester and polypropylene (PP) fibres then applied in car interiors, by PLA-based fibres.

The centre offers the know-how in the development of fibres with improved thermal properties in order to combine it with new technologies producing 3D-fibre formed parts to be applied in acoustic and thermal insulation.

They are interested in collaborations with users of these acoustic and thermal insulations in any sector, through a technical cooperation agreement, in which the centre can adapt the materials to the specific requirements of the application.

On the other hand they would also like to be contacted by potential partners interested in a joined development of new materials for new applications, through a research cooperation agreement.

Advantages and Innovations

- The material is environmentally friendly, as it is biodegradable.
- The softening temperature of the material has been increased from 57ºC to 102ºC without affecting the viscosity of the material, so it can then be processed by extrusion melt spinning in order to obtain fibers.
- The material can be processed by standard equipment of extrusion.

Stage of Development

Available for demonstration

IPR Status

Secret Know-how

Profile Origin

Other EU programme

Keywords

Technology

02006001	Materials, components and systems for construction
02007014	Plastics, Polymers
02009001	Design of Vehicles
03004008	Plastics and Rubber related to Chemical Technology
03005007	Textile fibres

Market

08001001	Plastic fabricators
08001006	Processes for working with plastics
08001018	Polymer (plastics) materials
08004002	Chemical and solid material recycling

09001004	Mail and package shipment

NACE

C.20.1.6	Manufacture of plastics in primary forms
C.22.2.1	Manufacture of plastic plates, sheets, tubes and profiles

Network Contact

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Open for EOI : Yes

Dissemination

Send to Sector Group

Materials

Client

Type and Size of Organisation Behind the Profile

R&D Institution

Year Established

1990

Turnover

1 - 10M

Already Engaged in Trans-National Cooperation

Yes

Languages Spoken

English
Spanish

Client Country

Spain

Partner Sought

Type and Role of Partner Sought

The centre would like to collaborate with users (companies, technology centres or universities) from any sector that requires acoustic and thermal insulations. The partner may indicate the specific needs of the application and the Spanish centre will adapt the materials for an appropriate use. A technical cooperation agreement will be established.

On the other hand the centre would also like to be contacted by potential partners (companies, technology centres or universities) that need the developed know-how to obtain new materials to be used in different applications. A research cooperation agreement will be established.

Type and Size of Partner Sought

SME 11-50,University,R&D Institution,SME <10,>500 MNE,251-500,SME 51-250,>500

Type of Partnership Considered

Technical cooperation agreement
Research cooperation agreement

Attachments

PICTURE.jpg

