Technology Offer

Flexible X-ray fluorescence

Summary

A research center from Belgian university has developed a technique for material analysis based on X-ray fluorescence. A portable demonstrator offers the possibility to measure different metallic coatings with high accuracy in the range 1 to 2000 nm. Applications are identified in electronics industry. Licence agreement, technical and research collaborations are sought.

Expiration Date 16 March 2017
Reference TOBE20150827001
Profile link

Details

Description

X-ray fluorescence (XRF) is a proven technique for material analysis. It works on the following principle: an X-ray tube irradiates the sample, inducing X-ray fluorescence. The fluorescence spectrum is recorded and analyzed. A specific post-processing of the data provides the coating thickness on the sample. This principle has been experimentally demonstrated with some copper, aluminium, magnesium, titanium, chromium, sulphur, ruthenium in the range 1 to 2000 nm, using a portable device of 3,8 kg with simplified user interface.
The Belgian research center is open to different collaborations.
In addition to licensing agreement, the requested technical and research collaborations concern developments dedicated to next generation product or adaptation to another application.

Advantages and Innovations

Advantages:
• Minimal or no sample preparation
• Non-destructive analysis
• No wet chemistry – no acids, no reagents
• Analysis of solids, liquids, powders, films, granules etc.
• Rapid analysis – results in minutes
• High accuracy of coating thickness measurement
• User friendly interface

Innovation:
Proprietary algorithm integrated in software adapted for coating thickness measurement.

Stage of Development

Prototype available for demonstration

Keywords

Technology

01002012	Semiconductors
02002002	Coatings
02003001	Process automation

Market

03001001	Semiconductors
03001002	Customised semiconductors
03004001	Semiconductor fabrication equipment and wafer products
08001010	Semiconductor materials (e.g. silicon wafers)
08001011	III/V semiconductor materials (e.g. gallium arsenide)

NACE

M.72.1.9	Other research and experimental development on natural sciences and engineering

Open for EOI : Yes

Client

Type and Size of Organisation Behind the Profile

University

Languages Spoken

English
French

Client Country

Belgium

Partner Sought

Type and Role of Partner Sought

- Type of partner sought: Industry

- Specific area of activity of the partner: metrology, process control

- Task to be performed by the partner sought: specification for further development; technology

evaluation

Type of Partnership Considered

License agreement
Technical cooperation agreement
Research cooperation agreement

Technology Request

An Albanian company seeks modern plastics fabrication equipment

Summary

An Albanian Company, located in Tirana, requests new fabrication equipment. The company is engaged in production and stamping of flexible plastic products. Type of collaboration: commercial agreement with technical assistance. The company is an Albanian-Turkish joint venture, is present in several international markets such as Germany Italy & Turkey. The management is young, energetic, and motivated. Potential partners must have experience in this industry.

Expiration Date 21 July 2017
Reference TRAL20160711001

Details

Description

Company is located in Mezez in the commune of Kashar. The industrial site accounts 6500 m2 in which a building of 4000 m2 serves for the production and ware-housing operations. The company is engaged in production and stamping of flexible plastic products. The main product of company are plastic bag used for different packages, of different forms, and different dimensions. These plastic bags are to categories a)for packaging different food & b)for industrial products. In addition, there is also a production line which produces polyethylene granules for plastic tubes and different industrial purposes of usage.

The marketing focus of the company is the national and regional market but it also looks beyond to European and wider areas of export.

Company has accomplished various quality certification requirements such as ISO 9001: 2008 and is currently achieving the certificate from ISO 14 001

The management staff of the company have shown persistent commitment to enterprise growth and innovation

Main products

• Plastic shopping bags
• PE packing with or without printing
• Laminated packing made by PE,OPP,CP, ALU
• Shrinkable films (thermos-foil) for drinks and beverages
• Plastic labels for drinks and other bottles
• Garbage bags

The production line consist of following components:
o Line of extruder
o Line of pressing machines

o Line e stamping/printing machines
o Line e recycling
o Warehouse

Technology Request - New investment

The company investment plan incorporates new machinery in recycling industry. This new project requires state of art of new technology. Based on this plan, the company intends to increase the are of operation and build new facility to allocate the new line of recycling machinery.

The new investment will increase capacity of production but also improve the quality and product diversification. The new machinery which are in the investment plan are

• A new line of flexographic stamping in 8 basic colors,
• An auxiliary equipment for recycling machinery
• New machinery for multi-layers film production or co-extrude
• New machinery for division and cutting of film slitter
• New machines for stamp testing
• Mechanical and hydraulic presses for recycling.

Advantages

Company is a joint venture Albanian and Turkish entrepreneurs with representatives in several international markets such as Germany Italy and Turkey.
Staff employed in management and in operation are young, energetic, and well motivated.
New investment will increase product diversification and better client satisfaction.
The company strategy is based on productivity improvement and cost reduction, qualitative products

Export
Company has established sustainable relationships with export market in Italy and Greece for years

The technology
The technology components already in the operating are originated from different countries such as Italy, Taiwan & Turkey

The enterprise objective are a)maintaining sales growth & b)improve capital utilization that's why the company require cooperation with potential partners for technology offer, becoming innovative, and support new market segment.

Technical Specification or Expertise Sought

Company needs a cooperation with a potential partner already in work in this specific fields producing flexographic printing machinery with 8 color. Companies producing machines for Extruding polyethylene with some layers (Co-extruding matrix)
Companies producing Slitter for plastic sheet. Companies producing stamping machines for plastic sheet. Companies producing Hydraulic Press machinery for recycling materials

Keywords

Technology

02005001	Foil, fils
02005002	Laminate
02005005	Plastic bags

Market

07004008	Other consumer products
08004004	Other pollution and recycling related
08006001	Process control and logistics
09004006	Packing products and systems
09004008	Other manufacturing (not elsewhere classified)

NACE

C.22.2.1	Manufacture of plastic plates, sheets, tubes and profiles
C.22.2.2	Manufacture of plastic packing goods
C.22.2.9	Manufacture of other plastic products

Open for EOI : Yes

Client

Type and Size of Organisation Behind the Profile

Industry SME 50-249

Year Established

1980

Turnover

1 - 10M

Client Country

Albania

Partner Sought

Type and Role of Partner Sought

Company request technology an nowadays one and brand new.

The partner should offer the flexographic machines with 8 color and the technical assistance for

it. Company is in the market since 15 years they have experienced staff but in new ones they need to get some more technical explanation.

The other machines is a slitter for this company need and offer accompanied with technical assistance.

The Partner should offer an extrude machine with co-extruding matrix.
Meantime the partner should offer an Hydraulic press for recycling materials.
There will be different partner each one specialize on the specific production of machines.

Type of the partnership will be build in the form of BOT based on Commercial agency agreement, financial agreement with technical assistance

Type and Size of Partner Sought

251-500

Type of Partnership Considered

Financial agreement
Commercial agreement with technical assistance
Technical cooperation agreement

Technology Request

Metal surface phosphatization equipment is needed.

Summary

A small enterprise from Vologda region in Russia needs the equipment for finished metal product surface phosphatization. The equipment is required to be used in the production with the purpose of increasing the metal corrosion resistance and extending the finished product life. The company would prefer a ready-to-use technology. The company is ready to conclude the manufacturing agreement.

Expiration Date 09 December 2016
Reference TRRU20151201001
Profile link

Details

Description

The phosphatization technology is used to provide additional protection from corrosion, as well as to increase the metal's hardness, wear resistance, and electrical insulating properties. The phosphate film is resistant to organic oils, lubricants, combustible materials, toluene, benzene, which ensures the protection of the metal from its possible corrosion. The company manufactures medical and laboratory metal furniture. It needs the equipment for phosphatization of metal surfaces of the products to apply before powder painting. The requested technology must increase the quality and extend the life of the enterprise's finished products – the metal medical furniture that may be damaged during use, which can cause its corrosion.
Under the manufacturing agreement the parther should to provide the necessary equipment and delivery it to the Russian company. Terms of delivery and trasportation will be discussed after the first contact.

Technical Specification or Expertise Sought

The company needs a partner which manufactures the equipment for metal product surface phosphatization (the formation of a special film on the metal surface which protects the metal from corrosion). The technology will be applied to the products – the metal furniture (steel, chiefly) of different size and form.
The technical documentation should be in Russian.

Keywords

Technology

02002002	Coatings
02002015	Surface treatment (painting, galvano, polishing, CVD, ..)

Market

05007007	Other medical/health related (not elsewhere classified)
08001012	Speciality metals (including processes for working with metals)

NACE

C.25.9.9	Manufacture of other fabricated metal products n.e.c.
C.31.0.9	Manufacture of other furniture

Open for EOI : Yes

Client

Type and Size of Organisation Behind the Profile

Industry SME 50-249

Client Country

Russia

Partner Sought

Type and Role of Partner Sought

Type: SME, industry.
Area: equipment manufacture.
Role: provide the equipment for the Russian SME under the manufacturing agreement.

Type and Size of Partner Sought

SME 11-50,SME <10,>500 MNE,251-500,SME 51-250,>500

Type of Partnership Considered

Manufacturing agreement

Seeking manufacturer for innovative oil spill recovery vessel

Summary

A UK company has developed an innovative oil spill recovery vessel (OSRV) that can recover up to 40 tonnes of water-free oil per hour, and is seeking manufacturers to build from the prototype under licence. The partner would have to have a Lloyds Approved premises and work-force, or (maybe with the UK company's help) become approved. They are particularly interested in Finland but are open to enquiries from across Europe for manufacturing agreements.

Last Update	03 May 2016
Expiration Date	13 November 2016
Reference	TRUK20150512001
Profile link	

Details

Description

Tackling oil spills is extremely expensive, especially if they reach the shoreline. Those responsible for the pollution face severe financial penalties which can be reduced or eliminated by fast effective response.
International law also now requires ships to have oil spill response coverage to enter any international port.

The high cost of arranging cover with land based oil spill response contractors is eliminated however with this vessel, which is a compact certified OSRV that can be carried on board. Insurance claims and "land-based" response agency fees can be dramatically reduced by installation of these vessels.

Heavy oil recovered by these vessels contains 0% water, lighter oils can contain a maximum of 2% water; and each vessel can recover up to 4,100 barrels of oil per day which can be reprocessed ensuring maximum financial gains. The rapid response time and continuous operation enabled by the vessel drastically reduces clean-up costs to a minimum. With a two person crew and low fuel consumption, operating costs too, are kept to a minimum.

The vessel has the capacity to work worldwide in all locations, inshore or offshore, tropical to arctic. In the event of flood situations, e.g. recent instances in eastern Australia and Pakistan, and currently the UK, the design renders it suitable for emergency shallow water rescue operations.

The vessel has a single, powerful EPA (Environmental Protection Agency) Tier II approved | EIAPP (Engine International Air Pollution Prevention) Certified TDI diesel engine which drives the boat and powers the hydraulics, eliminating the need for additional auxiliary engines and unnecessary emissions. They vessels use bio-degradable oils as standard.

The UK company has provisional orders for boats already and is seeking other interested European manufacturers willing to build for the company under licence. They are seeking companies across Europe, but with a particular interest in Finland, that have a Lloyds Approved premises and work-force, to reach a manufacturing agreement.

Technical Specification or Expertise Sought

The manufacturers sought should be Lloyds Approved however Lloyds will supply surveyors for the UK company worldwide where the boats will be built, so they can advise on the requirements for certifying production facilities

The UK company would also supply mould sets and the necessary components for the job and there would be set prices and timelines to be adhered to. All the necessary instruction and info would be supplied too.

The specifications for the vessels are:

Overall Length: 8.85m
beam 2.55m
Draft 0.45m

Hull construction: structurally certified by Lloyds Register to 150nm from shore

Engine: FNM 250HP 4 Cylinder TDI Diesel. EPA Tier II and EIAPP certified to Lloyds +100A1 SSC WORKBOAT MONO HSC G3
9 (nine) International patents

Propulsion: jet drive with auto clean intake screen

Lifting: integral attachment points, or launch from road trailer of cradle if launched from commercial shipping

fits commercail transport aircraft

Electrics: 12V DC solid state system; dedicated engine start battery; general service battery with parallel start; 3.5kw 110v or 230v AC. Client selects; 95% spark free sealed system.

Electronics: VHF radio

Hydraulic supply: variable pressure with wheelhouse controls

Ancillary: nav lights

Equipment: skimmer lift; 2x 2000 gallon bladders incl. solar lights, hoses and tow cable; winch; pressure washer; reverse cycle air conditioning; UV air purification; portable toilet; 12V warm/cool box

Maximum beam: 2.55m

Displacement: 3.75 tonnes TBC

Material: fibre reinforced plastic

Transmission: hydraulic with PTO (power take-off)

Steering: hydraulic

Safety equipment: engine room fire extinguishers equipment; auto bilge pumps; hand rails; lifebuoy.

Skimmer: Up to 16 tonnes per hour

Wheel House: detachable

Stage of Development

Prototype available for demonstration

IPR Status

Patent(s) applied for but not yet granted,Patents granted

Keywords

Technology

02008008	Water Transport
02009005	Shipbuilding
05004001	Filtration and Membrane Processes
10002007	Environmental Engineering / Technology
10004009	Marine Environment

Market

06004003	Other Enhanced Oil Recovery (EOI)
08004004	Other pollution and recycling related

NACE

C.28.9.9	Manufacture of other special-purpose machinery n.e.c.
C.30.1.1	Building of ships and floating structures
M.74.9.0	Other professional, scientific and technical activities n.e.c.

Open for EOI : Yes

Dissemination

Restrict Dissemination to Specific Countries

Finland, Italy, Poland, Slovenia, UnitedKingdom, USA,

Client

Type and Size of Organisation Behind the Profile

Industry SME 11-49

Client Country

United Kingdom

Partner Sought

Type and Role of Partner Sought

- Type of partner sought: Company

- Specific area of activity of the partner: Shipbuilding

- Task to be performed by the partner sought: Manufacture of novel oil spill recovery vessel with the cooperation of the designer

Type of Partnership Considered

Manufacturing agreement