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Date, place

**REQUEST FOR QUOTATION FORM**

**DESIGNED TO DETERMINATE THE ESTIMATED COMMISSION VALUE**

**FOR THE EXPENSE ITEM NO. 18 "Coating booth"**

The item is planned as an expense in the project no. POIR.02.01.00-00-0195/2017 called: "Establishment of a Research & Development Centre by SANOK RUBBER COMPANY S.A. designed to develop innovative products for the production of means of transport industry”

 (hereinafter the "Project") selected by the Ministry of Development

for funding within measure 2.1. "Support for investments in R&D infrastructure of enterprises" of the

2nd Priority Axis "Support for the environment and capacity of enterprise for R&D&I activity" of the Smart Growth 2014-2020 Operational Programme

in the call no. 1/2.1/2017 (hereinafter the "Call"), edition of <08 May 2017 – 7 July 2017. >, conducted by SANOK RUBBER COMPANY s.a (hereinafter referred to as the "Purchaser").

Description of the expense item:

Name, as in the funding application: **Coating booth**

Item no., as in the funding application: **18**.

Key parameters affecting the commission value:

Intended use:

Coating applying on rubber profiles at the extrusion moulding line

* Processed materials: water-based silicone or polyurethane coats, viscosity from 10 to 70 s (Ford cup)
* The spraying booth shall be designed with two internal work zones and permit processing in each zone independently or at the same time, as required by the work load. The operator shall be provided with access to both ends of the spraying booth to properly coat the rubber profiles which will be extruded out of two extrusion-moulding processing outlets.
* Spraying booth design:

Spraying booth outer dimensions:

* height approx. 2200 mm
* length approx. 4700 mm
* width approx. 1200 mm
* A part of the fixtures can be placed on an access platform, which shall also be delivered if provided by design with its equipment, whereas the overall height of the equipment with its access platform shall not exceed 5400 mm.

Each spraying zone shall feature:

* Spray guns – 4 units per work zone
* Two coating material feeding systems (A – a unit of diaphragm pumps and B – a unit of peristaltic pumps)
1. Membrane pump unit: two diaphragm pumps, each supplying 4 spray guns; independent coating material supply flow rate per spray gun; selectable coating material recirculation mode.
2. Peristaltic pump unit: Each of the 8spray guns shall be supplied independently via one peristaltic pump;
* 4 peristaltic pumps (per one work zone) shall be remotely controlled and feature low-pulse transfer drums with a minimum of 6 pressure rollers to provide a stable output at different I.D.s of marprene tubes; the pump speed shall be controllable at least between 5 and 100 rpm, and the flow rate control interval shall be 0.1 rpm.
* 4 spray guns (per one work zone), needleless designed, with infinitely variable spray cone width control; the spray gun spacing shall be approx. 550 mm.
* The coating material flow rate per each spray gun shall be controlled with the pump rpm, and each pump rpm shall be set independently with a master (remote) control system.
* The coating materials shall be supplied from a approx. 10-litre batching tank.
* The batching tank shall feature a low-speed agitator (with the rpm adjustable at least between 20 and 300 rpm) and an immersion height adjustment.
* The tank cover shall feature a minimum level indicator.
* All spray gun supply lines shall be fitted with quick connectors for easy replacement. Each spray gun shall be provided with a separate compressed air supply for spraying.
* Each spray gun shall feature a compensator for the peristaltic pump pulsation.
* A rubber profile seal alignment system to allow holding the product in a defined position and product repositioning according to the shape of the actual product being processed.
* A total of eight pneumatic systems for fixing and positioning of the spray guns. Each spray gun shall be positioned in three axes, and each position shall be secured against shifting during spraying; each spray gun shall be capable of rotation around the rubber profile seal and of being repositioned for product changeover.
* A dry filtration system for the spraying booth exhaust air: it shall feature a minimum of three air treatment stages with a filter insert contamination level alarm (there shall be cardboard, fibre and bag filters installed).
* Exhaust ventilation system: each work zone in the spraying booth shall feature a separate exhaust ventilation system. The exhaust fans shall be intrinsically safe and installed on the building roof or in indoor filter modules.
* Fire dampers shall be provided for the exhaust air ducts. The exhaust ventilation system shall operate fully automatically and provide a constant air exhaust rate for the spraying booth, irrespective of the filter insert contamination level.
* The ventilation ducts within the spraying booth shall feature access doors for inspection of internal contamination.
* Coating detection system: a system comprising UV sensors, installed on fully adjustable support arms at the end of spraying booth and outputting a light and sound alarm if no coating is detected on a rubber profile during processing.
* Fire alarm and suppression systems: the spraying booth shall be designed to accommodate a fire alarm and suppression system which secures the entire extrusion moulding line.
* Compressed air distribution system: the compressed air shall be supplied dry and scrubbed of oil in a 0.01 µm oil filter and separator; this system shall be complete with a chiller.
* The spraying cabin power and control system shall feature a PLC with a control panel.

The name of the Offerer:..............................................................................................

Name: ......................................................................................................................

Address: ........................................................................................................................

Telephone: ................................................................................................................

E-mail: …………………………………………………..….............................................

Price offered by the Contractor

Net price:

VAT (rate: ………%): ……………………………………………………………...

Gross price: .....................................................................................................................

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(the Offerer's seal and signature)