

Business Offer

Distribution partners and commercial agents sought for innovative fully automated sampler robots for biomass materials

Summary

A Finnish company has developed a new solution for automated biomass sampling and is looking for commercial agents, distributors and owner's engineer companies to boost growth. The novel technology is innovative and fully automated and allows taking representative samples from the truck before unloading. It works for all crushed materials. A cooperation partner could be e.g. an owner's engineer company in charge of new power plant design or smaller projects such as renewing fuel handling.

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Reference	BOFI20170706001

Details

Description

The Finnish company has developed a fully automated solution, which renews raw material quality management at biomass power plants, pulp mills and bio refineries. The sampler is a unique solution (European patent pending) that takes real-time quality management of solid biomass to the next level. The sampler enables fast and reliable sampling directly from each arriving load before unloading and it works for all crushed materials.

The biggest bottleneck in biomass quality management has been sampling. According to many studies, 80% of all falsity is an outcome of an incorrect sampling method and the remaining 20% of falsity is a result of handling samples and measuring them in the wrong way. Falsity in quality controlling is causing errors of approximately 2% in the moisture result, which causes errors of approximately 5% in the bio fuel energy content calculation.

The new sampler developed by the company eliminates errors caused by conventional sampling procedures and provides real-time information of each biomass delivery bringing considerable advantages to the industry.

The sampling procedure complies with sampling and sample handling standards EN 14778 and EN 14780 and has proven to be considerably more accurate than the manual sampling practices.

The company is already on the national market but is looking for international growth with the help of distributors, agents or owner's engineer companies (representative of the commissioning company undertaken to protect the owner's interest in a construction or engineering project)

operating in the biomass sector within and outside Europe. Ideally, the partner is involved in power plant design or in renewing fuel handling systems and is also able to provide maintenance and service work.

Based on first-hand experience in working with different energy companies in biomass sampling in Finland as well as on international studies, the company identified a global challenge in the sector and developed an automated solution to improve the procedures for quality control. So far the company has contacted directly potential clients such as power plants and engineering companies, but they are looking for partners for international growth.

Advantages and Innovations

This Finnish automation technology solves a global challenge of biomass sampling. The sampler collects samples automatically and rapidly straight from the load before unloading. The sampler is an out-of-the box solution combining proven technical solutions, latest technology, automation and industrial internet in a way that has never been seen before in biomass industry.

The most important advantage is to get representative samples from biomass which has been impossible so far with manual sampling. Customers will get more precise information per each load about biomass and they can optimize the burning process and consequently lower their CO₂ emissions. Also, customers have better information about their biomass e.g. how much energy they have in the terminal. This can lead to cost savings as the cost of the biomass can be determined based on more accurate (moisture) information. Company can also produce computational moisture information per each load. It is accurate enough for the logistical purposes.

The company's solution presents a new way of operating that benefits the end user (plant), feedstock supplier as well as consumers and the society at large by improving resource and cost efficiency (and therefore also sustainability) of biomass supply and use. The novel solution is estimated to create 800 000 € of annual savings at an 800 GWh (fuel usage/a) power plant. The solution helps reduce CO₂ emissions not only in the supply chain and at the plant but also by making biomass more competitive and therefore a more favourable fuel feedstock compared to coal.

Automated sampling also improves work safety remarkably, as truck drivers or power plant employees do not need to take samples manually, therefore decreasing the risk for physical injuries and being exposed to harmful substances such as dust and microbes.

Stage of Development

Already on the market

IPR Status

Patent(s) applied for but not yet granted, Trade Marks

Keywords

Technology

02003

Process control and logistics

03001

Other Industrial Technologies

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04003	Fossil Energy Sources
04005	Renewable Sources of Energy
04007	Energy efficiency
Market	
06007	Other Energy
08002001	Energy management
08002003	Process control equipment and systems
08002005	Machine vision software and systems
08003007	Other industrial equipment and machinery
NACE	
C.28.2.2	Manufacture of lifting and handling equipment

Network Contact

Issuing Partner

CONSELL GENERAL DE LES CAMBRES OFICIALS DE COMERC INDUSTRIA I NAVEGACIO
DE CATALUNYA

Contact Person

Colaborador BSP

Email

subproductes@cambrescat.org

Open for EOI : **Yes**

Client

Type and Size of Organisation Behind the Profile

Industry SME <= 10

Year Established

2015

Turnover

1 - 10M

Already Engaged in Trans-National Cooperation

No.

Languages Spoken

English
Finnish

Client Country

Finland

Partner Sought

Type and Role of Partner Sought

Commercial agent, distributor or owner's engineer company involved in energy sector. Ideally the partner is involved in power plant design or in renewing fuel handling systems and is also able to provide maintenance and service work.

Type and Size of Partner Sought

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

Type of Partnership Considered

Distribution services agreement
Commercial agency agreement

Attachments

Sampler 2.jpg



Sampler 1.jpg

