HORIZON 2020

PureBlade - Clean Sheet Compressor Design, Low Energy Air Supply for Food Drinks Production

Fact Sheet

Project Information

PureBlade

Grant agreement ID: 778867

Project website

DOI
10.3030/778867

Project closed

EC signature date
21 August 2017

Start date	**End date**
1 September 2017	29 February 2020

Funded under
SOCIETAL CHALLENGES - Secure, clean and efficient energy

Total cost
€ 2 292 111,25

EU contribution
€ 1 572 615,63

Coordinated by
LONTRA LIMITED
United Kingdom

Objective

Air compressors are important because they are used by all sections of industry to supply air for a wide range of manufacturing processes. Air compressors consume 10% of EU industrial energy use which equates to approximately 10TWh of electricity and 4.3M tonnes of CO2 per annum.
Both financial and regulatory pressures (Article 8(4) of the EU Energy Efficiency Directive) are raising the profile of industrial energy use. Audits of compressor

systems reveal opportunities to upgrade with a short return on investment due to the expensive nature of wasted and leaked air; the Lontra solution presents the possibility of over 20% energy savings, which is equivalent to approximately 20TWh of electricity, and 860,000 tonnes of CO2 saved pa across the EU.
Food and Pharmaceutical manufacturers use oil-free, low pressure air compression technologies (known as ‘blowers’) but the core designs date back to before 1935. By investing in a clean sheet design Lontra have leapfrogged the competition and created a new state of the art technology with significantly improved efficiency and reliability; the Blade Compressor®.
Our Phase 1 market research project, enabled us to better understand the work needed to develop the Blade Compressor® from TRL6 technology to TRL8 for the Food and Pharmaceutical markets, as well as mapping out our routes to market and next steps. A Phase 2 SME Instrument support would take us through the next risky technology development and market engagement – opening up significant market opportunities, accelerating Lontra’s growth and raising the bar of air compressor efficiency across industry.

Fields of science (EuroSciVoc)

engineering and technology > mechanical engineering > **manufacturing engineering**

Programme(s)

H2020-EU.3.3. - SOCIETAL CHALLENGES - Secure, clean and efficient energy MAIN PROGRAMME

H2020-EU.2.1.1. - INDUSTRIAL LEADERSHIP - Leadership in enabling and industrial technologies - Information and Communication Technologies (ICT)

H2020-EU.2.3.1. - Mainstreaming SME support, especially through a dedicated instrument

Topic(s)

SMEInst-09-2016-2017 - Stimulating the innovation potential of SMEs for a low carbon and efficient energy system

Call for proposal

H2020-SMEInst-2016-2017

See other projects for this call

Sub call

H2020-SMEINST-2-2016-2017

Funding Scheme

SME-2 - SME instrument phase 2

Coordinator

LONTRA LIMITED

Net EU contribution

€ 1 572 615,63

Total cost

€ 2 292 111,25

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CV47 8NZ SOUTHAM
United Kingdom

SME

Yes

Region

West Midlands (England) > Herefordshire, Worcestershire and Warwickshire > Warwickshire

Activity type

Private for-profit entities (excluding Higher or Secondary Education Establishments)

Links

Contact the organisation
Participation in EU R&I programmes
HORIZON collaboration network

Last update: 6 September 2024

Permalink: https://cordis.europa.eu/project/id/778867