

EPOS Technology Focus - Transport and Supply Chain Optimisation

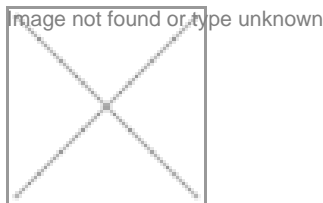
Project:

Enhanced energy and resource Efficiency and Performance in process industry Operations via onsite and cross-sectorial Symbiosis

The EPOS project brings together 5 global process industries from 5 key relevant sectors: steel, cement, chemicals, minerals and engineering.

EPOS's main objective is to enable cross-sectorial Industrial Symbiosis (IS) and provide a wide range of technological and organisational options for making business and operations more efficient, more cost-effective, more competitive and more sustainable across process sectors.

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Sector:

Cement

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Ceramics

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Chemicals

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Engineering

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Minerals

Non-ferrous metals

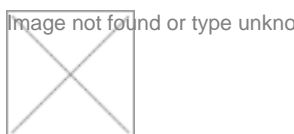
Steel

Water

Summary:

EPOS Technology Focus: Within the scope of the EPOS project, extensive literature and market research reviews were performed in order to identify different technological, organisational, service and management solutions that could be applied to different industrial sites and clusters. The collected information will aid in establishing on-site and/or cross-sectorial industrial symbiosis opportunities; additionally, to enhance overall sustainability, performance and resource efficiency of different process industry sectors. Through the cooperation of project partners, a longlist of different technological options was created. Resource material for this list included: scientific articles, project reports, manufacturer's documentation and datasheets.

Transport and supply chain optimisation: The transport and supply chain is one of the core processes in each industry sector. The optimisation of existing transport and supply systems can be done through the introduction of new technological, organisational or operational measures. Improvements can be made on many levels, namely plant, site, warehouse and transport to or from other industrial sites or plants. In addition to the improvement of the existing transport and supply processes, there are also opportunities for collaboration or the sharing of resources and assets related to the transport and supply chain. These opportunities can be identified in order to establish symbiosis between different sectors (e.g. shared warehouse facilities, consolidation of freight shipments, etc.).



- Belt conveyor
- Vertical conveyor
- Spiral conveyor
- Pneumatic conveying system
- Air-slide conveyor
- Linear motor
- Pneumatic tube system

Compressed air engine

Keywords:

Technology, Industry, Sustainability, Transport, Supply Chain

Type:

Case study

Education/training materials

Other

Rights:

Open Access

Contact Name:

Project coordinator: Greet Van Eetvelde

Email:

info@project-epos.eu