

IDENTIFICATION OF SKILLS-BUILDING NEEDS IN INDUSTRIAL SYMBIOSIS AND ENERGY EFFICIENCY IN THE CERAMIC SECTOR

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INTRODUCTION

The main objective of the European project SPIRE-SAIS (2020–2024) is to draw up a workplan entitled “European Energy-Intensive Industry Skills Agenda and Strategy (SPIRE-SAIS)”, offering a consolidated focus for addressing the demands and challenges of general skills in industrial sectors, centred in particular on the individuals and skills needed in regard to industrial symbiosis (IS) and energy efficiency (EE). The project features the participation of about 30 public and private bodies, Dortmund University (Germany) being the coordinating centre. The following industrial sectors are envisaged within the scope of the project: the chemical, cement, steel, mining, non-ferrous metals, ceramic, water, and paper and refining industries.

OBJECTIVES

- Developing a proactive, industry-driven skills strategy, focusing on industrial-urban symbiosis and energy efficiency in the eight SPIRE sectors.
- Anticipating new demands for skills and enabling proactive practical activities that will satisfy future requirements of energy-intensive industries.

METHODOLOGY

Under this project, with the collaboration of different ceramic tile manufacturing companies and the Spanish national ceramic tile manufacturers' association (ASCER), a functional organisation chart has been drawn up for the ceramic tile industry. From this organisation chart, the positions directly or indirectly related to IS and EE have been identified. The selection was obtained upon drawing up specific data sheets describing the mission, duties, and relationship with the aforementioned issues for each position.

Subsequently, with a view to obtaining a generic organisation chart for the entire ceramic sector, a double validation of this chart was carried out via the European ceramic industry association (CERAME-UNIE). This validation has allowed the representativeness of the organisation chart at sector level (including the different subsectors making up the ceramic sector) to be assured.

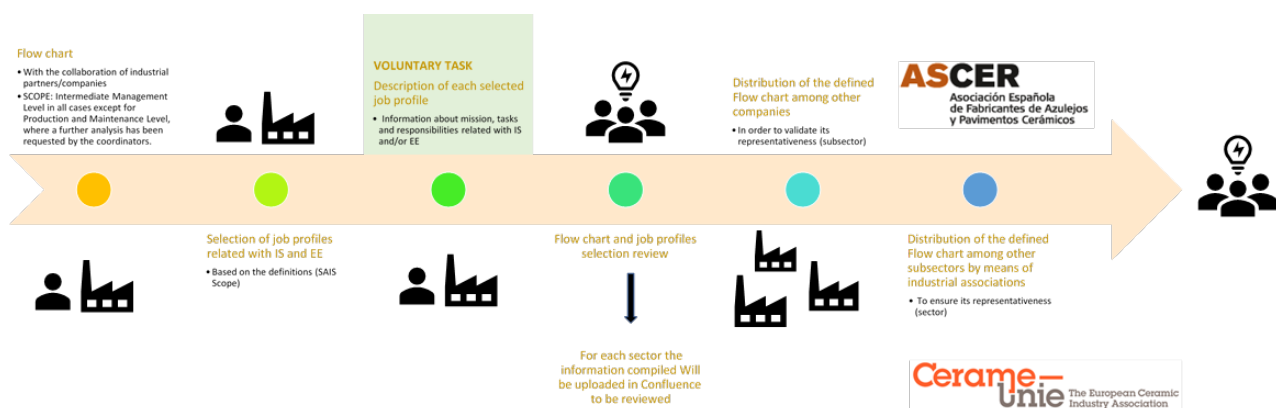


Figure 1. Applied methodology for drawing up the functional organisation chart for the ceramic industry

RESULTS OBTAINED IN THE CERAMIC SECTOR

Figure 2 depicts the organisation chart obtained in the ceramic sector, as well as the positions linked to industrial symbiosis and energy efficiency.

The profiles linked to IS and EE lie mainly in the production and maintenance sections. However, tasks linked to positions pertaining to development, purchasing, accounting, quality, human resources, occupational risk prevention, and environment departments are also identified.

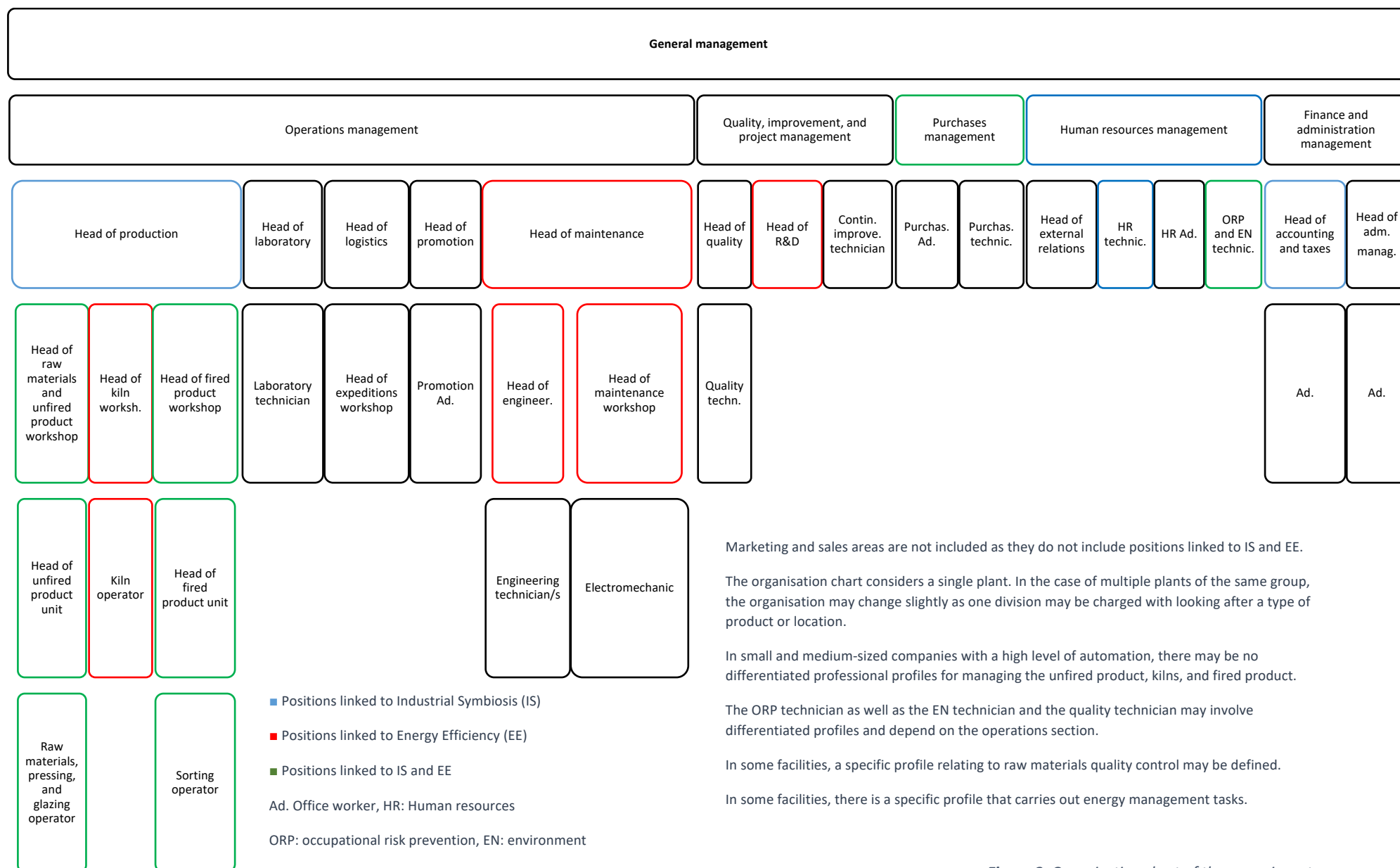


Figure 2. Organisation chart of the ceramic sector

FORTHCOMING ACTIONS

The process described above was applied in the other SPIRE industrial sectors. At present, using all the collected information, work is ongoing to establish the equivalences of these profiles across the different sectors in order to generate a multisectoral matrix of professional profiles linked to IS and EE activities.

Obtainment of this matrix will allow the skills-building needs in regard to IS and EE to be identified, as well as the suitability of current training and skills-building plans in this regard to be assessed. The results will enable new training and study plans to be drawn up that incorporate or extend the contents linked to the issues of interest (IS and EE), both at company level and at educational institution level (regulated and non-regulated training).

ACKNOWLEDGEMENTS

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