

The Technological Cluster in Business Model of Steel Production with The List of Determinants of The Development to Level 4.0 – STEEPVL Analysis*

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Abstract

The paper presents the key directions (key technologies: KETs/ICTs) of Industry 4.0 in the steel sector. Industry 4.0 technologies are the result of the fourth industrial revolution. Revolutionary design sets new business models. Innovational technologies have always been the primary determinant of changes in business models. Every company has a business model (or several), most often it is similar throughout the industry. As the steel industry changes, new business models emerge. Steel mills that are the first to change their business model/elements of the model become more competitive.

The aim of this paper was to present the key technological clusters for the steel sector. The added value of the work is both the cluster map and the list of factors for Steel 4.0. The work was created on the basis of review and own studies about using technological solutions in steel industry. The list of determinants of the development of steelworks 4.0 was compiled in accordance with the STEEPVL analysis structure.

Keywords: Industry 4.0, steelworks 4.0/steel 4.0, business model, KETs/ICTs, STEEPVL.