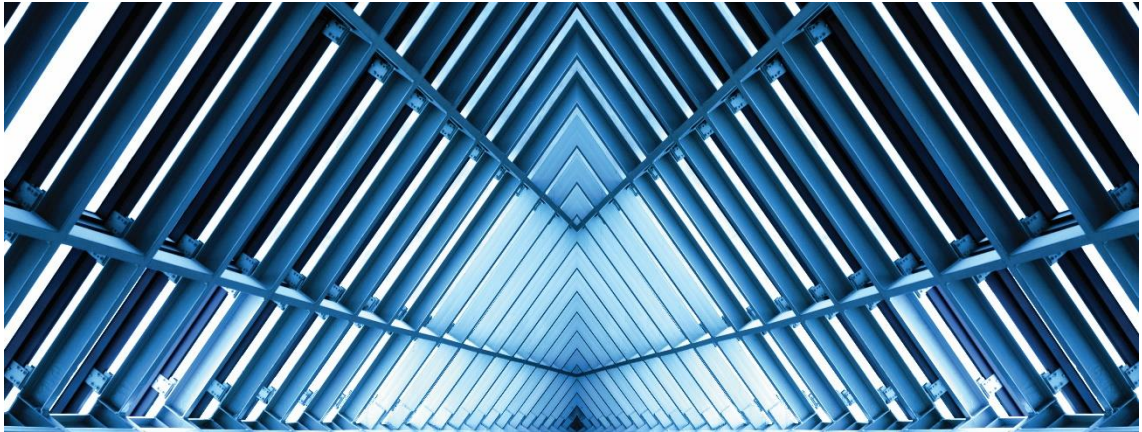


European Steel Skills Agenda (ESSA)



What's New?

First survey results on skill needs and technological developments in the European Steel Industry

In early 2021, a survey was conducted to identify first insights on current and future skills demands based on technological developments in the European steel industry. The identification of skills needs is a key part of the ESSA project and supports the development of strategies to make the workforce ready for the digital and green transformation.

The questionnaire focused on the skill requirements of employees in nine, central occupations of the steel industry:

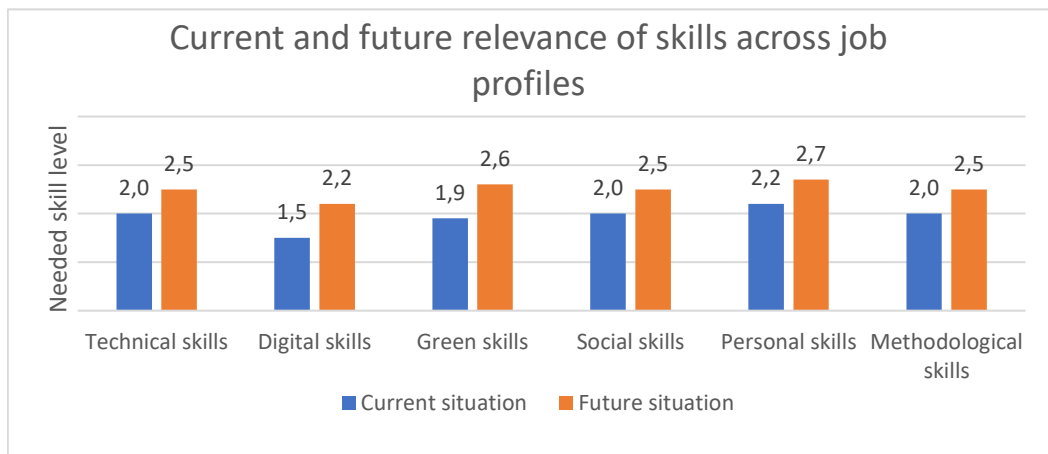
- [Metallurgical manager](#)
- [Process engineer](#)
- [Maintenance and repair engineer](#)
- [Process engineering technicians/supervisors](#)
- [Production supervisor](#)
- [Industrial electrician](#)
- [Metal processing plant operator](#)
- [Metal working machine tool setters and operators](#)
- [Factory hand](#)

The survey also included information on the current and future relevance of technologies for these job profiles. The participants were predominantly representatives of companies who reported on the job profiles they were familiar with in their positions.

Detailed results as well as information on the methodology can be found in [Deliverable 3.2](#) on pages 9 to 20. An altered version of the survey questionnaire will be used again for the European Steel Technology and Skills Foresight Panel in 2022. In this newsletter the three most important findings from the survey results 2021 will be presented.

Digital and green skills see strong increase, but personal skills remain the most important

The categorisation of skills used in the ESSA project includes six T-shaped skills categories: *Technical (physical / manual) skills* and the transversal *digital, green, social, personal, and methodological skills*, each category described by a number of subordinated skills. Looking at the skills across the selected job profiles, it becomes apparent that personal skills are the most important ones today (with 2.2 on a four-digit scale) and will also remain the most important skills on average in the near future (2.7). *Green skills* and *digital skills* are important at present and in the future as well and will receive a major boost from 1.5 to 2.2 in case of *digital skills* and 1.9 to 2.6 in case of *green skills*. Regarding the subordinated skills some of the results have to be mentioned: For example, *gross motor skills and strength* is the only skill category which will significantly lose importance in the future. Also basic digital skills are more frequently needed on a higher level as for example *cybersecurity* or *advanced IT skills & programming*.



Non-technical oriented and technical oriented occupations seem to be an interesting differentiation

Interesting differences also emerge with regard to the selected occupational profiles. A central differentiation is the significance of technical skills. For the VET related job profiles this is the most important skill category both today and in the future: For the *Industrial Electrician*, the *Metal Processing Plant Operator*, the *Factory Hand* and the *Metal Processing Tool Setters and Operators*. In the more engineer and management profiles technical skills play or will play only a subordinate role and transversal skills as *social, personal* and *methodological skills* play a more important role.

A wide range of technologies will become more important

Asked for the relevance of specific key technologies in job profiles the participants of the survey assessed in average, that the relevance of each of the selected technologies will be higher in the future as today. However, there are some technologies, which are already quite important today, for example *Predictive Maintenance* or *Mechatronics and Advanced Robotics*, where the increase of relevance will not be as big as it the case of other technologies such as *Big Data and Analytics* or *Internet-of-Services*, which are not so often in place right now. Overall, the number of assessments where the relevance of a technologies was assessed as quite or highly relevant ranges between 12 and 58 percent for the present, while it varies between 48 and 78 percent for the future.