Blueprint “New Skills Agenda Steel”: Industry-driven sustainable European Steel Skills Agenda and Strategy (ESSA)

Mid-term Conference
Of the European Steel Skills Alliance (ESSA)

“Online Skills Ecosystem and Pilot Training Course”

27th of May 2021
Jorge Muract, worldsteel
Online Skill Ecosystem
Collaborative tool to disseminate training to support upskilling and reskilling talent in the steel industry and academia.

Pilot Training Course
Blended learning program with e-learning, webinars, simulations and gamification.
Online Training Eco-System

- Competences
- Formal and Non-formal Certification
- Training Session

- Construction Sector
- Steel Sector
- Automotive Sector

- Other Blueprints

- Professors
- Technical schools
- Certification

- Web content
- Polytechnic institutes
- Community colleges
- Universities

- Industry Skill Requirements by Foresight

- Specific training
- Induction training
- Recruitment
- Competences

- Work
- Reinforcement and reminder

- Transfer and Implementing

- Job Profile, Occupations (competences) DB
- Technology based assessment

- People Profile DB
- Personalize Curricula

- Analytic report

- steelHub

- Integration with other EU Tools

- Training
- Human resources

- Associations
- Associations
Stakeholders using steelHub

15 Industries
2 Universities
1 Research Center
1 Association
Agenda

Online Skill Ecosystem
Collaborative tool to disseminate training to support upskilling and reskilling talent in the steel industry and academia.

Pilot Training Course
Blended learning program with e-learning, webinars, simulations and gamification.
Objectives

- Pilot a blended learning program 100% online, which include e-learning, webinars, simulation and gamification.
- Testing steelHub infrastructure.
- Collect data and perform preliminary data analysis.
Blended learning program structure
Blended learning program structure

Introduction

We received an order to produce railroad tracks for an important company in the sector. The grade of steel to be produced must meet mixed traffic specifications that include high-speed trains, for which steel grade 92600 or 1.0911 is required.

You are the technical manager of the Secondary Metallurgy and Continuous Casting processes. For both processes, you must comply with the chemical composition and inclusion content specified by the client. In addition, you must control the production parameters, such as temperature and production time, in order to reduce production cost and improve profitability of our company.

You must consider that the temperature and cost of the three ladles going into Continuous Casting process will be the same obtained in the Secondary Metallurgy process.
Start: 25 November 2020 12 UTC / End: 26 November 12 UTC
Secondary Steelmaking + Continuous Casting integrated simulator

Runs in the integrated simulator: 85,226
Secondary Steelmaking runs: 73,233
Continuous Casting runs: 11,993

Participants: 1,241
51% Industry // 49% Students

Participants from more than 50 companies and 90 educational institutions registered for the challenge.

PARTICIPATION PER REGION
- Europe & Africa: 7% (87)
- Americas: 11% (142)
- Asia West: 19% (235)
- Asia North: 29% (358)
- Asia East and Oceania: 34% (421)

TOP PARTICIPATING COUNTRIES
- China: 358
- South Korea: 354
- India: 134
- United Arab Emirates: 99
- Mexico: 52
- Brazil: 47
- Taiwan, China: 47
- Argentina: 34
- Slovenia: 21
- Russia: 15

SteelChallenge-15 is generously sponsored by the following companies:
# Leaderboard Europe for student and industry

## Europe and Africa - Student Category

<table>
<thead>
<tr>
<th>Position</th>
<th>Person</th>
<th>Affiliation</th>
<th>Country</th>
<th>Price</th>
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<tr>
<td>1</td>
<td>Andre Massaccesi Guimaraes</td>
<td>University of Westminster</td>
<td>United Kingdom</td>
<td>57,4669</td>
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<tr>
<td>2</td>
<td>Blaž Žerjav Jereb</td>
<td>University of Ljubljana</td>
<td>Slovenia</td>
<td>57,4807</td>
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<td>3</td>
<td>Noel Gregori</td>
<td>University of Ljubljana</td>
<td>Slovenia</td>
<td>57,4916</td>
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<tr>
<td>4</td>
<td>Gregor Šegel</td>
<td>University of Ljubljana</td>
<td>Slovenia</td>
<td>57,6215</td>
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<tr>
<td>5</td>
<td>Matija Arzenšek</td>
<td>University of Ljubljana</td>
<td>Slovenia</td>
<td>57,6419</td>
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## Europe and Africa- Industry Category

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<tr>
<td>1</td>
<td>Alexander Nesmeev</td>
<td>TMK</td>
<td>Russia</td>
<td>59,3997</td>
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<tr>
<td>2</td>
<td>Nikolay Stolbov (Хиконол Столбо)</td>
<td>TMK</td>
<td>Russia</td>
<td>60,3446</td>
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<tr>
<td>3</td>
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<td>TMK</td>
<td>Russia</td>
<td>61,3687</td>
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<td>4</td>
<td>Lorenzo Bergamo</td>
<td>Tenaris</td>
<td>Italy</td>
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</tr>
<tr>
<td>5</td>
<td>Alexey Vladimirovich Nikitin (Алексей Владимирович Никитин)</td>
<td>TMK</td>
<td>Russia</td>
<td>62,9744</td>
</tr>
</tbody>
</table>
Survey

99% participants recommended

300/1200 answer the survey
Aggregated Data Analysis
Conclusion

First working prototype of steelHub to collaborate in the dissemination of training content to support upskilling and reskilling talent in the steel industry and academia.
Thanks for your attention

Jorge Muract, worldsteel
muract@worldsteel.org

ESSA website: https://www.estep.eu/essa
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