CONTROL IN STEEL

Deliverable 3.3: Dissemination Material

Preliminary Version: 2022-02-24
To be finalized after the project

1. Project summary

The project ControlInSteel is a dissemination activity. Focus of the dissemination are advanced control and automation concepts in the downstream process chain of the European steel production.

Today, knowledge engineering is a mature tool for analyzing problem solutions paths chosen by research projects as functions of impact, effort and problems. In ControlInSteel, controlled vocabularies will be developed, extended to taxonomies and ontologies to describe the interplay between chosen method, targeted problem and impact. Outcome of the project will be a systematic analysis which methods have been the most effective ones for reaching the desired impact.

At the center of any dissemination project is the distribution of results. On the one hand by discussing the results found by the ControlInSteel evaluation. On the other hand. by broadening the knowledge about those former project results that are evaluated by the project.

ControlInSteel started within the global COVID-19 crisis. The projects initial plan to conduct face-to-face workshops for the dissemination was slightly changed towards digital workshops and on-demand course material. The project team believes, that with this approach, the dissemination work will be even more reusable for the future.

2. Dissemination Material

2.1. Location of Material

The dissemination material is shared among the project team via our www.controlinsteel.com web page, following a hidden page link:

https://www.controlinsteel.com/material/

This link is open for public, but not advertised as menu entry on our site as long, as the material is preliminary.

All talks are found as PDFs.

2.2. Cover Pages Overview

Sant'Anna

ICT COISP

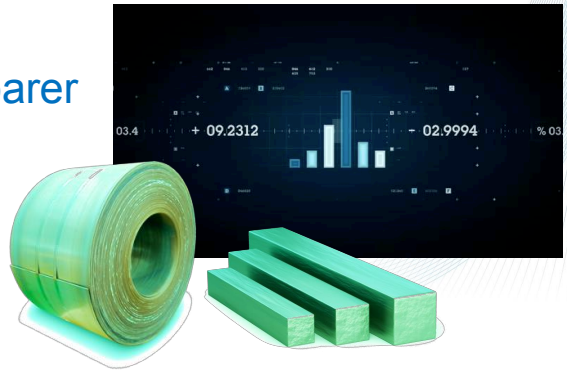
Cyber-Physical Systems For Production Simulation And Optimization Within Complex Industrial Systems

Vincenzo Iannino, Valentina Colla

Bildschirmfoto

Von passiven Daten zu aktiven digitalen Zwillingen und erklärbarer künstlicher Intelligenz

Marcus J. Neuer



BFI Angewandte Spitzenforschung | VDEh-Betriebsforschungsinstitut GmbH

Stahl

Quantifying uncertainty in probability dynamics of production processes, using physics-informed artificial intelligence

Marcus J. Neuer

2020-10-15, ESTEP AI&ML Workshop

BFI Excellence in Applied Research

CONTROL IN STEEL

Systematic analysis of advanced automation and control solutions in EU funded research projects of the last decades

M. J. Neuer, F. Marchiori, V. Colla, J. Ordieres-Meré, M. Loos, S. Dettori

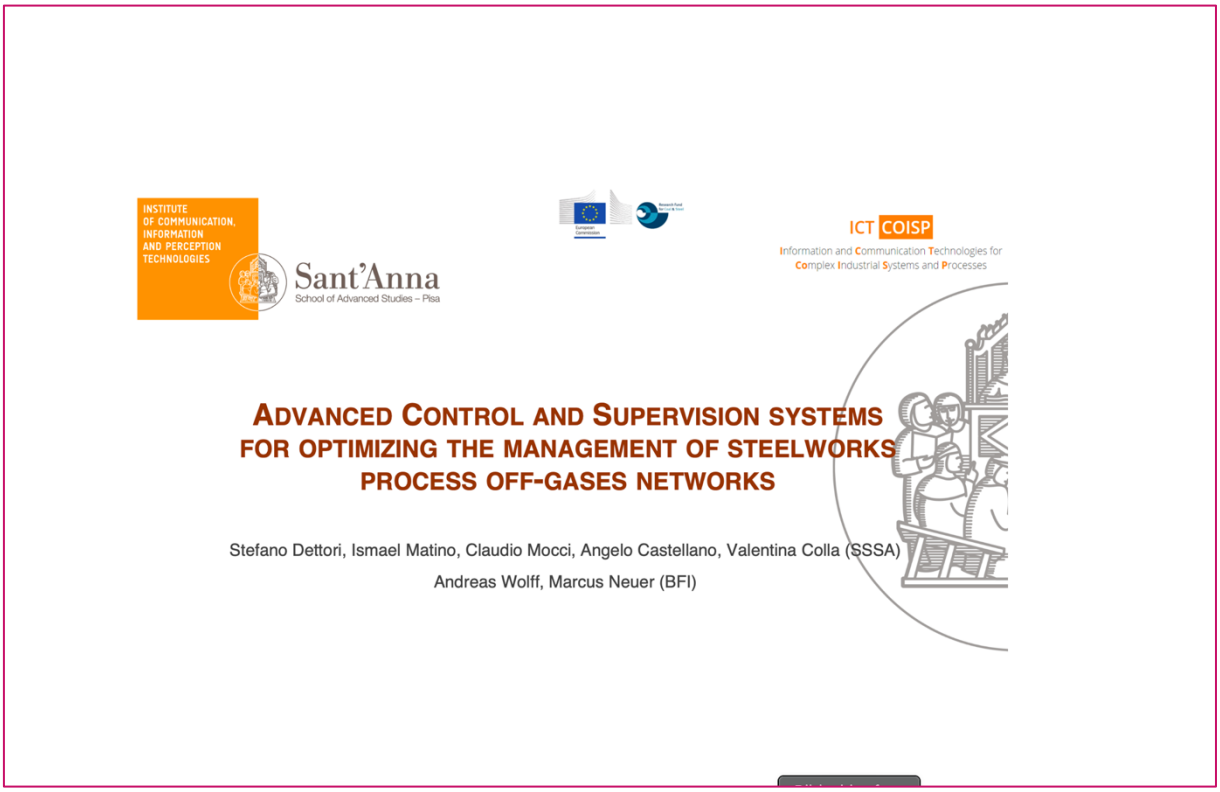
2021-08 – European Steel Technology and Application Days (ESTAD)

Research Fund for Coal & Steel

BFI Excellence in Applied Research

Sant'Anna Scuola Universitaria Superiore Pisa

CSM Centro Sviluppo Materiali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OF COMMUNICATION,
INFORMATION
AND PERCEPTION
TECHNOLOGIES
Sant'Anna
School of Advanced Studies – Pisa
ICT COISP
Information and Communication Technologies for
Complex Industrial Systems and Processes
ADVANCED CONTROL AND SUPERVISION SYSTEMS
FOR OPTIMIZING THE MANAGEMENT OF STEELWORKS
PROCESS OFF-GASES NETWORKS
Stefano Dettori, Ismael Matino, Claudio Mocci, Angelo Castellano, Valentina Colla (SSSA)
Andreas Wolff, Marcus Neuer (BFI)


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ICT COISP
Information and Communication Technologies for
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MULTI-AGENT SYSTEMS TO IMPROVE
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Scuola Superiore Sant'Anna
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INSTITUTE OF COMMUNICATION, INFORMATION AND PERCEPTION TECHNOLOGIES
Scuola Superiore Sant'Anna

ICT COISP
Information and Communication Technologies for Complex Industrial Systems and Processes

AI and ML techniques for generation and assessment of products properties data.

Marco Vannucci, Valentina Colla, Antonio Ritacco, Marco Vannocci, Antonella Vignali

From machine learning towards autonomous, explainable artificial intelligence in industrial automation for steel processing

Marcus J. Neuer and Moritz Loos

2021-08 – ESTAD2021

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