An ITEA Smart engineering project

VMAP Analytics

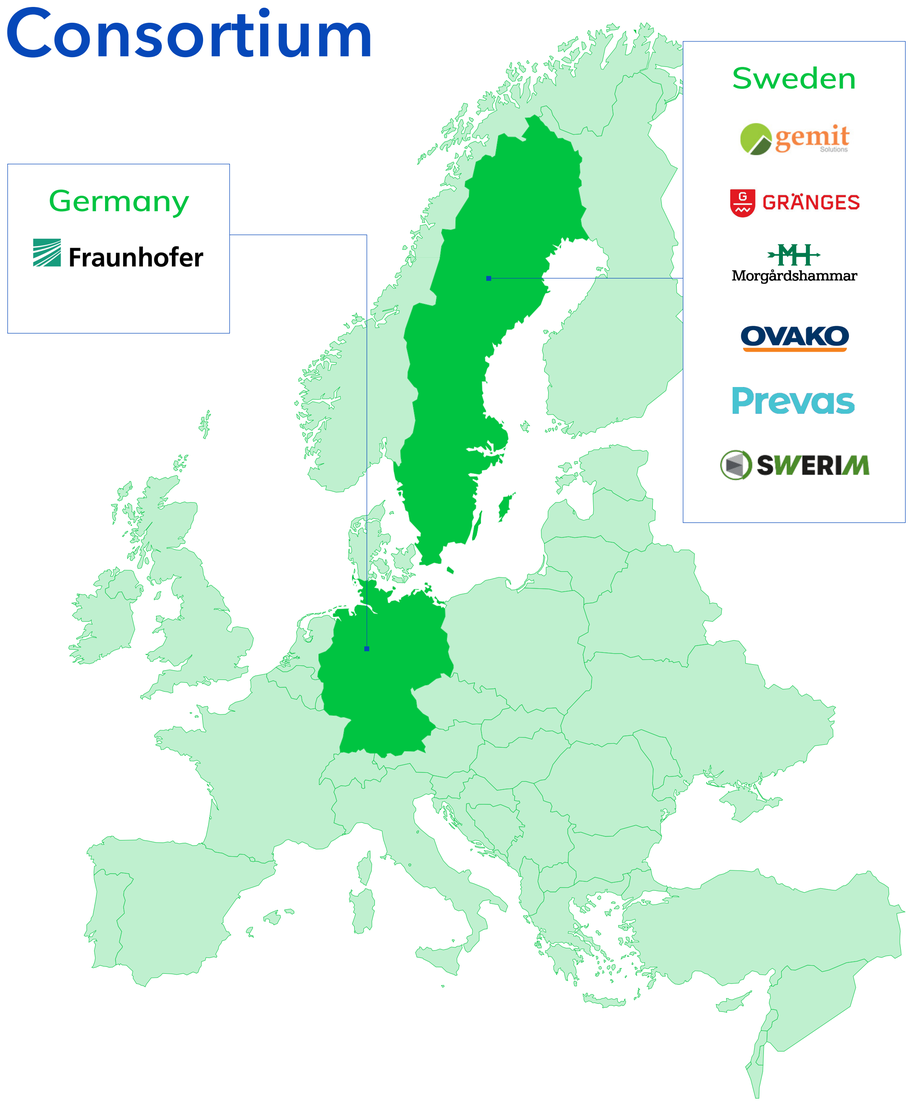
25 years ITEA 4 1998 – 2023

A common standard for digital twins

Project summary

To realise smart digital twins for manufacturing design tasks, the ITEA project VMAP analytics (Smart Analytics for Multi-Scale Material and Manufacturing) will extend the existing VMAP standard with means for measurement and monitoring data in steel production. AI-based predictive models will be trained and used to shorten development times and improve product and process quality.

Consortium



Project duration

November 2020 - April 2024

Key results

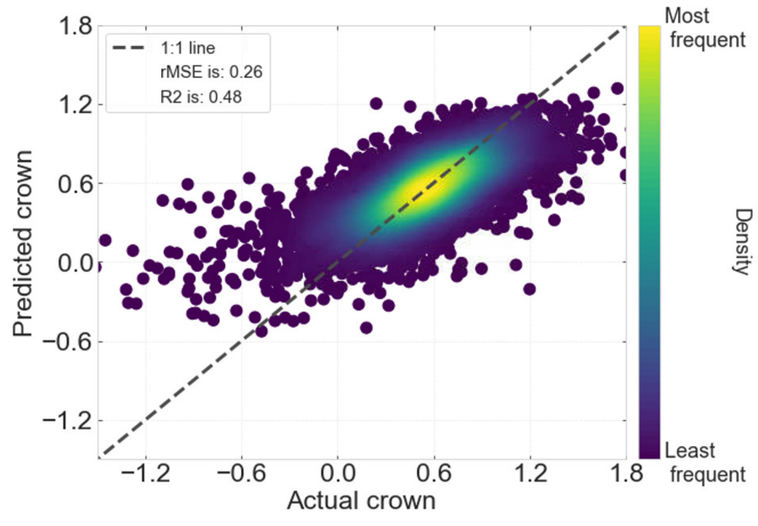
Data-based models for the prediction of:

- local and temperature-dependent rolling loads
- strip crown during hot rolling
- degassing time with controlled chemistry in the ladle furnace

Extension of the VMAP CAE data standard for:

- Management of time series data from integrated sensors
- Storage of spatially discretized measurement data

Prediction model for Strip Crown



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swerim.se/en/vmap-analytics

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vmap.eu.com

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