

Cable yarding simulation



VeroSim Cable Yarding

Based on the forest digital twin, timber harvesting with a cable crane can be simulated. Working times, machine hours and the timber assortments produced are added up and displayed graphically. The results can be used to compare different variants of line layout and intervention strength and thus determine an optimum.

Timber harvesting with a cable crane method is simulated and all work steps and the harvested timber assortments are totaled so that the results of the simulation can improve the executed felling.

DETAILS

ORIGIN OF WOOD

Forest

TYPE OF WOOD

Stemwood

KIND OF WOOD CONCERNED

Logs and whole trees

IMPACT ON ENVIRONMENT & BIODIVERSITY

Forests adapted to climate change thanks to intervention in inaccessible terrain.

INCOME EFFECT

Improved profitability of logging in steep terrain

EXPLOITATION POTENTIAL

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HUB

Central-West Hub

ECONOMIC IMPACT

Reduced installation cost, improved profitability

SPECIFIC KNOWLEDGE NEEDED

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MOBILIZATION POTENTIAL

> 50'000 m³ for Switzerland

SUSTAINABILITY POTENTIAL - VALUE

Positive

EASE OF IMPLEMENTATION

Specialist knowledge is required

EASE OF IMPLEMENTATION - EVALUATION

Difficult

KEY PREREQUISITES

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TYPE OF EVENT WHERE THIS BPI HAS BEEN FEATURED

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JOB EFFECT

Optimized planning

COSTS OF IMPLEMENTATION (EURO - €)

5000

MORE DETAILS

CHALLENGE ADDRESSED

5.- Enhance economic and environmental performance of forest supply chains

KEYWORDS

cable-crane
digital-twin

COUNTRY OF ORIGIN

Switzerland

DOMAIN

Harvesting, infrastructure, logistics

DIGITAL SOLUTION

Yes

SCALE OF APPLICATION

Cross-border/multi-lateral (several countries)

TYPE OF SOLUTION

Advice and services for forest owners

INNOVATION

Yes

START AND END YEAR

2021 - 2025

CONTACT DATA

OWNER OR AUTHOR

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REFERENCES AND RESOURCES

MAIN WEBSITE

<https://www.bfh.ch/en/research/research-projects/2021-297-267-347/>

PROJECT WEBSITE

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PROJECT REFERENCE

Cable yarding simulation 4.0

RESOURCES

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LOGO OF BEST PRACTICE

LOGO OF MAIN ORGANIZATION

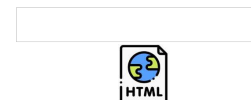


PROJECT UNDER WHICH THIS FACTSHEET HAS BEEN CREATED

Rosewood 4.0

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A TOOL FROM ROSEWOOD 4.0, DESIGNED AND DEVELOPED BY

