

# 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

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### 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 m<sup>3</sup> 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

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### 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

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### OWNER OR AUTHOR

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### REPORTER

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## REFERENCES AND RESOURCES

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### 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

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LOGO OF MAIN ORGANIZATION

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PROJECT UNDER WHICH THIS FACTSHEET HAS BEEN CREATED

Rosewood 4.0

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11 Dec 2023

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A TOOL FROM ROSEWOOD 4.0, DESIGNED AND DEVELOPED BY

