

RUDDERSTOCK REFURBISHMENT

Environmental improvements from life extension

OBJECT OF ASSESSMENT

Wencon Rapid & Coating application

WENCON®

→ CURRENT LIFE CYCLE (RUDDERSTOCK – 9,000 KG)

BASED ON SCENARIO 1



CURRENT CARBON FOOTPRINT
71,172 KG CO₂eq

SDG POTENTIAL



↻ REFURBISHMENT LIFE CYCLE (RUDDERSTOCK – 9,000 KG)

BASED ON SCENARIO 2



NEW CARBON FOOTPRINT
9,072 KG CO₂eq

TOTAL CO₂EQ SAVINGS
87.2%

COMPARATIVE LIFE CYCLE ASSESSMENT

SCENARIOS	POTENTIAL SAVINGS
S1 Business-as-usual	0%
S2 Refurbishment	87.2%
S3 Refurb. w. oceanic transportation	80.1%
S4 Refurb. w. aerial transportation	-127.8%
S5 Refurb. w. ReCiPe modelling framework	87%
S6 Refurb. w. geographical location	87.4%



RECOMMENDATIONS

- Reduction potential from life extension: Wencon refurbishment significantly lowers CO₂ footprint
- Rudderstocks may be transported by ship for refurbishment: Wencon refurbishment lowers CO₂ footprint even when transported over large distances via oceanic freight
- Rudderstock aerial transportation should be avoided: Wencon refurbishment may not reduce CO₂ footprint if transported over large distances via air freight
- Rudderstock refurbishment may change geographical location: Benefits may be obtained although refurbished in China