



# Sustainable Optimization Agitator Report



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RETURN ON INVESTMENT

**59.29 %**

ENERGY SAVINGS PER YEAR

**€2.473,17**

PAYBACK TIME

**1.69 years**

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*Please note that the calculations and analysis made in this Sustainable Optimization report are based on information and data which is not originating directly from Alfa Laval. Alfa Laval cannot verify the contents of this report and it is intended as general information on potential optimizations only. The information and data in the report shall not be construed as an express or implied warranty or guarantee and shall be relied upon entirely at the customer’s own risk.*



## INTRODUCTION

The purpose of the Alfa Laval Sustainable Optimization report is to present optimization possibilities on the specified equipment. This report will give estimations on economic improvements based on investment and cost operation numbers.

On the following pages you will see an analysis of the agreed equipment.

Alfa Laval provides complete assistance to realize the estimated savings, and we also provide other services, from installation to maintenance and spare parts.

For further information, please contact:

Scenarios

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## OPERATION PARAMETERS

The calculations are based on these settings

PROJECT NAME	AgitatorScenario
ITEM NAME	150 m <sup>3</sup> milk tank
TAG REFERENCE	Tank tag no.
OPERATING TIME PER BATCH	12.00 hours
OPERATIONG BATCHES PER YEAR	364
OPERATING TIME PER YEAR	4368 hours
LIFETIME IN YEARS	10
COUNTRY	Germany
ELECTRICITY COST PER KWH	0.1586
CO2 EMISSION PER KWH	0.5452



## EQUIPMENT PROFILES

The calculations are based on these settings

	AGITATOR 1	AGITATOR 2
MODEL NAME	ALS Gear drive	ALS Direct drive
MOTOR ABSORBED POWER PER UNIT	1.58 kW/h	5.15 kW/h
LIST PRICE PER UNIT	€9.999,00	€5.828,00
DISCOUNT	0.00 %	0.00 %
NET PRICE PER UNIT	€9.999,00	€5.828,00
ADDITIONAL INVESTMENT COSTS		
ADDITIONAL RUNNING COSTS	€0,00	€0,00
ADDITIONAL INVESTMENT COSTS NOTES		

## ANALYSIS WIZARD

Below you see the comparison between the equipments profiles

	AGITATOR 1	AGITATOR 2
EQUIPMENT QTY	1	1
TOTAL INVESTMENT COST	€10.499,00	€6.328,00
TOTAL OPERATING COST	€1.094,57	€3.567,74
ELECTRICAL ENERGY COST PER YEAR	€1.094,57	€3.567,74
ELECTRICAL ENERGY COST DURING LIFETIME	€10.945,68	€35.677,39
CO2 EMISSION PER YEAR	3762.67 kg	12264.38 kg
CO2 EMISSION DURING LIFETIME	37627 kg	122644 kg

## ANALYSIS OUTPUT

Below you see the comparison between the equipments profiles

	ALS GEAR DRIVE	ALS DIRECT DRIVE	ALS GEAR DRIVE VS. ALS DIRECT DRIVE SAVINGS
INVESTMENT	€10.499,00	€6.328,00	-€4.171,00
COSTS			
ANNUAL	€1.094,57	€3.567,74	€2.473,17
OPERATIONAL			
COSTS			
ENERGY COSTS	€1.094,57	€3.567,74	€2.473,17
CO2 EMISSIONS	3762.67	12264.38	8501.72
TCO	€21.444,68	€42.005,39	€20.560,70
ROI			59.29%
PAYBACK			1.69 years

## RETURN ON INVESTMENT

