



# Sustainable Optimization Pump Report



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RETURN ON INVESTMENT

**63.94 %**

ENERGY SAVINGS PER YEAR

**€801,81**

PAYBACK TIME

**1.56 years**

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Compare Project pump replacement report,  
generated Sep 06 2018 by Scenarios



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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	Compare
ITEM NAME	Compare Solid C V LKH
TAG REFERENCE	
FLOW RATE	35
HEAD	40
OPERATING HOURS PER DAY	15.0000
OPERATIONG DAYS PER YEAR	300
OPERATING HOURS PER YEAR	4500
LIFETIME IN YEARS	10
COUNTRY	Denmark
ELECTRICITY COST	0.0836
CO2 EMISSION PER KWH	0.5452



## EQUIPMENT PROFILES

The calculations are based on these settings

	PUMP 1	PUMP 2
MODEL NAME	LKH-25/179	SolidC-3/195
PUMP EFFICIENCY TYPE	IEC50HzIE3@50Hz	IEC50HzIE3@50Hz
MOTOR SUZE (KW)	7	8
MOTOR ABSORBED POWER PER UNIT	5.8600	7.8400
LIST PRICE PER UNIT	10241.00	7733.00
DISCOUNT	50.0000	50.0000
NET PRICE PER UNIT	5120.50	3866.50
ADDITIONAL INVESTMENT COSTS	0.00	0.00
ADDITIONAL RUNNING COSTS	0.00	0.00
ADDITIONAL INVESTMENT COSTS NOTES		

## ANALYSIS WIZARD

Below you see the comparison between the equipments profiles

	PUMP 1	PUMP 2
MOTOR SIZE	2 poles, 50 Hz, 7,5kW	2 poles, 50 Hz, 11kW
NET PRICE EXCL. ADD'L INVESTMENT COSTS	€5.120,50	€3.866,50
ADDITIONAL INVESTMENT COSTS	€0,00	€0,00
ADDITIONAL RUNNING COST PER HOUR	€0,00	€0,00
TOTAL INVESTMENT COST	€5.120,50	€3.866,50
TOTAL OPERATING COST	€2.404,07	€3.205,88
ELECTRICAL ENERGY COST PER YEAR	€2.404,07	€3.205,88
ELECTRICAL ENERGY COST DURING LIFETIME	€24.040,70	€32.058,78
CO2 EMISSION PER YEAR	15678	20907
CO2 EMISSION DURING LIFETIME	156782	209072



ANALYSIS OUTPUT

Below you see the comparison between the equipments profiles LKH 70 and LKH 70

	LKH-25/179	SOLIDC-3/195	LKH-25/179 VS. SOLIDC-3/195 SAVINGS
INVESTMENT COSTS	€5.120,50	€3.866,50	-€1.254,00
ANNUAL OPERATION COSTS	€2.404,07	€3.205,88	€801,81
ENERGY COSTS	€2.404,07	€3.205,88	€801,81
CO2 EMISSIONS	15678.22	20907.23	5229.02
TCO	€29.161,20	€35.925,28	€6.764,08
ROI			63.94%
PAYBACK			1.56 years

RETURN ON INVESTMENT

