

## Efficiency analysis report

**Sample audit A\_copy\_11/08/2017 13:32:46**

Audited from 2013-08-12 09:20 until 2013-09-02 13:23

**SIM\_COLLECTION\_0**

**Supply side calculated flow 0 (Annual)**

2017-09-26

A thick red line starts from the bottom left corner, goes up and right, then down and right, then up and right, ending at the bottom right corner.

# EQUIPMENT DATA

## Existing configuration

ZR4/51		ZT90 VSD		ZT160 FF		ZT30 FF	
Rated pressure	116 psi	Rated pressure	130 psi	Rated pressure	108.1 psi	Rated pressure	116 psi
Full load	187 kW	Full load	139 kW	Full load	175 kW	Full load	32.8 kW
Offload	56 kW	Offload	20 kW	Offload	58 kW	Offload	10.1 kW
Full output	433.7 m³/min	Full output	226.3 m³/min	Full output	339.4 m³/min	Full output	63.8 m³/min
Offload pressure	105.2 psi	Offload pressure	101.55 psi	Offload pressure	97.9 psi	Offload pressure	94.25 psi
Onload pressure	97.9 psi	Onload pressure	94.25 psi	Onload pressure	90.6 psi	Onload pressure	86.95 psi

## Proposed configuration



ACTIVE

ZR4/51		ZT90 VSD		ZT160 FF		ZT30 FF	
Rated pressure	116 psi	Rated pressure	130 psi	Rated pressure	108.1 psi	Rated pressure	116 psi
Full load	187 kW	Full load	139 kW	Full load	175 kW	Full load	32.8 kW
Offload	56 kW	Offload	20 kW	Offload	58 kW	Offload	10.1 kW
Full output	433.7 m³/min	Full output	226.3 m³/min	Full output	339.4 m³/min	Full output	63.8 m³/min
Offload pressure	88.4 psi	Offload pressure	88.4 psi	Offload pressure	88.4 psi	Offload pressure	88.4 psi
Onload pressure	85.5 psi	Onload pressure	85.5 psi	Onload pressure	85.5 psi	Onload pressure	85.5 psi

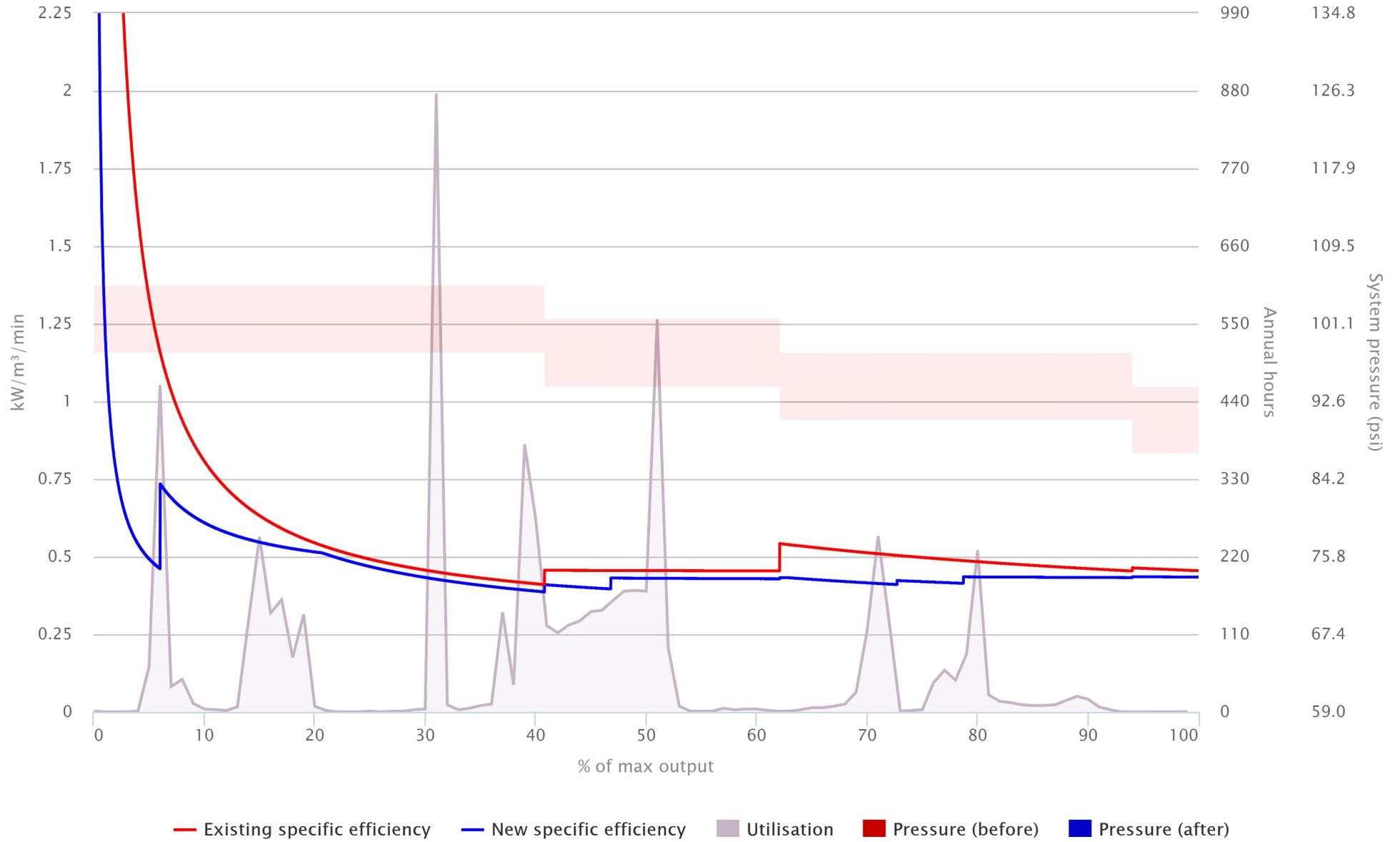
Units

Flow: m³/min

Pressure: psi

Power: kW

# GRAPH DATA



# CHART DATA

8760						
0-10 % <input type="text" value="623"/>	0.0 - 106.3	70.9	34.2	36.7	22864.1	1829.13
10-20 % <input type="text" value="907"/>	106.3 - 212.6	100.8	87.1	13.7	12425.9	994.07
20-30 % <input type="text" value="16"/>	212.6 - 319.0	130.6	124.3	6.3	100.8	8.06
30-40 % <input type="text" value="1476"/>	319.0 - 425.3	160.4	151.7	8.7	12841.2	1027.30
40-50 % <input type="text" value="1546"/>	425.3 - 531.6	216.3	196.6	19.7	30456.2	2436.50
50-60 % <input type="text" value="841"/>	531.6 - 637.9	265.8	251.1	14.7	12362.7	989.02
60-70 % <input type="text" value="70"/>	637.9 - 744.2	353.9	293.6	60.3	4221.0	337.68
70-80 % <input type="text" value="724"/>	744.2 - 850.6	396.4	334.1	62.3	45105.2	3608.42
80-90 % <input type="text" value="357"/>	850.6 - 956.9	426.3	391.8	34.5	12316.5	985.32
90-100 % <input type="text" value="28"/>	956.9 - 1063.2	462.9	438.1	24.8	694.4	55.55
<input type="text" value="81"/>	N/A	23.1	2.89	20.2	1637	130.96
<input type="text" value="2091"/>	1411161.9 kW     1256136.89 kW <b>You will save:</b> 155025 kW hours, \$ 12402.00, 95805.45 lbs/CO <sub>2</sub> per year					
<input type="text" value="0"/>						

# CONCLUSIONS

## SIMULATION DATA



**Audit name** Sample audit A\_copy\_11/08/2017 13:32:46  
**Collection name** SIM\_COLLECTION\_0  
**Simulation name** Supply side calculated flow 0 (Annual)  
**Simulation type** Supply side calculated flow

### Prepared for

**Company** sample company name  
**Address line 1** sample Address 1  
**Address line 2** sample Address 2  
**City** sample City  
**ZIP** sample zip  
**State** sample state  
**Country** Belgium  
**Name** Mr. sample given name sample family name  
**Job title** 1

### Prepared by (author)

**Company** CMC NV  
**Address line 1** /  
**Address line 2** /  
**City** /  
**ZIP** /  
**State** /  
**Country** Belgium  
**Name** Mr. Anthony Hoeckman  
**Email** anthony.hoeckman@cmcnv.com

## Summary conclusions

We have concluded that **you will save 155025 kW hours, \$ 12402.00 and 95805.45 kilo/CO<sub>2</sub> per year** by applying the proposed equipment configuration shown on page 2 of this report.

Evidence to support our conclusions is provided in the associated Graph & Chart data.

Graph data shows the sites unmanaged versus managed specific efficiency and operating pressure range alongside the annualised system utilisation.

Chart data tables system utilisation in easy to read 10% 'utilisation zones' and highlights the difference in unmanaged versus managed kW, kW hours and cost per annum within each zone before totalising savings at the foot of the table.

Additional author comments relating to this efficiency analysis report follow

## AUTHOR COMMENTS

Signature of author: \_\_\_\_\_

Dated: \_\_\_\_\_

The estimates shown are calculated from given compressor performance data and are intended to demonstrate the potential energy cost savings achievable by the use of Gardner Denver energy efficient products. These estimates do not constitute a contract or part thereof. Site conditions vary and operating conditions are not known. Gardner Denver cannot accept liability if these savings are not achieved in practice.