

Date: 11/12/2019

Project Name: Neapel Nord

Customer:

Sales Order Number:

Application Engineer: Michael Schwarz

Comment: Operating Data according existing impeller configuration and actual pressure at outlet

AMBIENT GAS PARAMETERS	ENGLISH UNITS	METRIC UNITS
Molecular Weight	28.834 lbm/lbmol	28.834 kg/kgmol
R Value	53.582 ft.lbf/lbm.R	0.288 kJ/kg.K
Density	0.074 lbm/ft^3	1.178 kg/m^3
Sp. Heat @ Const. P	0.241 BTU/lbm.R	1.011 kJ/kg.K
Ratio of Sp. Heats	1.397	1.397
Partial Pres. of Vapor	0.169	0.169

GAS MIX:	VOL
Air	100

Inlet Set 1

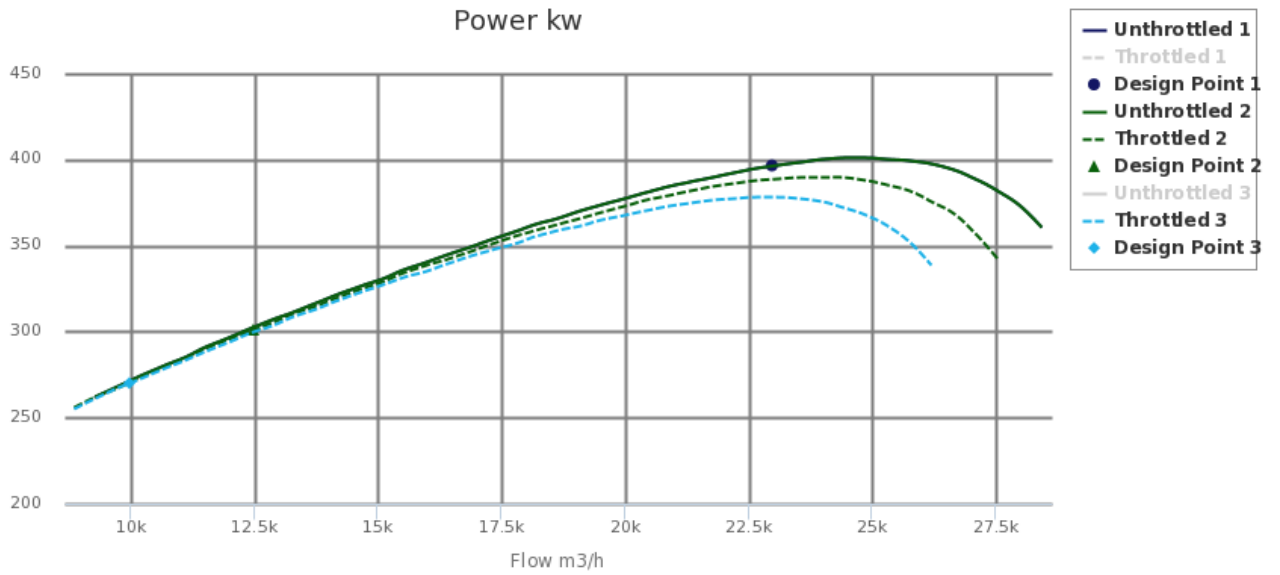
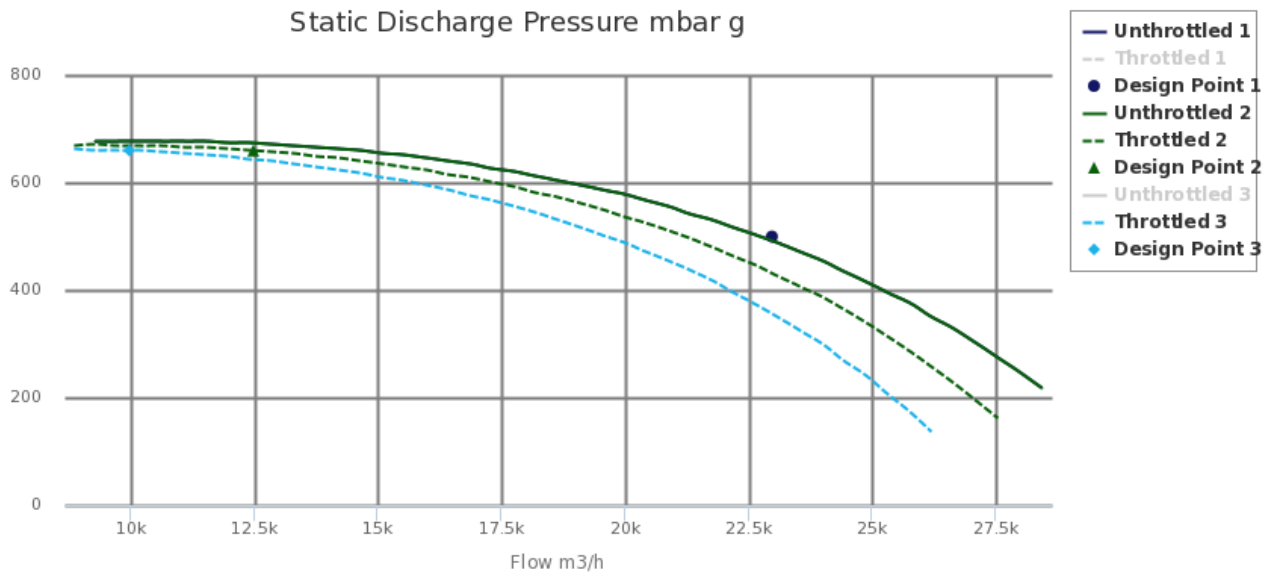
CORRECTED VALUES	ORIGINAL UNITS	ENGLISH UNITS	METRIC UNITS
Ambient Pressure	1.013 bar a	14.69 PSIA	1.01 bar a
Relative Humidity	36%	36%	36%
Ambient Temperature	25 C	77.00 F	25.00 C
Inlet Pressure	-5 mbar g	14.62 PSIA	1.01 bar g
Inlet Flow	23000 m3/h	13538 ICFM	23001 m3/h
Discharge Pressure	500 mbar g	7.25 PSIG	0.50 bar g
MEASURED VALUES	ORIGINAL UNITS	ENGLISH UNITS	METRIC UNITS
Surge Flow Rate	9299 m3/h	5473 ICFM	9299 m3/h
Surge Pressure	677.46 mbar g	9.83 PSIG	0.68 bar g
Pressure Rise to Surge	177.46 mbar g	2.57 PSIG	0.18 bar g
Max. Vol. Turndown	59.57%	59.57%	59.57%
Pressure @ Design	500.00 mbar g	7.25 PSIG	0.50 bar g
Power @ Design	532.00 HP	532.00 HP	396.71 KW
Efficiency @ Design	68.57%	68.57%	68.57%
Temperature @ Design	77.38 C	171.29 F	77.38 C

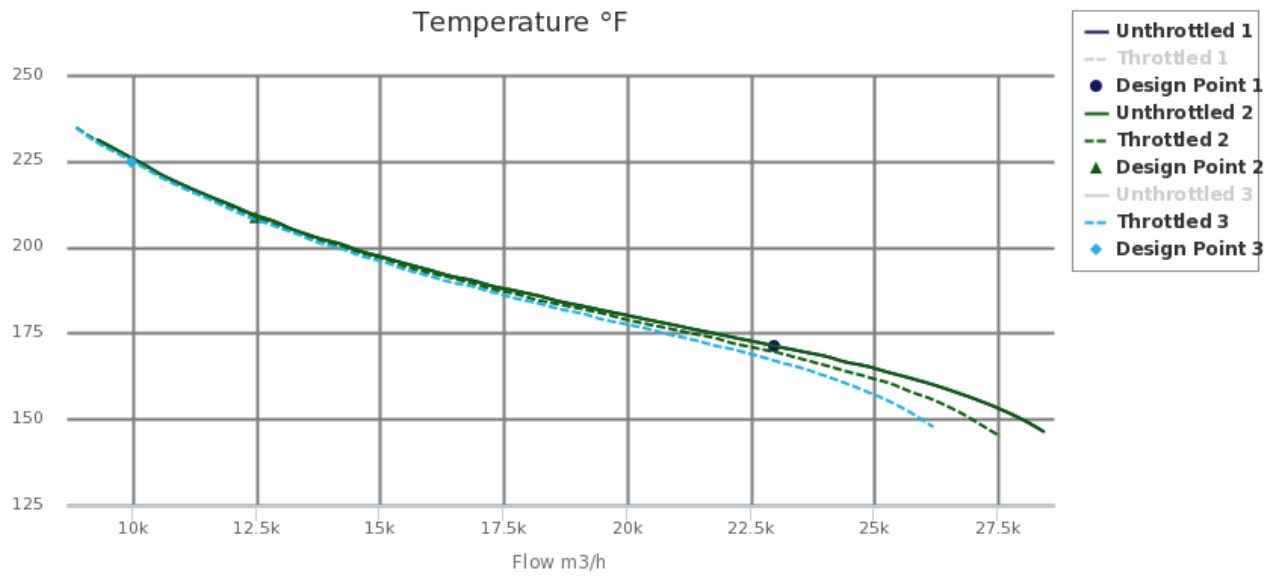
Inlet Set 2

CORRECTED VALUES	ORIGINAL UNITS	ENGLISH UNITS	METRIC UNITS
Ambient Pressure	1.013 bar a	14.69 PSIA	1.01 bar a
Relative Humidity	36%	36%	36%
Ambient Temperature	25 C	77.00 F	25.00 C
Inlet Pressure	-5 mbar g	14.62 PSIA	1.01 bar g
Inlet Flow	12500 m3/h	7358 ICFM	12500 m3/h
Discharge Pressure	660 mbar g	9.57 PSIG	0.66 bar g
MEASURED VALUES	ORIGINAL UNITS	ENGLISH UNITS	METRIC UNITS
Surge Flow Rate	9299 m3/h	5473 ICFM	9299 m3/h
Surge Pressure	677.46 mbar g	9.83 PSIG	0.68 bar g
Pressure Rise to Surge	17.46 mbar g	0.25 PSIG	0.02 bar g
Max. Vol. Turndown	25.61%	25.61%	25.61%
Pressure @ Design	660.00 mbar g	9.57 PSIG	0.66 bar g
Power @ Design	403.96 HP	403.96 HP	301.23 KW
Efficiency @ Design	63.94%	63.94%	63.94%
Tempurature @ Design	98.48 C	209.26 F	98.48 C

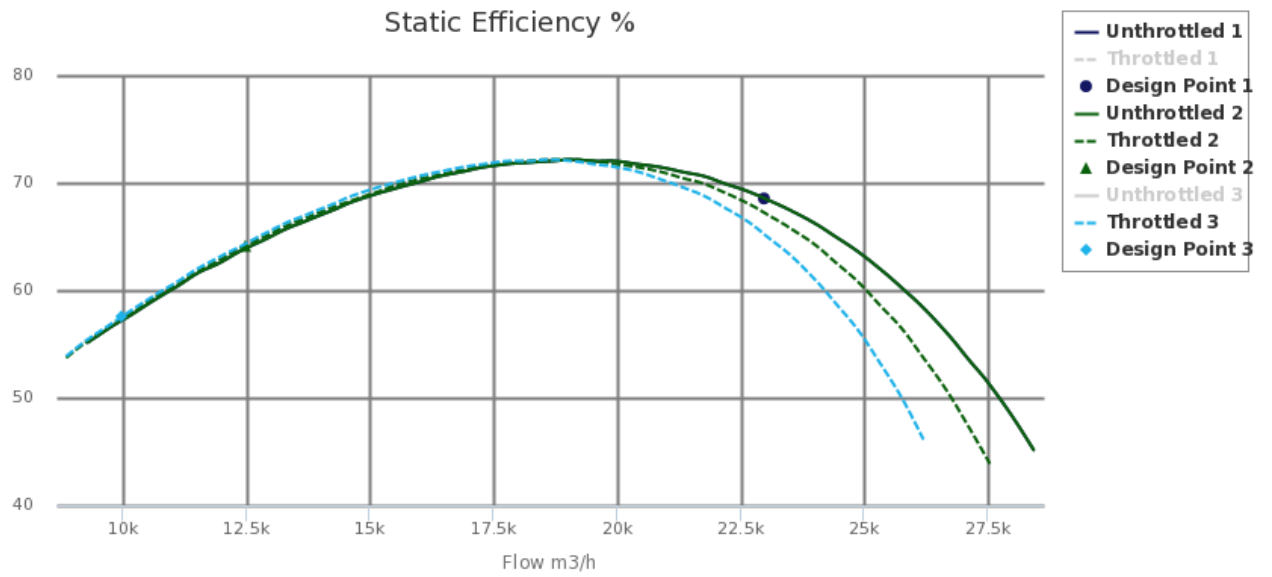
Inlet Set 3

CORRECTED VALUES	ORIGINAL UNITS	ENGLISH UNITS	METRIC UNITS
Ambient Pressure	1.013 bar a	14.69 PSIA	1.01 bar a
Relative Humidity	36%	36%	36%
Ambient Temperature	25 C	77.00 F	25.00 C
Inlet Pressure	-5 mbar g	14.62 PSIA	1.01 bar g
Inlet Flow	10000 m3/h	5886 ICFM	10000 m3/h
Discharge Pressure	660 mbar g	9.57 PSIG	0.66 bar g
MEASURED VALUES	ORIGINAL UNITS	ENGLISH UNITS	METRIC UNITS
Surge Flow Rate	9299 m3/h	5473 ICFM	9299 m3/h
Surge Pressure	677.46 mbar g	9.83 PSIG	0.68 bar g
Pressure Rise to Surge	17.46 mbar g	0.25 PSIG	0.02 bar g
Max. Vol. Turndown	7.02%	7.02%	7.02%
Pressure @ Design	660.00 mbar g	9.57 PSIG	0.66 bar g
Power @ Design	362.33 HP	362.33 HP	270.19 KW
Efficiency @ Design	57.28%	57.28%	57.28%
Tempurature @ Design	107.54 C	225.57 F	107.54 C

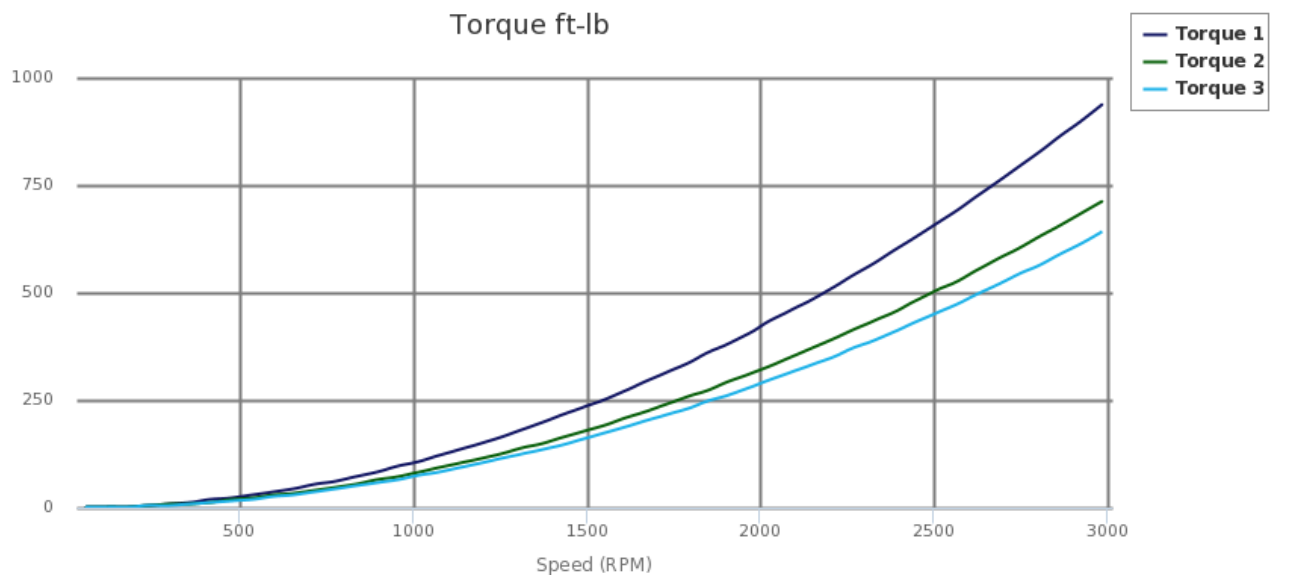




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