Filed	Value	Filed	Value
Name	TUTORIAL MACHINE	Configuration	
Tag		Notes	
Description		Service	
Model Type		Plant	
OEM		OEM PO	
OEM JN			

Section No	Section Name	Stages
1	TUTORIAL PHASE	1 TUTORIAL STAGE

Stage 1: TUTORIAL STAGE	
Impeller Diameter	600 [mm]
% Volumetric Efficiency	100
% Mechanical Efficiency	100

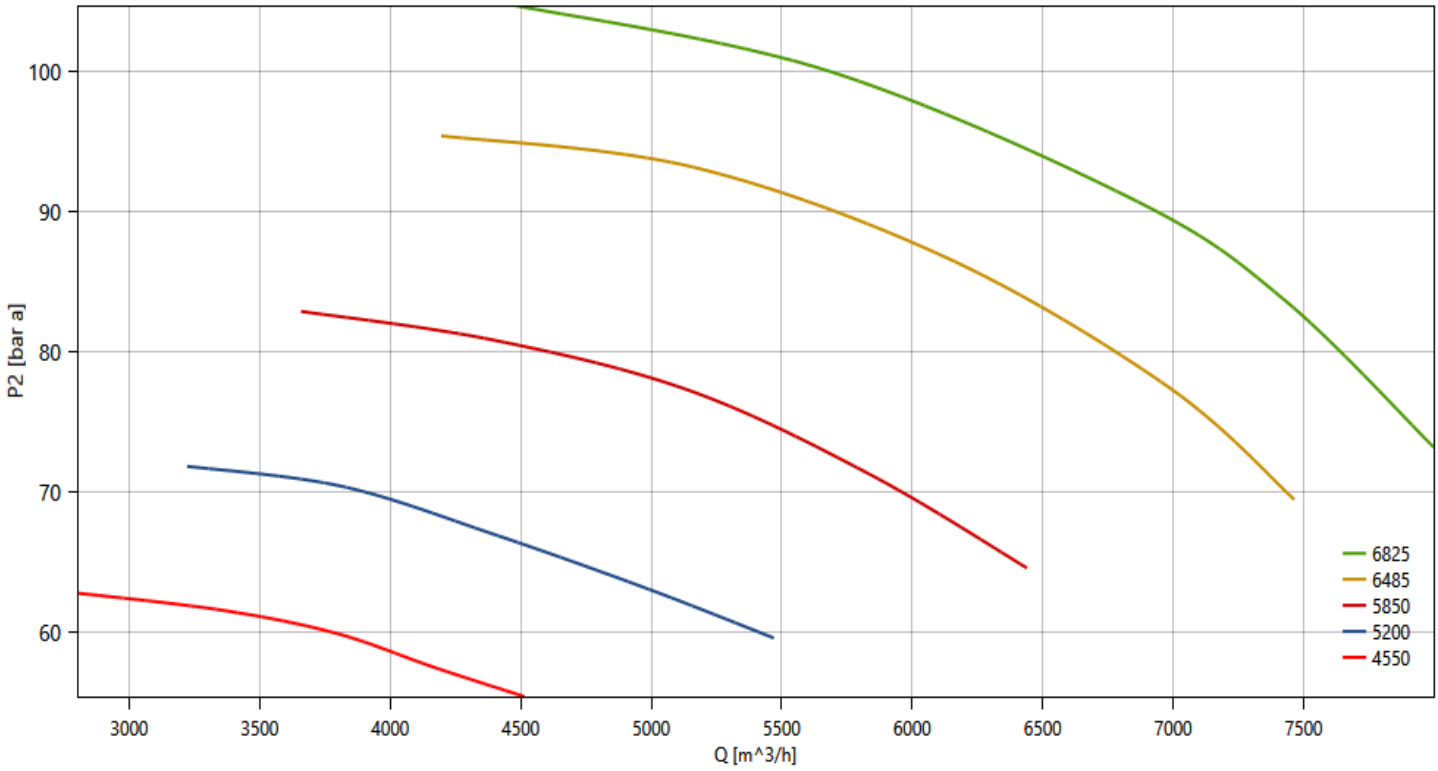
REFERENCE CONDITIONS

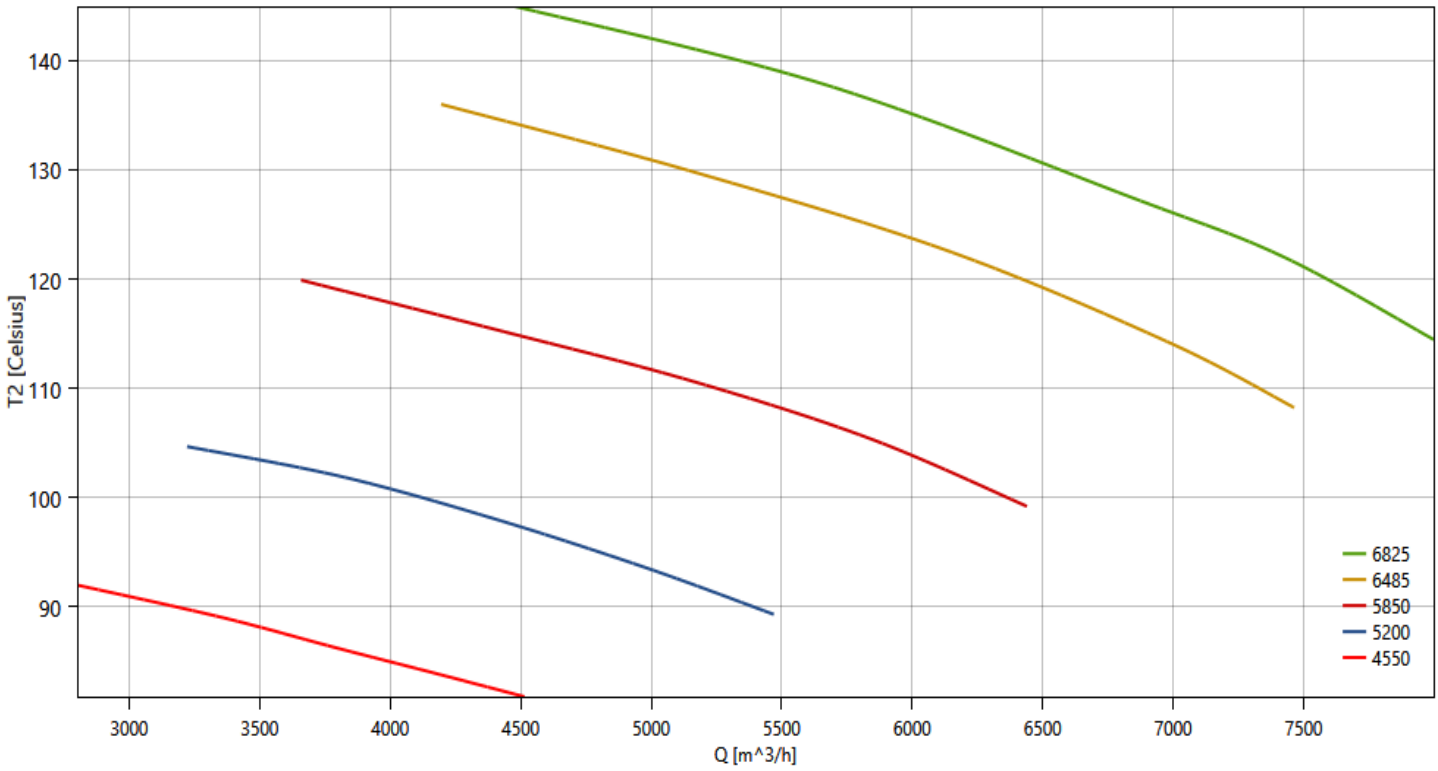
Mix Name:	Tutorial MIX
Gas	Mole Fraction
Methane-CH4	0,8
Ethane-C2H6	0,15
Propane-C3H8	0,05

INLET PRESSURE (P1)	40,2 bara
INLET TEMPERATURE (T1)	50 Celsius
MIX MOLECULAR WEIGHT	19,55 kg/kmol

Curve : TUTORIAL CURVES

MapI: P2 [bar a] MapII: T2 [Celsius]

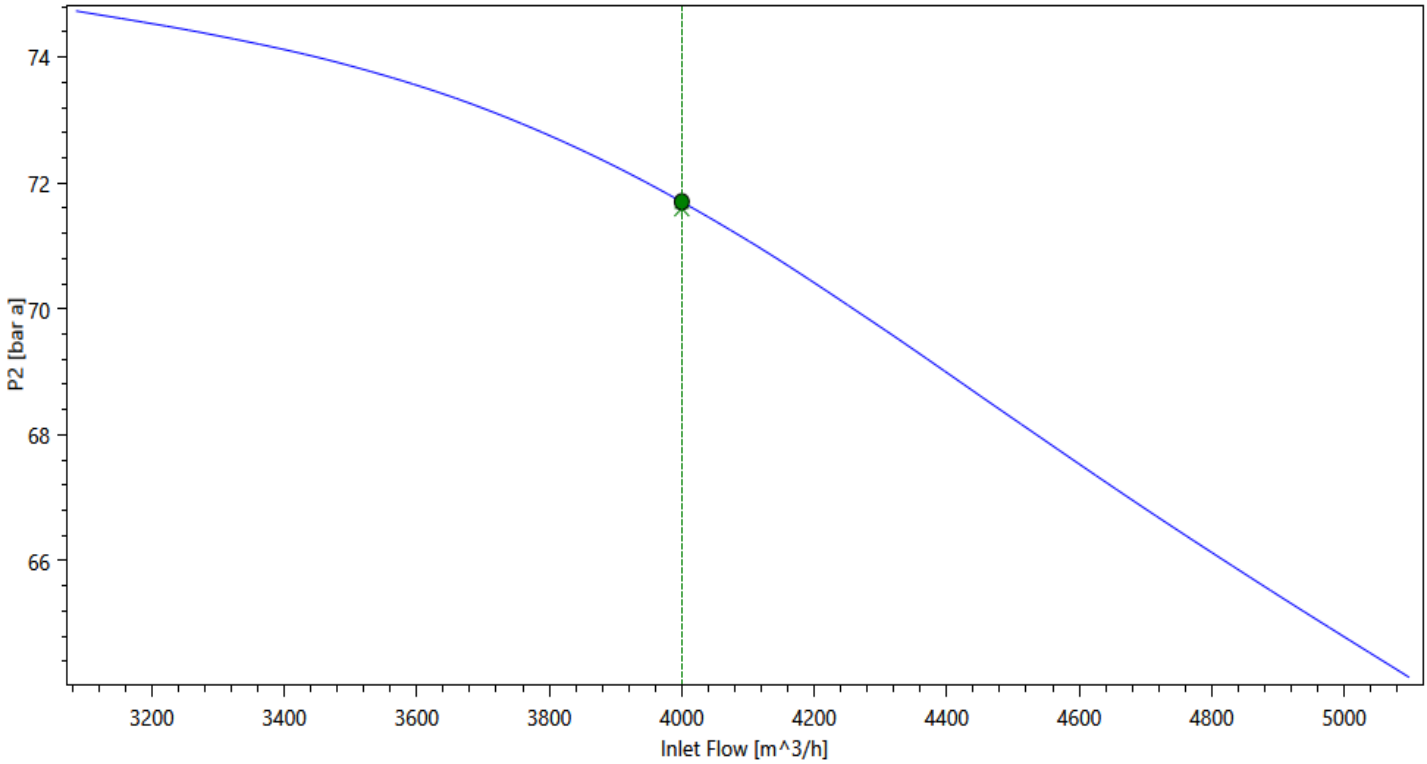




PERFORMANCE CONDITIONS			
Mix Name:	off design mix	INLET PRESSURE (P1)	45 bara
Gas	Mole Fraction	INLET TEMPERATURE (T1)	55 Celsius
Methane-CH4	0,8	MIX MOLECULAR WEIGHT	18,85 kg/kmol
Ethane-C2H6	0,2		

Input Speed : 5000 [RPM]

Map: P2 [bar a]



Default Points:

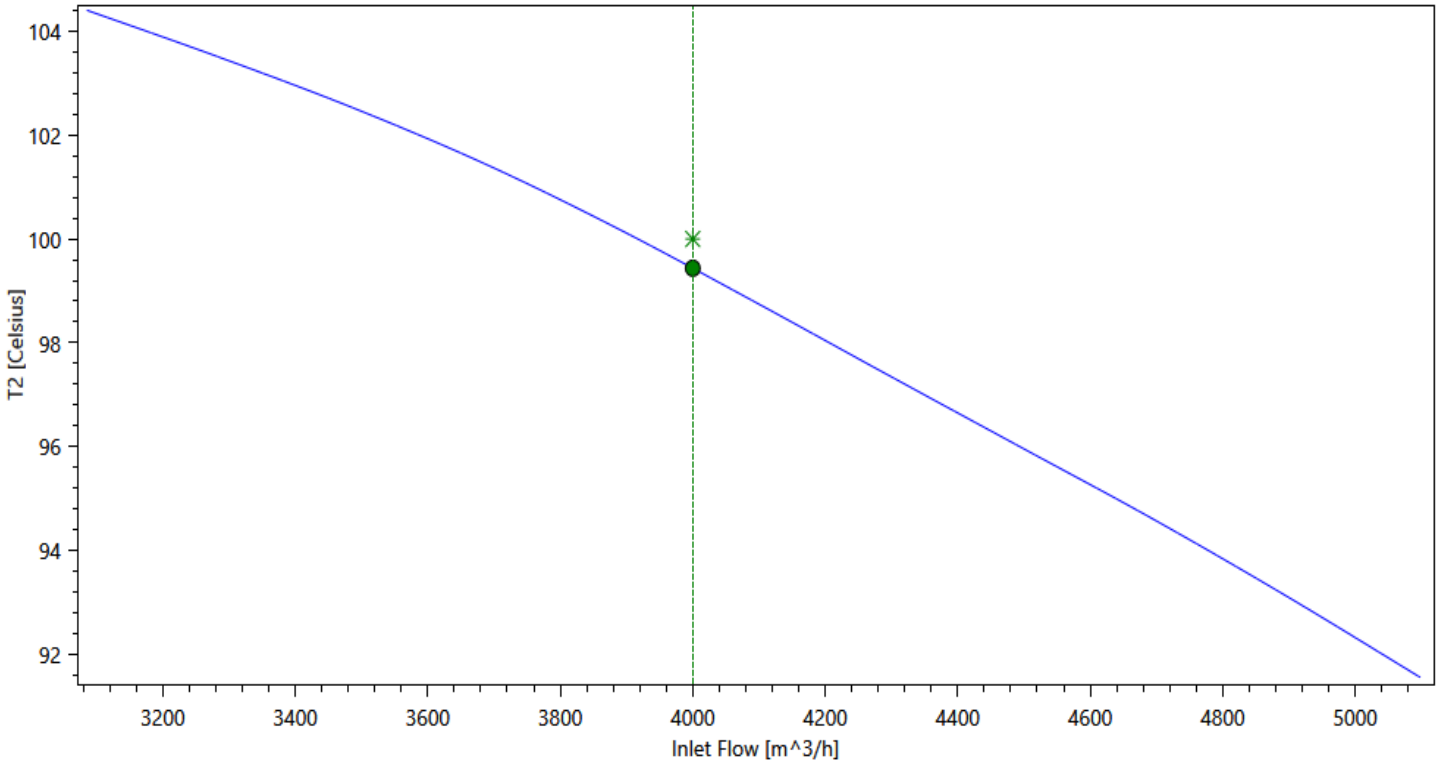
N°		Inlet Flow[m^3/h]	P2[bar a]
1		3085,13	74,73
2		3286,45	74,37
3		3487,77	73,89
4		3689,09	73,23
5		3890,41	72,31
6		4091,73	71,14
7		4293,05	69,76
8		4494,38	68,3
9		4695,7	66,85
10		4897,02	65,47
11		5098,34	64,15

Results P2(Q):

N		Mode	Q1 Meas	Q1 Exp	dQ1 %	P2 Meas	P2 Exp	dP2 %
1		Q1	4000 m^3/h			71.6 bar a	71.7 bar a	0.14

Input Speed : 5000 [RPM]

Map: T2 [Celsius]



Default Points:

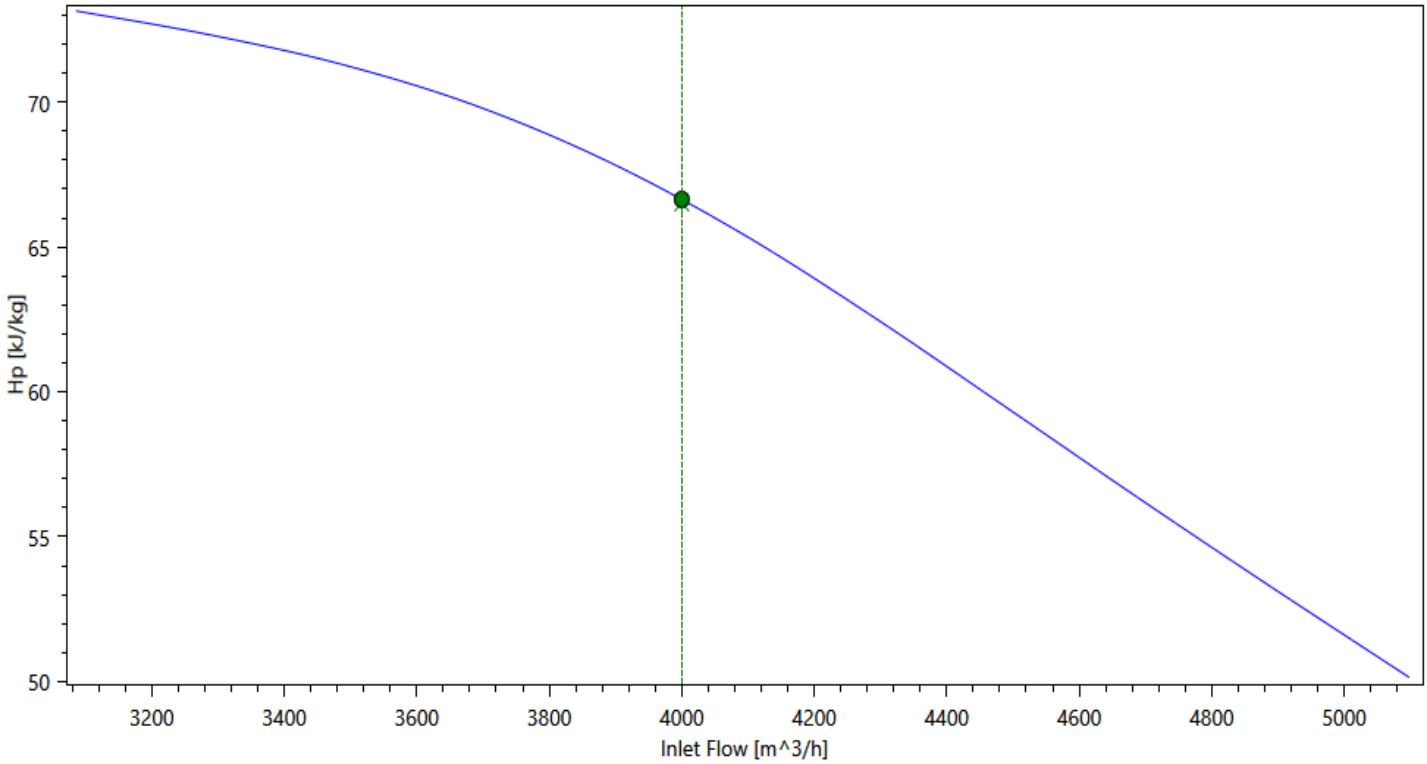
N°		Inlet Flow[m^3/h]	T2[Celsius]
1		3085,13	104,41
2		3286,45	103,5
3		3487,77	102,52
4		3689,09	101,43
5		3890,41	100,18
6		4091,73	98,8
7		4293,05	97,39
8		4494,38	95,99
9		4695,7	94,6
10		4897,02	93,11
11		5098,34	91,55

Results T2(Q):

N		Mode	Q1 Meas	Q1 Exp	dQ1 %	T2 Meas	T2 Exp	dT2 %
1		Q1	4000 m^3/h			100 Celsius	99.44 Celsius	0.57

Input Speed : 5000 [RPM]

Map: Hp [J/kg]



Default Points:

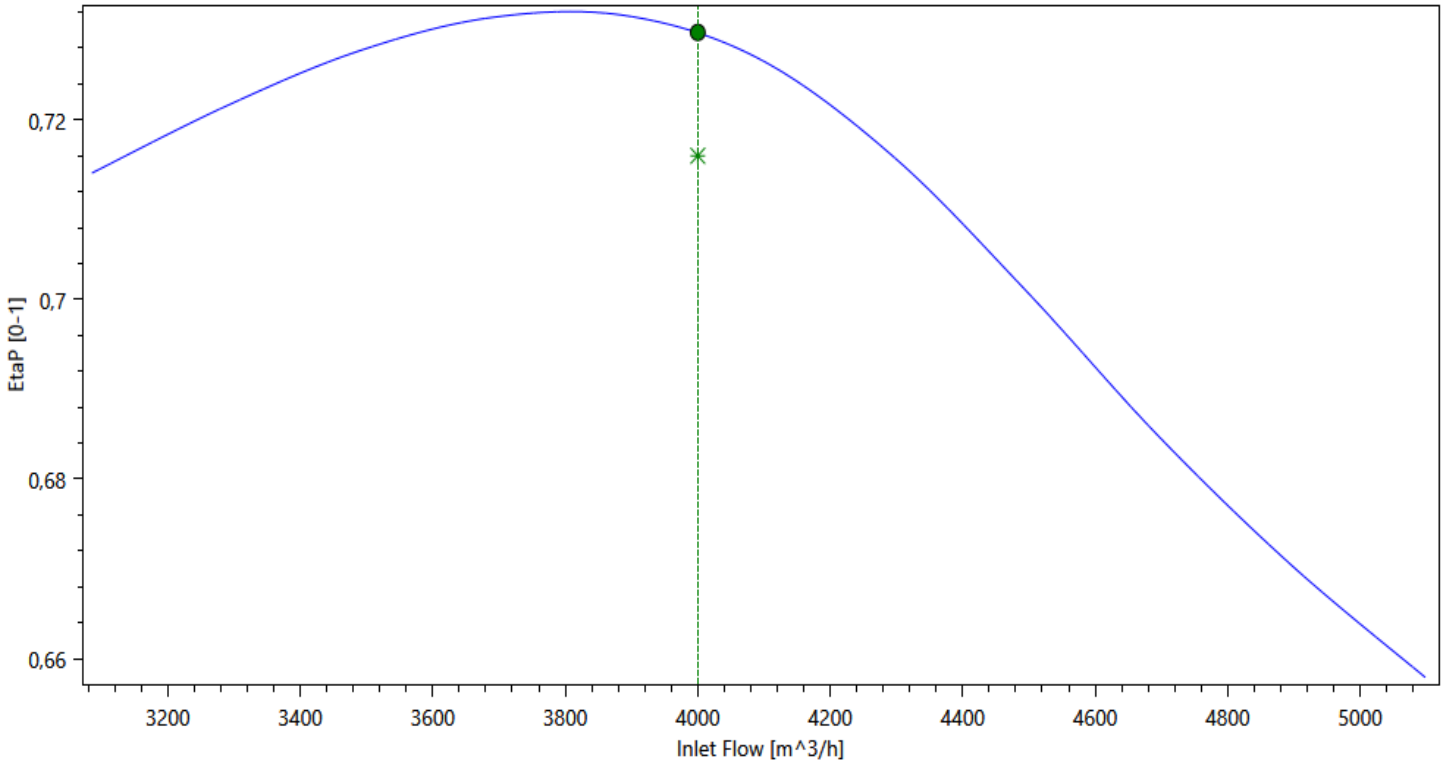
N°		Inlet Flow[m^3/h]	Hp[J/kg]
1		3085,13	73152,46
2		3286,45	72330,73
3		3487,77	71299,91
4		3689,09	69877,51
5		3890,41	67932,14
6		4091,73	65451,59
7		4293,05	62530,67
8		4494,38	59394,39
9		4695,7	56239
10		4897,02	53157,9
11		5098,34	50143,79

Results Hp(Q):

N		Mode	Q1 Meas	Q1 Exp	dQ1 %	Hp Meas	Hp Exp	dHp %
1		Q1	4000 m^3/h			66512.73 J/kg	66644.98 J/kg	0.2

Input Speed : 5000 [RPM]

Map: EtaP [0-1]



Default Points:

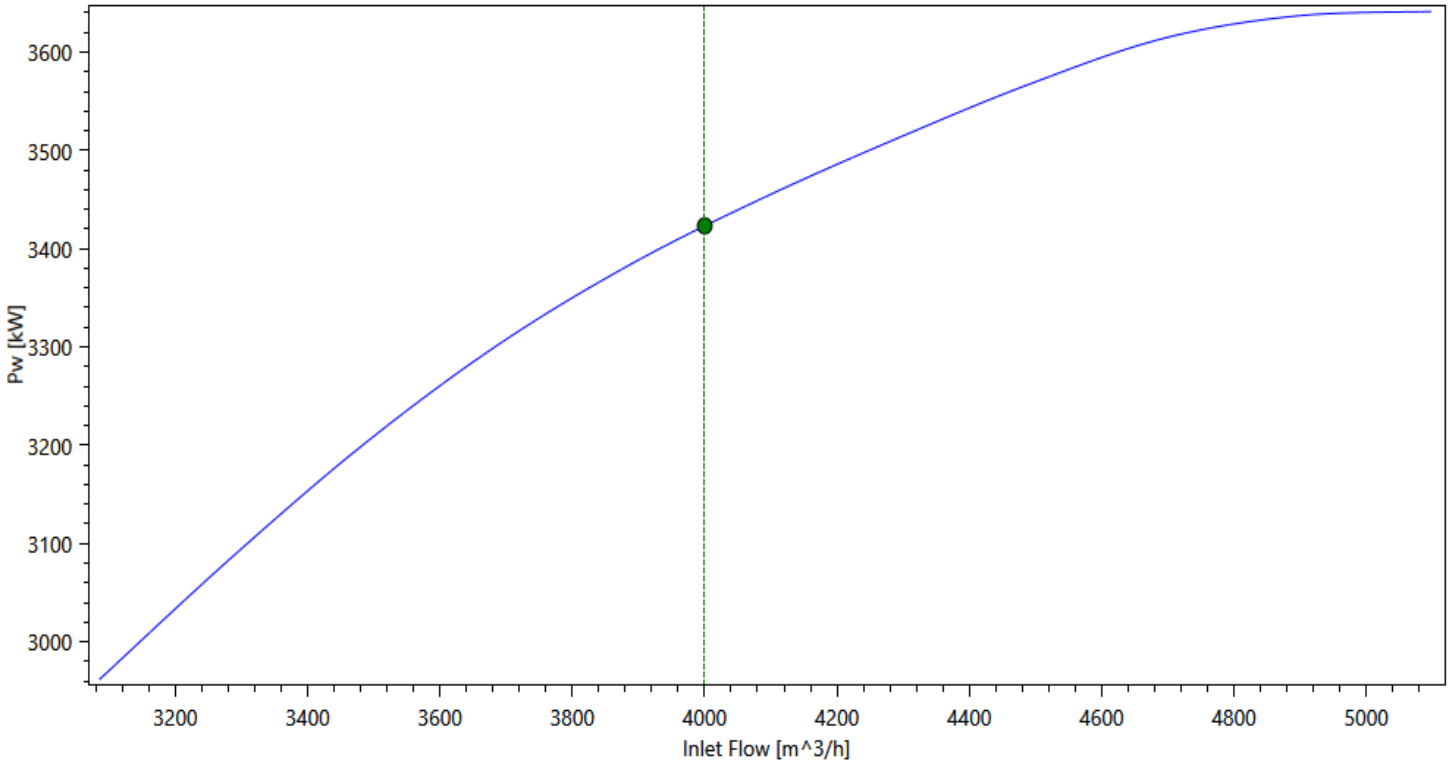
N°		Inlet Flow[m^3/h]	EtaP[0-1]
1		3085,1288	0,7141
2		3286,4497	0,7215
3		3487,7706	0,7277
4		3689,0915	0,7314
5		3890,4124	0,7316
6		4091,7333	0,7268
7		4293,0542	0,7161
8		4494,3751	0,7011
9		4695,696	0,6848
10		4897,0169	0,6704
11		5098,3378	0,6579

Results EtaP(Q):

N		Mode	Q1 Meas	Q1 Exp	dQ1 %	EtaP Meas	EtaP Exp	dEtaP %
1		Q1	4000 m^3/h			0.716	0.73	1.89

Input Speed : 5000 [RPM]

Map: Pw [kW]



Default Points:

N°		Inlet Flow[m^3/h]	Pw[kW]
1		3085,13	2961,65
2		3286,45	3086,72
3		3487,77	3202,66
4		3689,09	3302,84
5		3890,41	3384,94
6		4091,73	3452,74
7		4293,05	3512,83
8		4494,38	3568,32
9		4695,7	3614,37
10		4897,02	3636,94
11		5098,34	3641,26

Results Pw(Q):

N		Mode	Q1 Meas	Q1 Exp	dQ1 %	Pw Meas	Pw Exp	dPw %
1		Q1	4000 m^3/h				3423.18 kW	