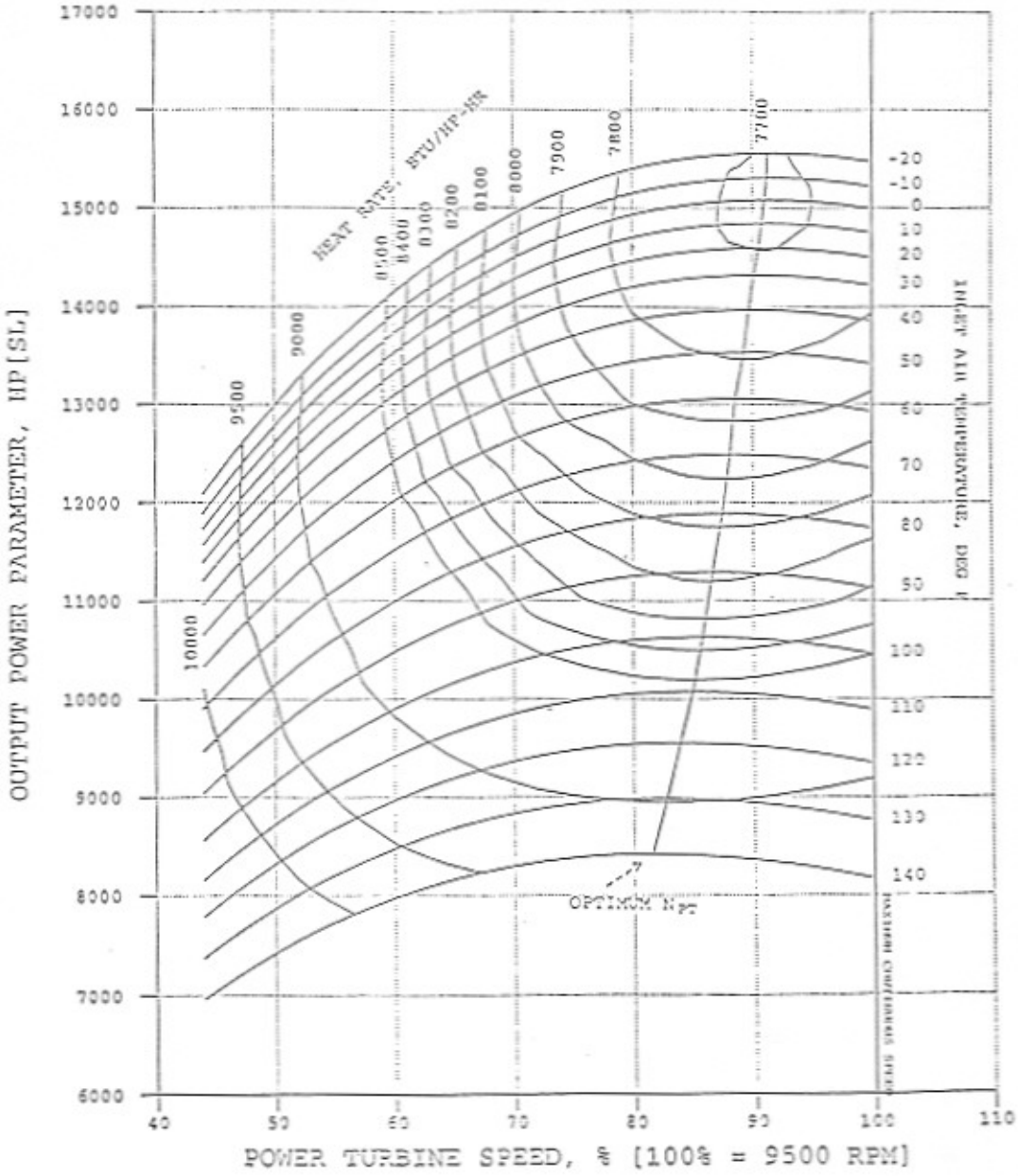
Attachment 2

MARS 90-T13002S TME-2S REV. 2.1
CS/MD GAS TURBINE
122F MATCH
REF: SD-27393(S) SHT. 2
(DATE: 4-MAY-2001)

.NOMINAL PERFORMANCE
.ELEVATION SEA LEVEL
.RELATIVE HUMIDITY 60 PERCENT
.ZERO INLET DUCT PRESSURE LOSS
.ZERO EXHAUST DUCT PRESSURE LOSS
.NO GAS PRODUCER POWER EXTRACTION
.NO WATER INJECTION
.NO OUTPUT GEARBOX
.(LHV: 20610 BTU/LB)

NATURAL GAS FUEL



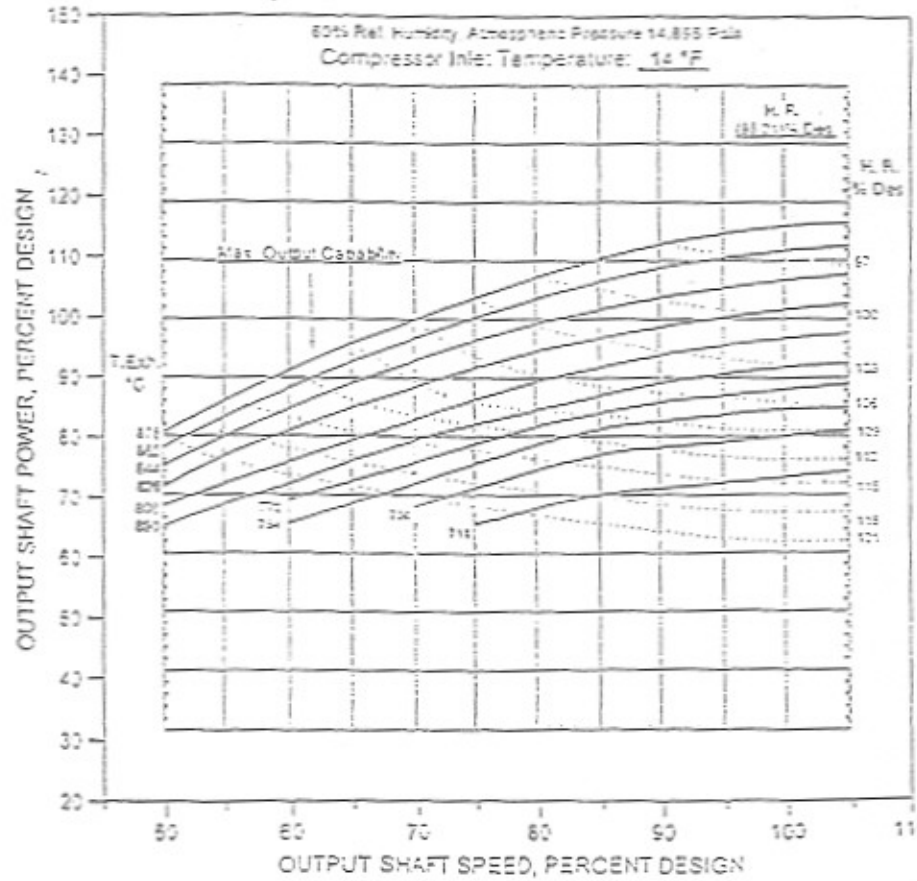
Nuovo Pignone FIRENZE	GE 10/2 Performance Maps Mechanical Drive Applications

GAS TURBINE MODEL GE10/2 DLE
Estimated Performance, Mechanical Drive Applications

Fuel Type		Natural Gas
Design Output	HP	15445
Design Heat Rate (LHV)	BTU/HP	7957
Design Exhaust Temper.	°F	925
Design Exhaust Flow	Lb/sec	100.22
Output Shaft Des.Speed	RPM	7,900
Design Point		Sea Level, ISO

NOTES 1. Altitude effects on diagram SOM 2558/4 Sh. 2
2. Performance measured at the Power Turbine load coupling with zero inlet and exhaust pressure drops and includes allowances for shaft driven auxiliaries
3. Operation on Compressor Speed Control
4. Additional Inlet and Exhaust pressure loss effects:

Effect on	Output	Heat Rate	Exhaust Temp
100 mm H_2O Inlet	-1.4%	+0.64%	+2.5 °F
100 mm H_2O Exhaust	-0.5%	+0.60%	+0.5 °F



3	REVISIONE – REVISION	ITEM 0805127
2	REVISIONE – REVISION	
1	REVISIONE – REVISION	N. SOM 4789/4

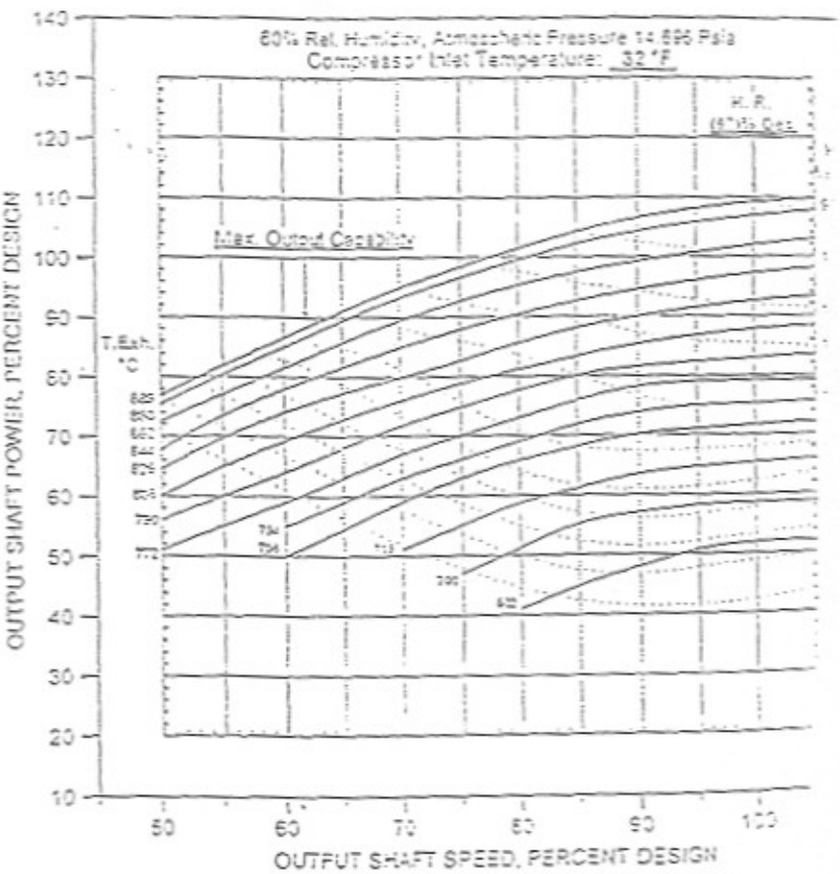
Nuovo Pignone FIRENZE	GE 10/2 Performance Maps Mechanical Drive Applications

GAS TURBINE MODEL PGT10B/2 DLE
Estimated Performance, Mechanical Drive Applications

Fuel Type		Natural Gas
Design Output	HP	15449
Design Heat Rate (LHV)	BTU/HP	7997
Design Exhaust Temper.	°F	925
Design Exhaust Flow	lb/sec	100.22
Output Shaft Des Speed	RPM	7,900
Design Point		Sea Level, ISO

NOTES: 1. Altitude effects on diagram SOM 25681 + Sh. 2
2. Performance measured at the Power Turbine load coupling with zero inlet and exhaust pressure drops, and includes allowances for shaft driven auxiliaries
3. Operation on Compressor Bleed Control
4. Additional Inlet and Exhaust pressure loss effects

Effect on	Output	Heat Rate	Exhaust Temp.
100 mm H_2O Inlet	-1.8%	+0.64%	+2.5 °F
100 mm H_2O Exhaust	-0.8%	+0.60%	+2.5 °F



REV	DESCRIZIONE - DESCRIPTION
3	REVISIONE – REVISION
2	REVISIONE – REVISION
1	REVISIONE – REVISION
0	EMISSIONE - ISSUE

ITEM 050512

N. SOM 4

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UTP 020 / (I-A)

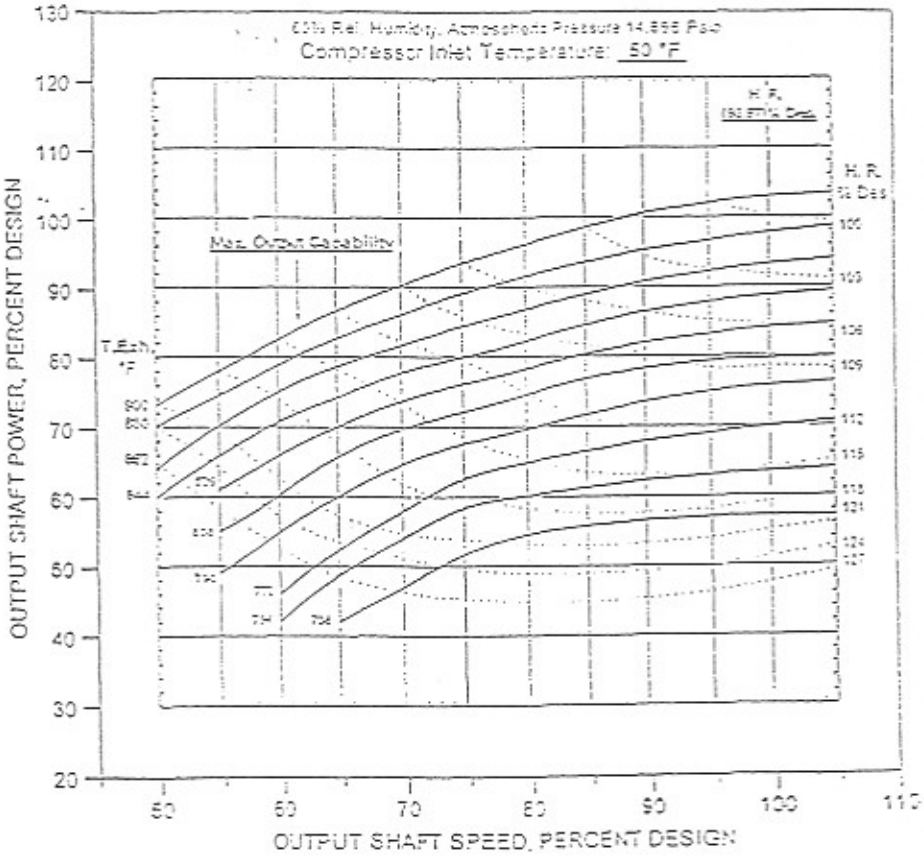
Nuovo Pignone FIRENZE	GE 10/2 Performance Maps Mechanical Drive Applications

GAS TURBINE MODEL GE10/2 DLE
Estimated Performance, Mechanical Drive Applications

Fuel Type		Natural Gas
Design Output	HP	15449
Design Heat Rate (LHV)	BTU/HP	7937
Design Exhaust Temper.	°F	905
Design Exhaust Flow	Lb/sec	103.22
Output Shaft Des.Speed	RPM	7,900
Design Point		Sea Level, ISO

NOTES
1. Altitude effects on diagram SOM 2555/4 Sh. 2
2. Performance measured at the Power Turbine load coupling with zero inlet and exhaust pressure drops, and includes allowances for shaft driven auxiliaries
3. Operation on Compressor Speed Control
4. Additional Inlet and Exhaust pressure loss effects:

	Effect on	Output	Heat Rate	Exhaust Temp
	100 mm H_2O Inlet	+1.6%	+0.64%	-2.5 °F
	100 mm H_2O Exhaust	-0.6%	+0.63%	+2.5 °F



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1	REVISIONE – REVISION	N.	SOM 47898/4

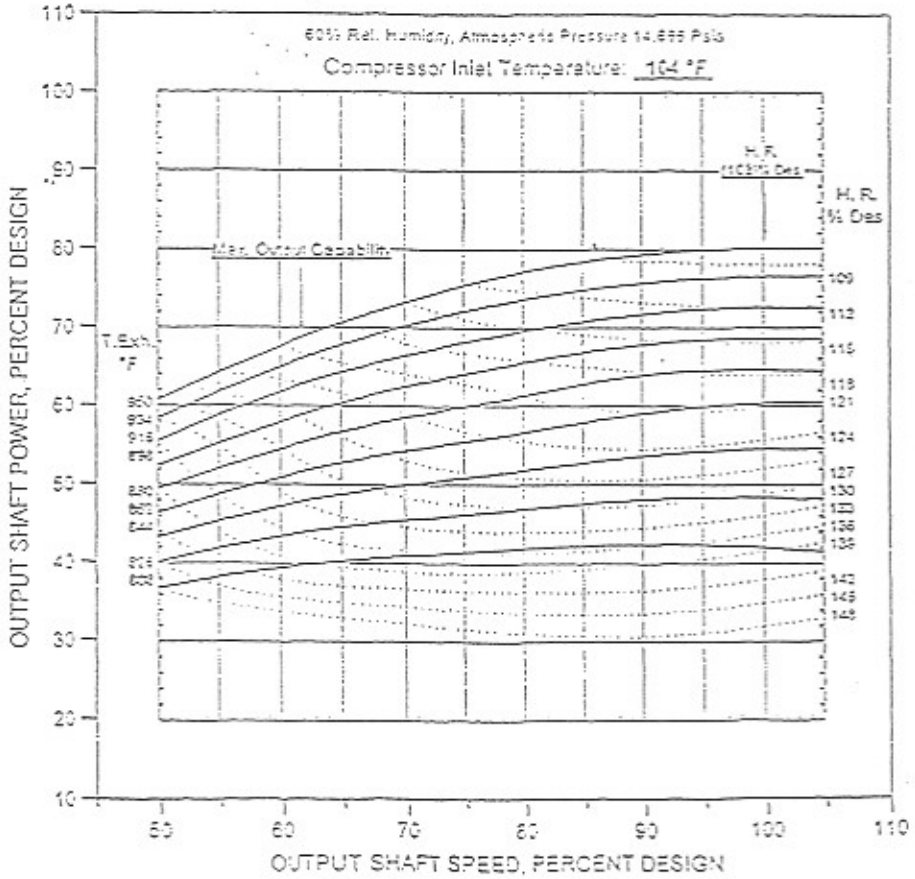
Nuovo Pignone FIRENZE	GE 10/2 Performance Maps Mechanical Drive Applications

GAS TURBINE MODEL GE10/2 DLE
Estimated Performance, Mechanical Drive Applications

Fuel Type		Natural Gas
Design Output	HP	15449
Design Heat Rate (LHV)	BTU/HP	7957
Design Exhaust Temper.	°F	935
Design Exhaust Flow	Lb/sec	100.85
Output Shaft Des Speed	RPM	7,900
Design Point		Sea Level, ISO

NOTES: 1. Altitude effects on diagram SOM 2555514 Sh. 2
2. Performance measured at the Power Turbine load coupling with zero inlet and exhaust pressure drops, and includes allowances for shaft driven auxiliaries
3. Operation on Compressor Speed Control
4. Additional Inlet and Exhaust pressure loss effects:

Effect on	Output	Heat Rate	Exhaust Temp.
100 mm H_2O Inlet	-1.6%	+0.64%	+2.5 °F
100 mm H_2O Exhaust	-0.8%	+0.60%	+2.5 °F



3	REVISIONE – REVISION	ITEM 0805127
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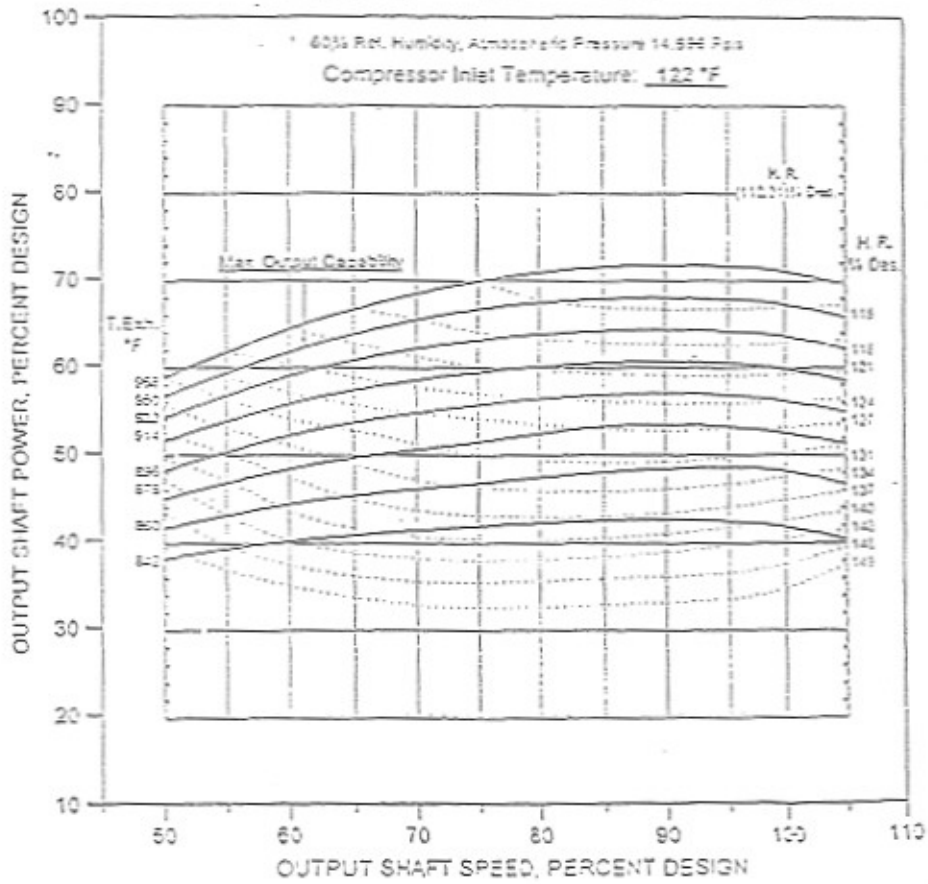
TP 020 / (I-A)

GAS TURBINE MODEL GE10/2 DLE
Estimated Performance, Mechanical Drive Applications

Fuel Type		Natural Gas
Design Output	HP	15449
Design Heat Rate (LHV)	BTU/HP	7997
Design Exhaust Temper.	°F	935
Design Exhaust Flow	Lb/sec	103.22
Output Shaft Des Speed	RPM	7,900
Design Point		Sea Level, ISO

NOTES 1. Altitude effects on diagram SOM 0503/4 Sh. 2
2. Performance measured at the Power Turbine load coupling with zero inlet and exhaust pressure drops, and includes allowances for shaft driven auxiliaries
3. Operation on Compressor Speed Control
4. Additional Inlet and Exhaust pressure loss effects:

Effect on	Output	Heat Rate	Exhaust Temp.
100 mm H_2O Inlet	-1.6%	+0.64%	+2.6 °F
100 mm H_2O Exhaust	-0.6%	+0.60%	+2.6 °F



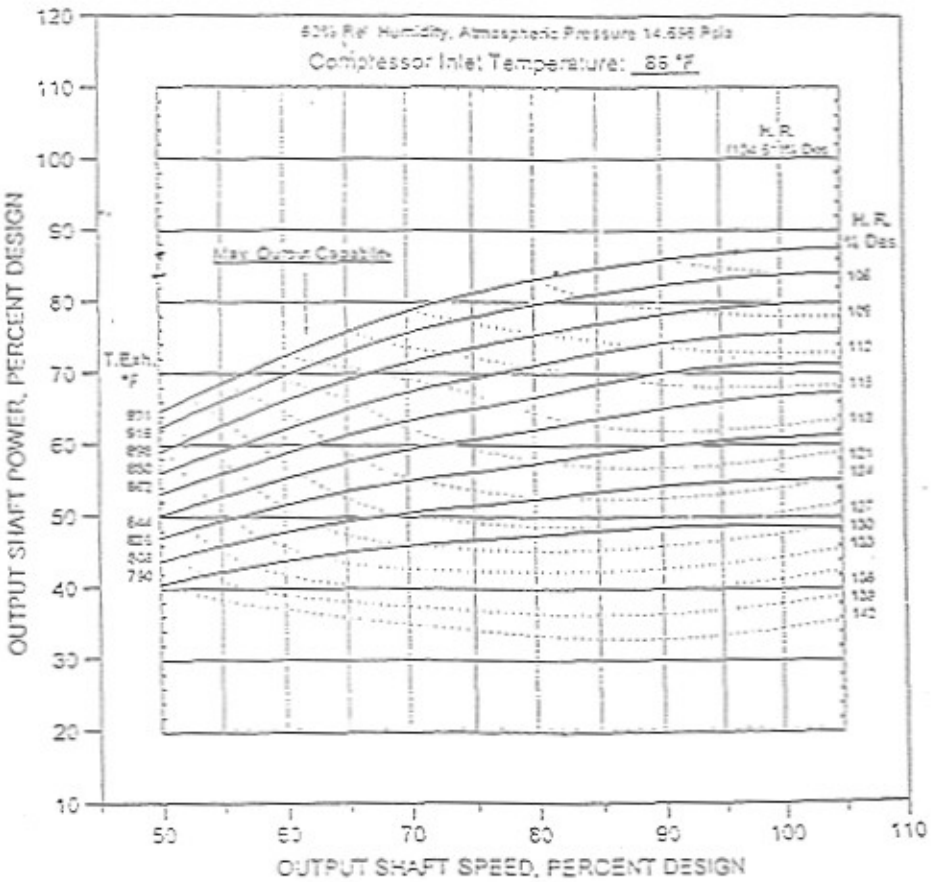
Nuovo Pignone FIRENZE	GE 10/2 Performance Maps Mechanical Drive Applications

GAS TURBINE MODEL GE10/2 DLE
Estimated Performance, Mechanical Drive Applications

Fuel Type		Natural Gas
Design Output	HP	15449
Design Heat Rate (LHV)	BTU/HP	7997
Design Exhaust Temper.	°F	905
Design Exhaust Flow	Lb/sec	103.22
Output Shaft Des Speed	RPM	7,900
Design Point		Sea Level, ISO

NOTES: 1. Altitude effects on diagram SOM 2555514 Sh. 2
2. Performance measured at the Power Turbine load coupling with zero inlet and exhaust pressure drops, and includes allowances for shaft driven auxiliaries
3. Operation on Compressor Speed Control
4. Additional Inlet and Exhaust pressure loss effects:

Effect on	Output	Heat Rate	Exhaust Temp
100 mm H_2O Inlet	-1.6%	+0.84%	+2.5 °F
100 mm H_2O Exhaust	-0.6%	+0.60%	+2.5 °F



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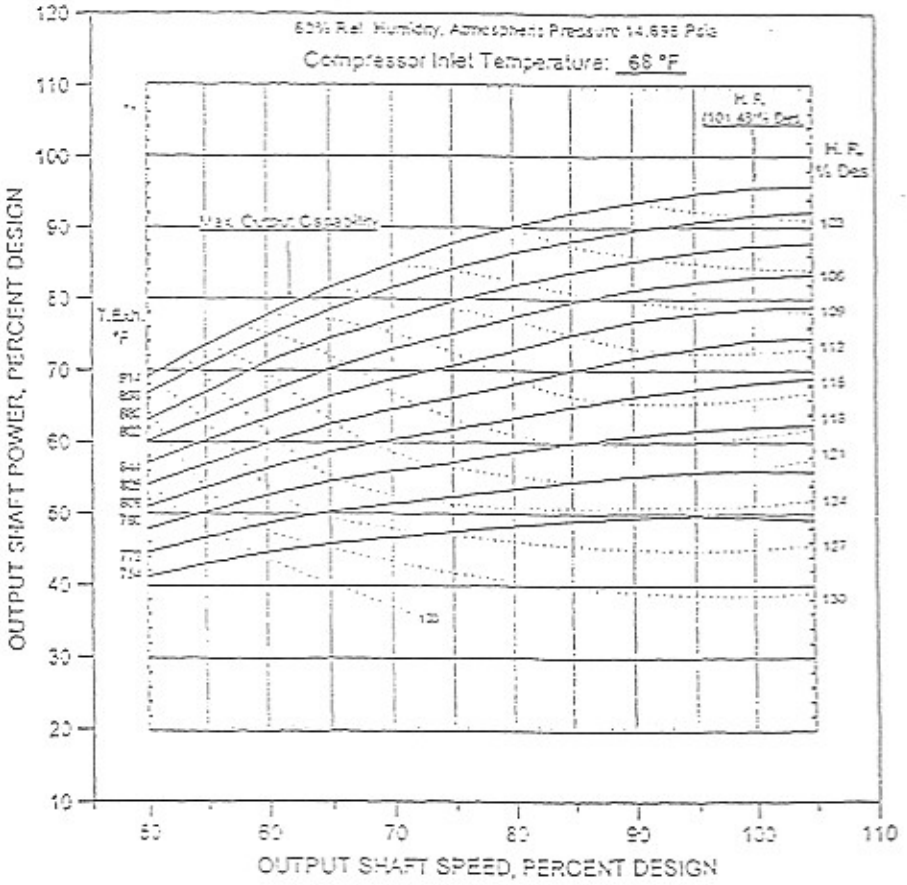
Nuovo Pignone FIRENZE	GE 10/2 Performance Maps Mechanical Drive Applications

GAS TURBINE MODEL GE10/2 DLE
Estimated Performance, Mechanical Drive Applications

Fuel Type		Natural Gas
Design Output	HP	15449
Design Heat Rate (LHV)	BTU/HP	7997
Design Exhaust Temper.	°F	935
Design Exhaust Flow	Lb/sec	105.[illegible]
Output Shaft Des. Speed	RPM	7,900
Design Point		Sea Level, ISO

NOTES: 1. Altitude effects on diagram SOM 2555/4 Sh. 2
2. Performance measured at the Power Turbine load coupling with zero inlet and exhaust pressure drops, and includes allowances for shaft driven auxiliaries
3. Operation on Compressor Speed Control
4. Additional Inlet and Exhaust pressure loss effects:

Effect on:	Output	Heat Rate	Exhaust Temp.
100 mm H_2O Inlet	-1.6%	+0.64%	+0.8 °F
100 mm H_2O Exhaust	-0.6%	+0.50%	+0.8 °F



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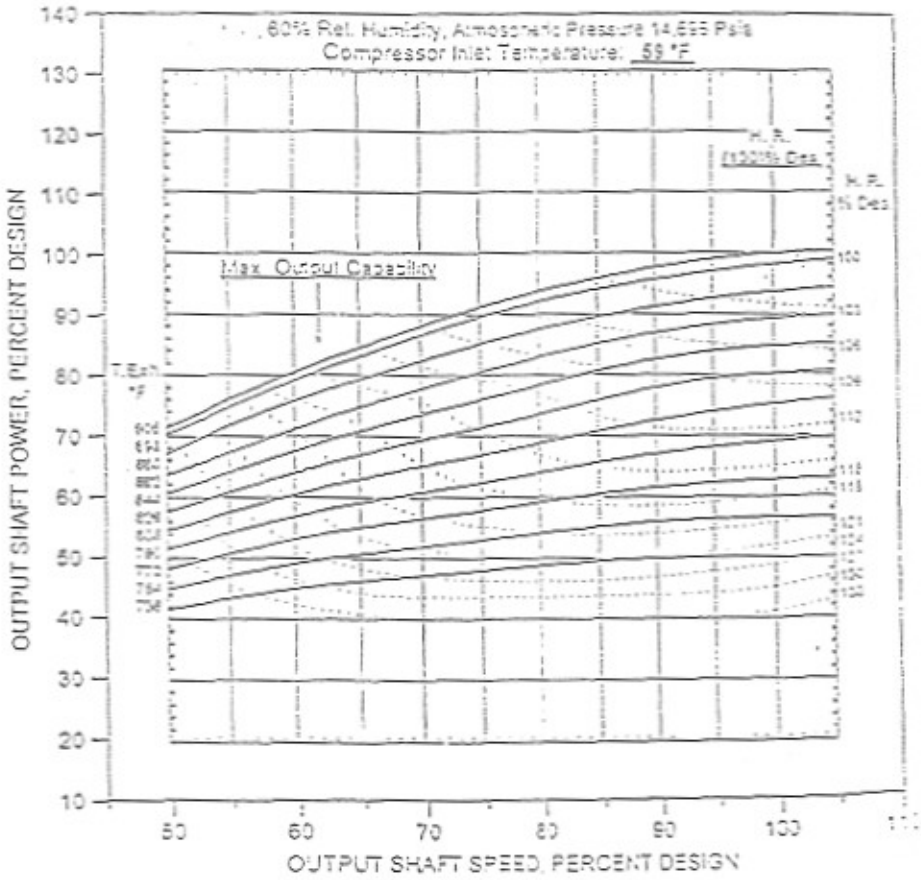
Nuovo Pignone FIRENZE	GE 10/2 Performance Maps Mechanical Drive Applications

GAS TURBINE MODEL GE10/2 DLE
Estimated Performance, Mechanical Drive Applications

Fuel Type		Natural Gas
Design Output	HP	15449
Design Heat Rate (LHV)	BTU/HP	7957
Design Exhaust Temper.	°F	925
Design Exhaust Flow	Lb/sec	103.22
Output Shaft Des Speed	RPM	7,600
Design Point		Sea Level, ISO

NOTES: 1. Altitude effects on diagram SOM 2555514 Sh. 2
2. Performance measured at the Power Turbine load coupling with zero inlet and exhaust pressure drops, and includes allowances for shaft driven auxiliaries
3. Operation on Compressor Speed Control
4. Additional Inlet and Exhaust pressure loss effects:

Effect on	Output	Heat Rate	Exhaust Temp
100 mm H_2O Inlet	-1.6%	+0.64%	+2.5 °F
100 mm H_2O Exhaust	-0.6%	+0.60%	+2.5 °F



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