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**The Palestra Building**

London, England



**APPENDIX B:  
Chiller Optimization Data**

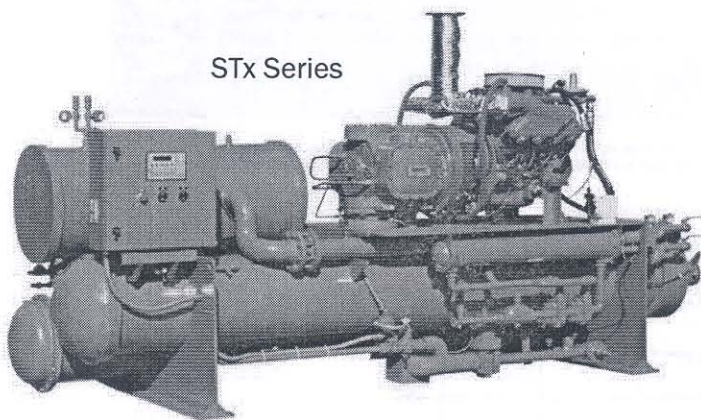
# TECOCHILL<sup>®</sup> Gas Engine Driven Chillers

## Water-Cooled Models 150 Tons to 400 Tons

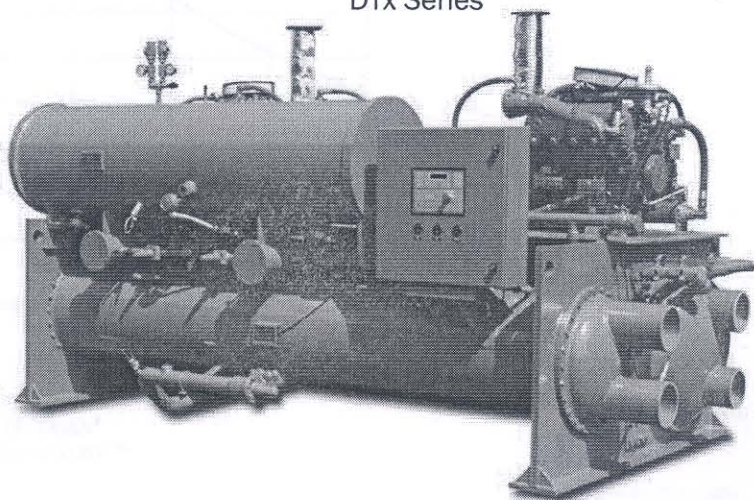
### Key Features & Options

- Non-ozone depleting HFC-134a
- TecoDrive 7400™ Natural Gas Engine
- Single Screw Balanced Action Compressor
- High Efficiency Flooded Evaporator
- IPLV's Exceeding 2.5
- Footprint equivalent to electric chillers
- Variable engine speed operation for excellent part load performance and longer life
- TecoNET™ Microprocessor-based Control System with precise PID Control for fully automatic operation, continuous system monitoring, digital display, fault diagnostics, and tie-in to an energy management system
- Remote Monitoring and Control System (RMCS) that permits remote real-time monitoring, data acquisition, and system control by telephone
- ETL Listed

STx Series



DTx Series



# WATER-COOLED MODELS

Full Load Rating [tons]	
IPLV COP <sup>4</sup>	
Full Load COP	
COP with Engine Heat Recovery	
Fuel Consumption [MBtu/hr @ HHV 1020 Btu/scf]	
Fuel Consumption [scfh]	
Fuel Pressure [in. wc, 27.703 in. wc = 1 psig]	
Available Engine Heat [MBtu/hr]	
Maximum Supply Temperature [°F]	

### WATER SYSTEMS

Chilled Water Flow [GPM]	
Chilled Water Pressure Drop @ Rated Flow [ft]	
Total Cooling Tower Flow [GPM]	
—Flow To Condenser Only [GPM]	
—Flow To Dump HX Only [GPM]	
Condenser Pressure Drop @ Rated Flow [ft]	
Cooling Tower Heat Rejection [MBtu/hr]	

### ELECTRICAL REQUIREMENT

Voltage Requirement	
Electrical Service	
Amperage Rating	
Parasitic Power Requirement [kW]	

### ACOUSTIC LEVELS<sup>5</sup> [dBa @ 3 ft]

—with Enclosure	
—without Enclosure	

### Refrigerant

### DIMENSIONAL DATA

Length	
Width	
Height	

### WEIGHTS

Rigging Weight [lb]	
Operational Weight [lb]	

### DRIVELINE

Engine	
Compressor	

## ST<sub>x</sub> SERIES

CH-150x	CH-200x
150	200
2.6	2.6
1.7	1.6
2.1	1.9
1,032	1,526
1,012	1,496
7-28	13-28
323	480
201	212

## DT<sub>x</sub> SERIES

CH-300x	CH-350x	CH-400x
300	350	400
2.6	2.6	2.6
1.7	1.7	1.6
2.0	2.0	1.9
2,157	2,529	3,052
2,115	2,479	2,992
7-28	13-28	13-28
675	799	960
202	207	212

### WATER SYSTEMS

Chilled Water Flow [GPM]	
Chilled Water Pressure Drop @ Rated Flow [ft]	
Total Cooling Tower Flow [GPM]	
—Flow To Condenser Only [GPM]	
—Flow To Dump HX Only [GPM]	
Condenser Pressure Drop @ Rated Flow [ft]	
Cooling Tower Heat Rejection [MBtu/hr]	

### ELECTRICAL REQUIREMENT

Voltage Requirement	
Electrical Service	
Amperage Rating	
Parasitic Power Requirement [kW]	

### ACOUSTIC LEVELS<sup>5</sup> [dBa @ 3 ft]

—with Enclosure	
—without Enclosure	

### Refrigerant

### DIMENSIONAL DATA

Length	
Width	
Height	

### WEIGHTS

Rigging Weight [lb]	
Operational Weight [lb]	

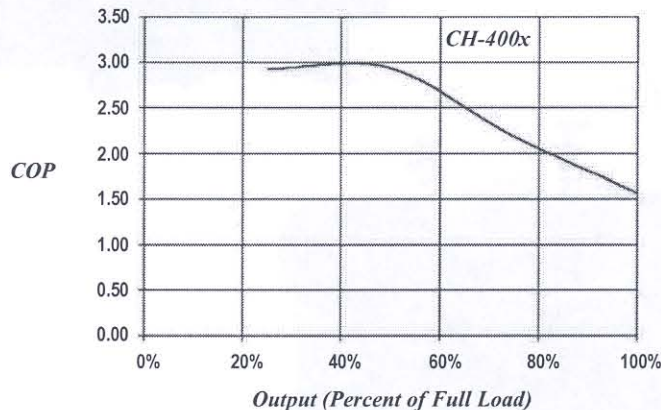
### DRIVELINE

Engine	
Compressor	

#### NOTES:

1. Specifications subject to change without notice, all specifications are  $\pm 5\%$ .
2. COP ratings are based upon Fuel Higher Heating Value (HHV) @ 1020 BTU/SCF

## TYPICAL TECOCHILL PART-LOAD PERFORMANCE



# TECOGEN

Natural Gas Engine-Driven Products



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TECOGEN<sup>®</sup>  
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