

RFB-2024-066 - DETAILED SPECIFICATIONS

ALBANY COUNTY JUDICIAL CENTER - CHILLERS

6 Lodge Street.
 Albany, NY 12207
 Contact: Dave Quinn
 Telephone (518) 487-5361

<u>Equipment</u>	<u>Maintenance Schedule/ Service Requirements</u>	<u>Min. Vendor Qualifications</u>
<p>2 Low Pressure Centrifugal Chillers YORK Model YTG3A3E1-CNJ Serial Numbers: SKNM540190 SKNM540300 350 tons</p>	<p style="text-align: center;">***Cooling Season*** ***Start-up – April & Shut down – October***</p> <p><u>ANNUAL COOLING EQUIPMENT START-UP PREPARATION:</u></p> <ul style="list-style-type: none"> • Check refrigerant and oil levels • Check oil sump and purge oil heaters and temperatures • Check and testing all operating and safety controls • Check the starter operation • Start the chiller and calibrating controls • Log operating conditions after system and unit stabilize • Review operating procedures and owner’s log with operator • Check auxiliary equipment operation <p><u>OPERATING SEASON INSPECTIONS:</u></p> <ul style="list-style-type: none"> • Inspect chiller and adjust safety controls • Check purge operation • Check operation of controls • Check oil and refrigerant levels • Check operation of lube system • Check the oil return system • Check operation of motor and starter • Record operating conditions • Check log and review chiller and system operation with operator • Check condenser and cooler water flows • Check the refrigerant cycle to verify the proper operating balance • Check condenser water and chilled water heat transfer • Log and report repairs and parts that are required <p><u>THREE TIMES PER YEAR:</u></p> <ul style="list-style-type: none"> • Check Chiller purge and surge counts and record and report to the County if the numbers are unusually high. • Check variable speed drive on the chillers for proper operation and report to the County. 	<p style="text-align: center;"><u>ALL MAINTENANCE WORK ON THE CHILLERS MUST BE PERFORMED BY A YORK CERTIFIED TECHICIAN</u></p> <p style="text-align: center;">AND</p> <p style="text-align: center;">10 YEARS COMMERCIAL HVAC MAINTENANCE/ REPAIR EXPERIENCE</p> <p style="text-align: center;">Each Contractor must submit York Certifications for a minimum of two (2) technicians employed within the company</p>

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<u>Equipment</u>	<u>Maintenance Schedule/ Service Requirements</u>	<u>Min. Vendor Qualifications</u>
6 Lodge Street. Albany, NY 12207 Contact: Dave Quinn Telephone (518) 487-5361		
(per above)	<p><u>ANNUAL COOLING EQUIPMENT SHUTDOWN INSPECTION AND PM:</u></p> <p>Check the Compressor-Motor Assembly for the following items and perform PM tasks as indicated:</p> <ul style="list-style-type: none"> • Record voltages • Meg and record motor winding resistance • Lubricate open motor • Check the alignment on open drive units • Check the coupling • Check seals • Check inlet vane operator and linkage; lubricating where required <p>Check the Compressor Oil System for the following items:</p> <ul style="list-style-type: none"> • Change oil, oil filter and dryer • Conduct analysis on oil and oil filter at independent laboratory • Check oil pump, seal and motor • Clean the dirt leg • Check heater and thermostat • Check all other oil system components including cooler, strainer and solenoid valve where applicable <p>Check Motor Starter and perform the following tasks:</p> <ul style="list-style-type: none"> • Run diagnostic check • Clean and inspect heat exchanger • Check starter coolant pump and motor, meg motor • Check all terminals and tighten connections • Clean or replace air filter or starter fluid • Check overloads and calibrate • Check status lights <p>Review the Control Panel for the following items:</p> <ul style="list-style-type: none"> • Run diagnostic check of Micro Control Panel • Check safety shutdown operation • Check all terminals and tighten connections • Check display data accuracy and set points • Check free system cooling operation. 	(per above)

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<u>Equipment</u>	<u>Maintenance Schedule/ Service Requirements</u>	<u>Min. Vendor Qualifications</u>
6 Lodge Street. Albany, NY 12207 Contact: Dave Quinn Telephone (518) 487-5361		
(Continued from above)	<p><u>ANNUAL EQUIPMENT SHUTDOWN INSPECTION AND PM (con't):</u></p> <p>Review the Purge Unit for the following items:</p> <ul style="list-style-type: none"> • Inspect the operation of the unit • Change filter drier • Check all other components for proper condition and operation; record pressure control set point <p>Check the Condenser for the following items:</p> <ul style="list-style-type: none"> • Check flow switch operation • Remove condenser head and inspect end sheets • Mechanically brush clean condenser water tubes <p>Check the Cooler for the following items:</p> <ul style="list-style-type: none"> • Check flow switch operation • Check refrigerant level <p>Check the System for the following items:</p> <ul style="list-style-type: none"> • Conduct a leak check and identify leak sources for repairs • Add refrigerant as required (refrigerant provided by owner) • Record condition of sight glasses • Check the refrigerant cycle to verify the proper operating balance • Check condenser water and chilled water heat transfer <p>General Items Included:</p> <ul style="list-style-type: none"> • Repair insulation removed for inspection and maintenance procedures • Clean equipment and surrounding area upon completion of work • Consult with the operator • Report deficiencies and repairs required. 	(per above)

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<u>ALBANY COUNTY JUDICIAL CENTER – CHILLERS (CONTINUED)</u>		
<u>Equipment</u>	<u>Maintenance Schedule/ Service Requirements</u> <u>Summer and Winter Change over</u>	<u>Min. Vendor Qualifications</u>
<p>6 Lodge Street. Albany, NY 12207 Contact: Dave Quinn Telephone (518) 487-5361</p>	<p><u>OPERATING SEASON INSPECTIONS:</u></p> <ul style="list-style-type: none"> • Record all power and control voltages for proper operation of drive • Verify proper operation of cooling circuit (VSD only) <p>Check condenser water loop strainer (VSD only)</p> <p><u>ANNUAL SHUTDOWN INSPECTION AND PM:</u></p> <ul style="list-style-type: none"> • Remove dust and dirt from cabinets, heat sinks and cooling fans • Tighten input power electrical connections • Verify proper settings of overloads and safeties • Check accuracy of transducers and thermistors and calibrate where possible • Record all power and control voltages for proper operation of drive • Verify proper operation of cooling circuit and back flush heat exchanger (VSD only) • Meg motor and record findings • Change closed loop coolant fluid every two years • Check condenser water loop strainer (VSD only) • Check vane pot calibration and recalibrate when required 	<p>(per above)</p>