

Section 1 MEDIUM and LOW TEMP MULTIDECKS

1.1 Visual check

1.1 Visual check of exterior for damages and corrosion

Maintenance requirements:

- Visual check of multideck cabinets; record defective parts with pictures and data plate information.
- Check for exterior damages, corrosion and brine traces.
- Remove exterior damages, corrosion and brine traces.

Maintenance step is considered completed if:

- no function-affecting damages were found
- no function-affecting rust was found
- all mechanical connections like screwed and soldering joints are free of brine traces

Date:

Tech:

Chiller Multi Deck Units (AKA Mopro) Vento L8, Vento H7, IC5 & ID6

- Chiller-01
- Chiller-02
- Chiller-03
- Chiller-04
- Chiller-05
- Chiller-06
- Chiller-07
- Chiller-08
- Chiller-09
- Chiller-10
- Chiller-11
- Chiller-12
- Chiller-13
- Chiller-14
- Milk_Roll_in-01

Vento Glass Door Shelf Freezers RL or Vento Freeze

- Shelf Freezer-01
- Shelf Freezer-02
- Shelf Freezer-03
- Shelf Freezer-04
- Shelf Freezer-05
- Shelf Freezer-06
- Shelf Freezer-07
- Shelf Freezer-08
- Shelf Freezer-09
- Shelf Freezer-10
- Shelf Freezer-11
- Shelf Freezer-12
- Shelf Freezer-13

Semi Verticals Cases

- F+V Chiller / L7 Cases-01
- F+V Chiller / L7 Cases-02
- F+V Chiller / L7 Cases-03
- F+V Chiller / L7 Cases-04
- Semi Vertical M+P-01
- Semi Vertical M+P-02
- Semi Vertical M+P-03
- Semi Vertical M+P-04
- Semi Vertical M+P-05

Semi Vertical M+P-06

Semi Vertical M+P-07

Semi Vertical M+P-08

Semi Vertical M+P-09

Semi Vertical M+P-10

Semi Vertical M+P-11

Semi Vertical M+P-12

1.2 Check for covers

1.2 Check for covers

Maintenance requirements:

- Check for controller cover and heat exchanger cover; check proper cover fastening.
- Check for squeezed or damaged insulation and cables due to cover fit.

Maintenance step is considered completed if:

- controller cover and heat exchanger cover are there and properly fastened
- no cable and/or insulation are squeezed by covers
- missing covers and/or damages are recorded

Date:

Tech:

Chiller Multi Deck Units (AKA Mopro) Vento L8, Vento H7, IC5 & ID6

- Chiller-01
- Chiller-02
- Chiller-03
- Chiller-04
- Chiller-05
- Chiller-06
- Chiller-07
- Chiller-08
- Chiller-09
- Chiller-10
- Chiller-11
- Chiller-12
- Chiller-13
- Chiller-14
- Milk_Roll_in-01

Vento Glass Door Shelf Freezers RL or Vento Freeze

- Shelf Freezer-01
- Shelf Freezer-02
- Shelf Freezer-03
- Shelf Freezer-04
- Shelf Freezer-05
- Shelf Freezer-06
- Shelf Freezer-07
- Shelf Freezer-08
- Shelf Freezer-09
- Shelf Freezer-10
- Shelf Freezer-11
- Shelf Freezer-12
- Shelf Freezer-13

Semi Verticals Cases

- F+V Chiller / L7 Cases-01
- F+V Chiller / L7 Cases-02
- F+V Chiller / L7 Cases-03
- F+V Chiller / L7 Cases-04
- Semi Vertical M+P-01
- Semi Vertical M+P-02
- Semi Vertical M+P-03
- Semi Vertical M+P-04
- Semi Vertical M+P-05
- Semi Vertical M+P-06

- Semi Vertical M+P-07**
- Semi Vertical M+P-08**
- Semi Vertical M+P-09**
- Semi Vertical M+P-10**
- Semi Vertical M+P-11**
- Semi Vertical M+P-12**

1.3 Check airflow

1.3 Check airflow panels and honeycombs

Maintenance requirements:

- Visual check of airflow panels and air exhaust honeycombs for dust.
- Inform store manager in case of significant dust or dirt buildup (multideck cabinets need cleaning).

Maintenance step is considered completed if:

- airflow panels and honeycombs are clean
- store manager was informed that a cleaning is necessary

Date:

Tech:

Chiller Multi Deck Units (AKA Mopro) Vento L8, Vento H7, IC5 & ID6

- Chiller-01
- Chiller-02
- Chiller-03
- Chiller-04
- Chiller-05
- Chiller-06
- Chiller-07
- Chiller-08
- Chiller-09
- Chiller-10
- Chiller-11
- Chiller-12
- Chiller-13
- Chiller-14
- Milk_Roll_in-01

Vento Glass Door Shelf Freezers RL or Vento Freeze

- Shelf Freezer-01
- Shelf Freezer-02
- Shelf Freezer-03
- Shelf Freezer-04
- Shelf Freezer-05
- Shelf Freezer-06
- Shelf Freezer-07
- Shelf Freezer-08
- Shelf Freezer-09
- Shelf Freezer-10
- Shelf Freezer-11
- Shelf Freezer-12
- Shelf Freezer-13

Semi Verticals Cases

- F+V Chiller / L7 Cases-01
- F+V Chiller / L7 Cases-02
- F+V Chiller / L7 Cases-03
- F+V Chiller / L7 Cases-04
- Semi Vertical M+P-01
- Semi Vertical M+P-02
- Semi Vertical M+P-03
- Semi Vertical M+P-04
- Semi Vertical M+P-05
- Semi Vertical M+P-06
- Semi Vertical M+P-07

- Semi Vertical M+P-08**
- Semi Vertical M+P-09**
- Semi Vertical M+P-10**
- Semi Vertical M+P-11**
- Semi Vertical M+P-12**

1.4 Check light function

Maintenance requirements:

- Visual inspection of lamp functionality (e.g. overhead, shelves).
- Make note of damaged or defect lamps (replacement is not part of preventative maintenance).

Maintenance step is considered completed if:

- all lamps are working; or damages and defects

Date:

Tech:

Chiller Multi Deck Units (AKA Mopro) Vento L8, Vento H7, IC5 & ID6

- Chiller-01
- Chiller-02
- Chiller-03
- Chiller-04
- Chiller-05
- Chiller-06
- Chiller-07
- Chiller-08
- Chiller-09
- Chiller-10
- Chiller-11
- Chiller-12
- Chiller-13
- Chiller-14
- Milk_Roll_in-01

Vento Glass Door Shelf Freezers RL or Vento Freeze

- Shelf Freezer-01
- Shelf Freezer-02
- Shelf Freezer-03
- Shelf Freezer-04
- Shelf Freezer-05
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- Shelf Freezer-07
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- Shelf Freezer-09
- Shelf Freezer-10
- Shelf Freezer-11
- Shelf Freezer-12
- Shelf Freezer-13

Semi Verticals Cases

- F+V Chiller / L7 Cases-01
- F+V Chiller / L7 Cases-02
- F+V Chiller / L7 Cases-03
- F+V Chiller / L7 Cases-04
- Semi Vertical M+P-01
- Semi Vertical M+P-02
- Semi Vertical M+P-03
- Semi Vertical M+P-04
- Semi Vertical M+P-05
- Semi Vertical M+P-06

Semi Vertical M+P-07

Semi Vertical M+P-08

Semi Vertical M+P-09

Semi Vertical M+P-10

Semi Vertical M+P-11

Semi Vertical M+P-12

1.5 Check drains

Maintenance requirements:

- Visual inspection of drains; check if there is water at the bottom cover panels during defrosting.
- Lift several bottom covers at random; check drains and drain pans for dirt and water.
- DAIRY ROLL-IN: Remove the left panel on the back to check the drain.
- LOW TEMP Check the drain heating. There must not be any ice in the drainage.
- Inform store manager in case of dirty drain pans or drains; a cleaning company must clean the units.

Maintenance step is considered completed if:

- all troughs and drains are clean
- the LOW TEMP drain heating works
- the store manager was informed in case of cleaning necessity
- other faults are taken note of

Date:

Tech:

Chiller Multi Deck Units (AKA Mopro) Vento L8, Vento H7, IC5 & ID6

Chiller-01

Chiller-02

Chiller-03

Chiller-04

Chiller-05

Chiller-06

Chiller-07

Chiller-08

Chiller-09

Chiller-10

Chiller-11

Chiller-12

Chiller-13

Chiller-14

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Milk_Roll_in-01

Vento Glass Door Shelf Freezers RL or Vento Freeze

Shelf Freezer-01

Shelf Freezer-02

Shelf Freezer-03

Shelf Freezer-04

Shelf Freezer-05

Shelf Freezer-06

Shelf Freezer-07

Shelf Freezer-08

Shelf Freezer-09

Shelf Freezer-10

Shelf Freezer-11

Shelf Freezer-12

Shelf Freezer-13

Semi Verticals Cases

F+V Chiller / L7 Cases-01

F+V Chiller / L7 Cases-02

F+V Chiller / L7 Cases-03

F+V Chiller / L7 Cases-04

Semi Vertical M+P-01

Semi Vertical M+P-02

- Semi Vertical M+P-03**
- Semi Vertical M+P-04**
- Semi Vertical M+P-05**
- Semi Vertical M+P-06**
- Semi Vertical M+P-07**
- Semi Vertical M+P-08**
- Semi Vertical M+P-09**
- Semi Vertical M+P-10**
- Semi Vertical M+P-11**
- Semi Vertical M+P-12**

1.6 Check unit parameter settings

Maintenance requirements:

- Disconnect unit from Modbus respectively from XWEB; connect service computer to unit Modbus, readout controller values and compare to latest settings.
- If the settings are not up to date, update them accordingly

Maintenance step is considered completed if:

- all controller settings are correct
- all controller settings are updated

Date:

Tech:

Chiller Multi Deck Units (AKA Mopro) Vento L8, Vento H7, IC5 & ID6

Chiller-01

Chiller-02

Chiller-03

Chiller-04

Chiller-05

Chiller-06

Chiller-07

Chiller-08

Chiller-09

Chiller-10

Chiller-11

Chiller-12

Chiller-13

Chiller-14

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Milk_Roll_in-01

Vento Glass Door Shelf Freezers RL or Vento Freeze

Shelf Freezer-01

Shelf Freezer-02

Shelf Freezer-03

Shelf Freezer-04

Shelf Freezer-05

Shelf Freezer-06

Shelf Freezer-07

Shelf Freezer-08

Shelf Freezer-09

Shelf Freezer-10

Shelf Freezer-11

Shelf Freezer-12

Shelf Freezer-13

Semi Verticals Cases

F+V Chiller / L7 Cases-01

F+V Chiller / L7 Cases-02

F+V Chiller / L7 Cases-03

F+V Chiller / L7 Cases-04

Semi Vertical M+P-01

Semi Vertical M+P-02

Semi Vertical M+P-03

Semi Vertical M+P-04

Semi Vertical M+P-05

Semi Vertical M+P-06

- Semi Vertical M+P-07
- Semi Vertical M+P-08
- Semi Vertical M+P-09
- Semi Vertical M+P-10
- Semi Vertical M+P-11
- Semi Vertical M+P-12

1.7 Check night blinds / glass doors

Maintenance requirements:

- Market light control (electrical opening and closing): If there is a central building control system, inform the store manager to close night blinds using the central control. Check for the correct closing position of all night blinds. Closed position is approx. 0.4inches above the air grid. Inform store manager to open night blinds again and check for correct opening. Open position is completely out of sight behind the top screen. If there is no central building control system, use your service computer. Connect service computer to system. Connect night blinds motor relays to the unit terminal box. Activate night blinds and check function as described. Disconnect motor relays and service computer again. Mind to not disturb the store customers too much.
- Manual control: Manually close night blinds and check for easy fastening in down position. Unhook and open night blinds again. Check the open position (completely behind the top screen).

Maintenance step is considered completed if:

- all night blinds close smoothly and stop at the right position (electrical) and are easy to fasten (manual)
- all night blinds open easily and are completely behind the top screen in open position;
- all or single down positions have been corrected;
- defect or damaged parts are taken note of;

Maintenance requirements:

- The complete glass door system must be checked visually for damages, corrosion and/or dirt.
- Check hinges and closing devices for damages and function. Glass doors must close autonomously by an opening angle under 90° and stay open by an opening angle over 90°.
- Check sealings for damages and function.
- LOW TEMP: Check frame heating for function.
- LOW TEMP: Check safety rope for damages and correct fastening (if applicable).

Maintenance step is considered completed if:

- the glass door system is undamaged and free of corrosion or dirt
- hinges, closing divides and sealings are undamaged and fully functional
- the LOW TEMP frame heating and safety rope are fully functional (if applicable)
- faults are made note of

Date:

Tech:

Chiller Multi Deck Units (AKA Mopro) Vento L8, Vento H7, IC5 & ID6

Chiller-01

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- Chiller-02
- Chiller-03
- Chiller-04
- Chiller-05
- Chiller-06
- Chiller-07
- Chiller-08
- Chiller-09
- Chiller-10
- Chiller-11
- Chiller-12
- Chiller-13
- Chiller-14
- Milk_Roll_in-01

Vento Glass Door Shelf Freezers RL or Vento Freeze

- Shelf Freezer-01
- Shelf Freezer-02
- Shelf Freezer-03
- Shelf Freezer-04
- Shelf Freezer-05
- Shelf Freezer-06
- Shelf Freezer-07
- Shelf Freezer-08
- Shelf Freezer-09
- Shelf Freezer-10
- Shelf Freezer-11
- Shelf Freezer-12

Shelf Freezer-13

Semi Verticals Cases

F+V Chiller / L7 Cases-01

F+V Chiller / L7 Cases-02

F+V Chiller / L7 Cases-03

F+V Chiller / L7 Cases-04

Semi Vertical M+P-01

Semi Vertical M+P-02

Semi Vertical M+P-03

Semi Vertical M+P-04

Semi Vertical M+P-05

Semi Vertical M+P-06

Semi Vertical M+P-07

Semi Vertical M+P-08

Semi Vertical M+P-09

Semi Vertical M+P-10

Semi Vertical M+P-11

Semi Vertical M+P-12

1.8 Check thermometer

Maintenance requirements:

- Check temperature on some units at random. Use an adequate measurement device. Check for defrosting.

Maintenance step is considered completed if:

- all thermometers are fully functional, correctly fastened and the sensor position is correct
- all defect thermometers have been detected
- faulty sensor positions are corrected
- defect thermometers are noted for later replacement

Date:

Tech:

Chiller Multi Deck Units (AKA Mopro) Vento L8, Vento H7, IC5 & ID6

- Chiller-01
- Chiller-02
- Chiller-03
- Chiller-04
- Chiller-05
- Chiller-06
- Chiller-07
- Chiller-08
- Chiller-09
- Chiller-10
- Chiller-11
- Chiller-12
- Chiller-13

- Chiller-14
- Milk_Roll_in-01

Vento Glass Door Shelf Freezers RL or Vento Freeze

- Shelf Freezer-01
- Shelf Freezer-02
- Shelf Freezer-03
- Shelf Freezer-04
- Shelf Freezer-05
- Shelf Freezer-06
- Shelf Freezer-07
- Shelf Freezer-08
- Shelf Freezer-09
- Shelf Freezer-10
- Shelf Freezer-11
- Shelf Freezer-12
- Shelf Freezer-13

Semi Verticals Cases

- F+V Chiller / L7 Cases-01
- F+V Chiller / L7 Cases-02
- F+V Chiller / L7 Cases-03
- F+V Chiller / L7 Cases-04
- Semi Vertical M+P-01
- Semi Vertical M+P-02
- Semi Vertical M+P-03
- Semi Vertical M+P-04

Semi Vertical M+P-05

Semi Vertical M+P-06

Semi Vertical M+P-07

Semi Vertical M+P-08

Semi Vertical M+P-09

Semi Vertical M+P-10

Semi Vertical M+P-11

Semi Vertical M+P-12

1.10 Check condenser fans (AHT VENTO HYBRID & AHT VENTO SV)

Maintenance requirements:

- VENTO HYBRID: The fans are visible or covered by a panel, depending on whether it is the intake- or pressure-side.
- VENTO SV: The fans are located behind a grid. The grid must be removed for the check.

Maintenance step is considered completed if:

- all condenser fans are fully functional without unusual noises;
- or defect condenser fans are made note of for later replacement;

Date:

Tech:

Semi Verticals Cases

- F+V Chiller / L7 Cases-01
- F+V Chiller / L7 Cases-02
- F+V Chiller / L7 Cases-03
- F+V Chiller / L7 Cases-04
- Semi Vertical M+P-01
- Semi Vertical M+P-02
- Semi Vertical M+P-03
- Semi Vertical M+P-04
- Semi Vertical M+P-05
- Semi Vertical M+P-06
- Semi Vertical M+P-07
- Semi Vertical M+P-08
- Semi Vertical M+P-09
- Semi Vertical M+P-10

Semi Vertical M+P-11

Semi Vertical M+P-12

1.11 Clean condenser (AHT VENTO HYBRID & AHT VENTO SV)

Maintenance requirements:

- Disconnect the unit from power supply and from the market light control. Open and remove condenser cover. Clean condenser with vacuum cleaner and compressed air if necessary.

Maintenance step is considered completed if:

- condenser is clean
- condenser is cleaned

Date:

Tech:

Semi Verticals Cases

- F+V Chiller / L7 Cases-01
- F+V Chiller / L7 Cases-02
- F+V Chiller / L7 Cases-03
- F+V Chiller / L7 Cases-04
- Semi Vertical M+P-01
- Semi Vertical M+P-02
- Semi Vertical M+P-03
- Semi Vertical M+P-04
- Semi Vertical M+P-05
- Semi Vertical M+P-06
- Semi Vertical M+P-07
- Semi Vertical M+P-08
- Semi Vertical M+P-09
- Semi Vertical M+P-10

Semi Vertical M+P-11

Semi Vertical M+P-12

1.12 Check compressor operating noise

Maintenance requirements:

- Check compressor operating noise for knocking, screeching, whining, wheezing, significant pitch differences, etc.
- Compare noises to other units.

Maintenance step is considered completed if:

- the operating noise is normal
- or unusual noises have been made note of

Date:

Tech:

Chiller Multi Deck Units (AKA Mopro) Vento L8, Vento H7, IC5 & ID6

Chiller-01

Chiller-02

Chiller-03

Chiller-04

Chiller-05

Chiller-06

Chiller-07

Chiller-08

Chiller-09

Chiller-10

Chiller-11

Chiller-12

Chiller-13

Chiller-14

Milk_Roll_in-01

Vento Glass Door Shelf Freezers RL or Vento Freeze

Shelf Freezer-01

Shelf Freezer-02

Shelf Freezer-03

Shelf Freezer-04

Shelf Freezer-05

Shelf Freezer-06

Shelf Freezer-07

Shelf Freezer-08

Shelf Freezer-09

Shelf Freezer-10

Shelf Freezer-11

Shelf Freezer-12

Shelf Freezer-13

Semi Verticals Cases

F+V Chiller / L7 Cases-01

F+V Chiller / L7 Cases-02

F+V Chiller / L7 Cases-03

F+V Chiller / L7 Cases-04

Semi Vertical M+P-01

Semi Vertical M+P-02

Semi Vertical M+P-03

Semi Vertical M+P-04

Semi Vertical M+P-05

- Semi Vertical M+P-06**
- Semi Vertical M+P-07**
- Semi Vertical M+P-08**
- Semi Vertical M+P-09**
- Semi Vertical M+P-10**
- Semi Vertical M+P-11**
- Semi Vertical M+P-12**

1.13 Alarm test

Maintenance requirements:

- Test the alarm function by viewing XWEB.
- An alarm must be activated as soon as a sensor, a pressure transmitter or switch is disconnected. Inform store manager and the monitoring service of the alarm test beforehand.

Maintenance step is considered completed if:

- the alarm test is a success
- faults are corrected, and the alarm test repetition is successful

Date:

Tech:

Chiller Multi Deck Units (AKA Mopro) Vento L8, Vento H7, IC5 & ID6

- Chiller-01
- Chiller-02
- Chiller-03
- Chiller-04
- Chiller-05
- Chiller-06
- Chiller-07
- Chiller-08
- Chiller-09
- Chiller-10
- Chiller-11
- Chiller-12
- Chiller-13
- Chiller-14
- Milk_Roll_in-01

Vento Glass Door Shelf Freezers RL or Vento Freeze

Shelf Freezer-01

Shelf Freezer-02

Shelf Freezer-03

Shelf Freezer-04

Shelf Freezer-05

Shelf Freezer-06

Shelf Freezer-07

Shelf Freezer-08

Shelf Freezer-09

Shelf Freezer-10

Shelf Freezer-11

Shelf Freezer-12

Shelf Freezer-13

Semi Verticals Cases

F+V Chiller / L7 Cases-01

F+V Chiller / L7 Cases-02

F+V Chiller / L7 Cases-03

F+V Chiller / L7 Cases-04

Semi Vertical M+P-01

Semi Vertical M+P-02

Semi Vertical M+P-03

Semi Vertical M+P-04

Semi Vertical M+P-05

Semi Vertical M+P-06

Semi Vertical M+P-07

- Semi Vertical M+P-08**
- Semi Vertical M+P-09**
- Semi Vertical M+P-10**
- Semi Vertical M+P-11**
- Semi Vertical M+P-12**

1.14 Leak test

Maintenance requirements:

- The refrigerant circuit must be tight. The prevailing legal norms, inspection methods and documentation regulations must be taken into consideration.
- Date and results of the leak tests must be recorded in the logbook.

Maintenance step is considered completed if:

- the leak tests are done
- the results are recorded according to the prevailing legal norms

Date:

Tech:

Chiller Multi Deck Units *(AKA Mopro) Vento L8, Vento H7, IC5 & ID6*

- Chiller-01
- Chiller-02
- Chiller-03
- Chiller-04
- Chiller-05
- Chiller-06
- Chiller-07
- Chiller-08
- Chiller-09
- Chiller-10
- Chiller-11
- Chiller-12
- Chiller-13
- Chiller-14

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Milk_Roll_in-01

Vento Glass Door Shelf Freezers RL or Vento Freeze

Shelf Freezer-01

Shelf Freezer-02

Shelf Freezer-03

Shelf Freezer-04

Shelf Freezer-05

Shelf Freezer-06

Shelf Freezer-07

Shelf Freezer-08

Shelf Freezer-09

Shelf Freezer-10

Shelf Freezer-11

Shelf Freezer-12

Shelf Freezer-13

Semi Verticals Cases

F+V Chiller / L7 Cases-01

F+V Chiller / L7 Cases-02

F+V Chiller / L7 Cases-03

F+V Chiller / L7 Cases-04

Semi Vertical M+P-01

Semi Vertical M+P-02

Semi Vertical M+P-03

Semi Vertical M+P-04

Semi Vertical M+P-05

Semi Vertical M+P-06

- Semi Vertical M+P-07**
- Semi Vertical M+P-08**
- Semi Vertical M+P-09**
- Semi Vertical M+P-10**
- Semi Vertical M+P-11**
- Semi Vertical M+P-12**

1.15 Service of condensate pumps (if applicable)

Maintenance requirements:

- If there is a condensate pump, it must be checked for correct operation and unusual operating noises like knocking, screeching, whining, wheezing, significant pitch differences, etc.
- The strainer is to be cleaned. The inlet respectively outlet tubes are to be checked for free flow; dirt, constrictions or bends must be removed.

Maintenance step is considered completed if:

- the condensate pump is fully functional and clean
- faults are made note of

Date:

Tech:

Notes or pictures:

1.16 LOW TEMP: Check intermediate walls (plexi divider)

Maintenance requirements:

- Check for plexi intermediate walls and a good fit.
- Check for cracks or other damages.

Maintenance step is considered completed if:

- all plexi intermediate walls are there and undamaged
- faults are made note of

Date:

Tech:

Vento Glass Door Shelf Freezers

- Shelf Freezer 1
- Shelf Freezer 2
- Shelf Freezer 3
- Shelf Freezer 4
- Shelf Freezer 5
- Shelf Freezer 6
- Shelf Freezer 7
- Shelf Freezer 8
- Shelf Freezer 9
- Shelf Freezer 10
- Shelf Freezer 11
- Shelf Freezer 12
- Shelf Freezer 13

Section 2 DRY COOLER

2.1.1 Check dry cooler electrics

Maintenance requirements:

- Visual check of dry coolers; record defect parts with pictures and data plate information.
- Check the control cabinet interior. Check main connection terminals and load contactors for good fit and fastening. Refasten if necessary.
- Check electronic components like switches, push-buttons and control modules for function.

Maintenance step is considered completed if:

- faults that cannot be corrected immediately are made note of
- electrics are fully functional, and any faults are corrected

Date:

Tech:

Dry Cooler Units

Dry Cooler #1
(Notes and Pics)

Dry Cooler #2

Dry Cooler #3

2.1.2 Visual check of dry cooler exterior and cleaning

Maintenance requirements:

- Visual check of all dry cooler parts; record defect or damaged parts with pictures and data plate information. Missing parts and covers are to be replaced.
- Realign damaged or bent fins with a comb. Clean the air heat exchanger with a broom and rinse it with water. Before you start to clean the dry cooler with water, disconnect it from the main power supply and make sure that the dry cooler cannot be connected without you knowing. Electrics must be protected from water and may not be sprayed directly.

Maintenance step is considered completed if:

- there is no function-affecting dust or dirt; there is no major contamination and the dry cooler is clean swept
- all mechanical connections like screwed and soldering joints are free of brine traces;
- no function-affecting rust was found
- no damages to function-relevant parts were found

Cleaning tips:

Do not spray the fins in an angular way; it can damage the fins;

Clean in air flow direction;

If you use a pressure washer be sure to keep a safe distance of 28 inches;

Do not use aggressive cleaning agents;

Do not spray at electrics directly;

Date:

Tech:

Dry Cooler Units

Dry Cooler #1
(Notes and Pics)

Dry Cooler #2

Dry Cooler #3

2.1.3 Check fan function and operating noises

Maintenance requirements:

- All dry cooler fan motors are to be checked for correct operation, unusual operating noises like knocking, screeching, whining, wheezing, significant pitch differences, etc. and for emergency operation.
- The emergency operation is checked by switching off the speed control (GMM controller, safeguard F0). All fans must run at full speed.

Maintenance step is considered completed if:

- all fans are fully functional and run at full speed in emergency operation
- any unusual operating noises are made note of
- the emergency operation test was not successful, and the result was made note of

Date:

Tech:

Dry Cooler Units

Dry Cooler #1
(Notes and Pics)

Dry Cooler #2

Dry Cooler #3

2.1.4 Check brine temperature (glycol)

Maintenance requirements:

- Check the temperature of brine inlet flow and brine outlet flow with adequate digital measuring instruments. The temperature values are to be made note of. The inlet flow temperature may only be 5°Celsius (9°F) higher than the ambient temperature. Look for GMM controller parameters (e.g. ambient temperature = 30°C/86°F, inlet flow temperature =35°C/95°F).

Maintenance step is considered completed if:

- all measured temperature values are made note of
- the measured values are within range

Date:

Tech:

Dry Cooler Units

Dry Cooler #1
(Notes and Pics)

Dry Cooler #2

Dry Cooler #3

2.1.5 Check brine temperature at dry cooler controller

Maintenance requirements:

- Take and record brine inlet flow temperature readings at the GMM controller.

Maintenance step is considered completed if:

- the brine temperature is taken and made note of

Date:

Tech:

Dry Cooler Units

Dry Cooler #1
(Notes and Pics)

Dry Cooler #2

Dry Cooler #3

2.1.6 Check dry cooler air temperature

Maintenance requirements:

- Check the temperature values of the inlet air and the outlet air with an adequate digital measuring instrument. The temperature values are to be made note of.

Maintenance step is considered completed if:

- inlet and outlet air temperatures are measured and recorded

Date:

Tech:

Dry Cooler Units

Dry Cooler #1
(Notes and Pics)

Dry Cooler #2

Dry Cooler #3

2.1.7 Check ambient temperature at dry cooler controller

Maintenance requirements:

- Check ambient temperature at temperature sensor position with an adequate digital measuring instrument. Compare readings with the GMM controller display.
- If measured and displayed values differ, it may be due to a faulty sensor position, e.g. within direct sunlight and heat. Check sensor position and change it if necessary. The control impact of a wrong ambient temperature reading is significant and must be avoided.

Maintenance step is considered completed if:

- the temperature value is measured and made note of
- the temperature difference of measured and displayed value is below 3°Celsius (4°F)

Date:

Tech:

Dry Cooler Units

Dry Cooler #1
(Notes and Pics)

Dry Cooler #2

Dry Cooler #3

2.1.8 Check dry cooler alarm

Maintenance requirements:

- Check for correct alarm activation. The alarm must be active in case of:
fan fuse defect, pump station fuse defect, GMM controller fuse defect.
- Inform store manager and security service of the alarm test beforehand.

Maintenance step is considered completed if:

- the alarm test was successful
- faults are corrected, and the alarm test repetition is successful

Date:

Tech:

Dry Cooler Units

Dry Cooler #1
(Notes and Pics)

Dry Cooler #2

Dry Cooler #3

2.1.9 Check dry cooler

Maintenance requirements:

- Check the dry cooler for correct operation.
- Check GMM controller parameter settings.
- Check alarm logs.
- Inform store manager and security service of the alarm test beforehand.

Maintenance step is considered completed if:

- the dry cooler is fully functional
- all parameter settings are up-to-date
- all or single settings are updated

Date:

Tech:

Dry Cooler Units

Dry Cooler #1
(Notes and Pics)

Dry Cooler #2

Dry Cooler #3

Section 3 DOCUMENTATION

Location	Equipment Label	Unit Description(s) in Xweb	Type of Equipment
Service Area:	Bakery Freezer	Bakery_Freezer_1 Bakery_Freezer_2 Bakery_Freezer_3	Rivacold Aggregates or Krack Units
	P2 Stores: Backstock Chiller M&P	P2 Stores: Chiller_Room_M+P-1 Chiller_Room_M+P-2	Rivacold Aggregates or Krack Units
	Backstock Chiller F&V	Chiller_Room_F+V-1 Chiller_Room_F+V-2	
	P4/P6 Stores: Backstock Chiller (both M&P and/or F&V)	P4/P6 stores: Chiller_Room_1 Chiller_Room_2	
	Backstock Freezer	Backstock_Freezer_1 Backstock_Freezer_2 Backstock_Freezer_3	Rivacold Aggregates or Krack Units
Sales Floor:	Fruit & Veg Chiller ##	F+V Chiller-##	IDF5SU
	Chiller ##	Chiller-##	Vento L8, Vento H7, IC5 & ID6
	Meat & Poultry Semi Vertical ##	Semi Vertical M+P-##	AHT or Hussmann SV's
	Fruit & Veg Semi Vertical ##	Semi Vertical F+V-##	AHT SV's
	Meat & Poultry Slimline ##	Slimline M&P-##	IDF5NV
	Milk Chiller	Milk Roll_In-01	DD5X5FRW
	Shelf Freezer ##	Shelf_Freezer-##	RL or Vento Freeze
	Chest Cooler ##	Chest_Cooler-##	AHT Miami
	Chest Freezer ##	Chest_Freezer-##	AHT Miami
	Cabinet Freezer ##	Cabinet_Freezer-##	AHT Kinley
	Room Sensor	Room_Sensor	XWEB ambient sensor

3.1 Wiring diagram

Check for technical site documentation:

- wiring diagram refrigerated multideck cabinets (on the inside of the control cover)
- wiring diagram dry cooler
- wiring diagram pump station
- wiring diagram of cooling cell units (NK/TK)

Maintenance step is considered completed if:

- technical documentation is complete
- missing documents are made note of

3.1 Wiring diagram

Check for technical site documentation:

- wiring diagram refrigerated multideck cabinets (on the inside of the control cover)
- wiring diagram dry cooler
- wiring diagram pump station
- wiring diagram of cooling cell units (NK/TK)

Maintenance step is considered completed if:

- technical documentation is complete
- missing documents are made note of
- Fill out store equipment information survey

Date:

Tech:

Notes and Pictures:

3.2 Site Equipment Survey

Section 4 XWEB

Location	Equipment Label	Unit Description(s) in Xweb	Type of Equipment
Service Area:	Bakery Freezer	Bakery_Freezer_1 Bakery_Freezer_2 Bakery_Freezer_3	Rivacold Aggregates or Krack Units
	P2 Stores: Backstock Chiller M&P	P2 Stores: Chiller_Room_M+P-1 Chiller_Room_M+P-2	Rivacold Aggregates or Krack Units
	Backstock Chiller F&V	Chiller_Room_F+V-1 Chiller_Room_F+V-2	
	P4/P6 Stores: Backstock Chiller (both M&P and/or F&V)	P4/P6 stores: Chiller_Room_1 Chiller_Room_2	
	Backstock Freezer	Backstock_Freezer_1 Backstock_Freezer_2 Backstock_Freezer_3	Rivacold Aggregates or Krack Units
Sales Floor:	Fruit & Veg Chiller ##	F+V Chiller-##	IDF5SU
	Chiller ##	Chiller-##	Vento L8, Vento H7, IC5 & ID6
	Meat & Poultry Semi Vertical ##	Semi Vertical M+P-##	AHT or Hussmann SV's
	Fruit & Veg Semi Vertical ##	Semi Vertical F+V-##	AHT SV's
	Meat & Poultry Slimline ##	Slimline M&P-##	IDF5NV
	Milk Chiller	Milk Roll_In-01	DD5X5FRW
	Shelf Freezer ##	Shelf_Freezer-##	RL or Vento Freeze
	Chest Cooler ##	Chest_Cooler-##	AHT Miami
	Chest Freezer ##	Chest_Freezer-##	AHT Miami
	Cabinet Freezer ##	Cabinet_Freezer-##	AHT Kinley
	Room Sensor	Room_Sensor	XWEB ambient sensor

4.1 X-Web

Check for Proper operation

- Is cover installed on box
- Does the Xweb have a back up flash drive in the control cabinet
- Is the device online and accessible from Connect+
- Are both Hubs operational
- Does the system have active No links
- Check communication
- Check equipment names to X-Web Naming Convention doc below

Date:

Tech:

Notes Screen Shots and Pictures:

Xweb Naming Convention doc

Location	Equipment Label	Unit Description(s) in Xweb	Type of Equipment
Service Area:	Bakery Freezer	Bakery_Freezer_1 Bakery_Freezer_2 Bakery_Freezer_3	Rivacold Aggregates or Krack Units
	P2 Stores: Backstock Chiller M&P	P2 Stores: Chiller_Room_M+P-1 Chiller_Room_M+P-2	Rivacold Aggregates or Krack Units
	Backstock Chiller F&V	Chiller_Room_F+V-1 Chiller_Room_F+V-2	
	P4/P6 Stores: Backstock Chiller (both M&P and/or F&V)	P4/P6 stores: Chiller_Room_1 Chiller_Room_2	
	Backstock Freezer	Backstock_Freezer_1 Backstock_Freezer_2 Backstock_Freezer_3	Rivacold Aggregates or Krack Units
Sales Floor:	Fruit & Veg Chiller ##	F+V Chiller-##	IDF5SU
	Chiller ##	Chiller-##	Vento L8, Vento H7, IC5 & ID6
	Meat & Poultry Semi Vertical ##	Semi Vertical M+P-##	AHT or Hussmann SV's
	Fruit & Veg Semi Vertical ##	Semi Vertical F+V-##	AHT SV's
	Meat & Poultry Slimline ##	Slimline M&P-##	IDF5NV
	Milk Chiller	Milk Roll_In-01	DD5X5FRW
	Shelf Freezer ##	Shelf_Freezer-##	RL or Vento Freeze
	Chest Cooler ##	Chest_Cooler-##	AHT Miami
	Chest Freezer ##	Chest_Freezer-##	AHT Miami
	Cabinet Freezer ##	Cabinet_Freezer-##	AHT Kinley
	Room Sensor	Room_Sensor	XWEB ambient sensor

Section 5 WALK IN COLD ROOMS

5.1 Walk in maintenance

5.1.1 Check walk in exterior

Maintenance requirements:

- Visual check of walk in exterior. Detected damages like rammed doors are to be made note of.

Maintenance step is considered completed if:

- there are no visible damages to the walk in
- damages are made note of for later repair

5.1.2 Check ceiling construction

Maintenance requirements:

- Visual check of ceiling construction for fastening, stability, function and damages

Maintenance step is considered completed if:

- the ceiling construction is stable, correctly fastened and undamaged
- faults are made note of for later repair

5.1.3 Check frost protection heating parameter

Maintenance requirements:

- Check frost protection heating for correct operation.
- Check respectively to adapt the set value (4°Celsius / 39°F).

Maintenance step is considered completed if:

- the heating is fully functional
- the set value equals 4°C (39°F)
- defects are made note of

5.1.4 Check alarm system

Maintenance requirements:

- Check the alarm function of walk in cold room compartments - the cooler and freezer cells for correct operation. Heat room temperature sensor to do so.

Maintenance step is considered completed if:

- alarm is activated when room temperature is too high
- or faults are made note of for later repair

5.1.5 Check stacking mark (not applicable here)

Maintenance requirements:

- Check for stacking marks.

Maintenance step is considered completed if:

- there are stacking marks in the cooling cell compartments
- or missing marks are made note of

5.1.6 Check pressure compensation valve

Maintenance requirements:

- Check the pressure compensation valve for correct operation. The flap must be movable, there must be no icing, the cover must feel warm to the touch.

Maintenance step is considered completed if:

- the pressure compensation valve is fully functional
- or defects are made note of

5.1.7 Check lighting

Maintenance requirements:

- Visual check of all lamps for correct operation.
- The replacement of defect lamps and the lamp installation safety check is not part of the service.

Maintenance step is considered completed if:

- all lamps are fully functional
- or defect lamps are made note of

5.1.10 Check service labels

Maintenance requirements:

- Check for service labels. There must be one, and it must be correct.

Maintenance step is considered completed if:

- service label is there and correct
- service label is attached respectively corrected; any fault is made note of

Date:

Tech:

Back Stock Freezer / Delivery Freezer

(Add note and Pictures)

Bakery Freezer

(Add note and Pictures)

Combo Cooler #1

(Add note and Pictures)

Combo Cooler #2

(Add note and Pictures)

5.2 Refrigeration Systems Check

5.2.1 Visual unit check

Maintenance requirements:

- Check the unit exterior for dirt, damages and corrosion. Clean unit if necessary.
- Check the unit control cabinet interior. Check main connection terminals and load contactors for correct fastening. Refasten if necessary.
- Check electronic components like switches, push-buttons and control modules for function. Check cables for damages and chafe marks.

Maintenance step is considered completed if:

- faults that cannot be corrected immediately are made note of
- units are fully functional, and any faults are corrected

5.2.2 Check inspection glass/site glass

Maintenance requirements:

- The inspection glass must show a bubble-free liquid (no bubble formation).
- The inspection glass must be completely covered (correct liquid level).

Maintenance step is considered completed if:

- the inspection glass does not show any bubbles
- the liquid level is not lowered
- any faults are made note of for later repair

5.2.3 Check compressor oil inspection glass (if applicable)

Maintenance requirements:

- Check oil level according to manufacturer specifications.
- Refill compressor oil if the level is too low.

Maintenance step is considered completed if:

- oil level corresponds to manufacturer specifications
- compressor oil was refilled and made note of

5.2.4 Check compressor

Maintenance requirements:

- Check the compressor for unusual operating noises like knocking, screeching, whining, wheezing or significant pitch differences and for vibration.
- Check the compressor exterior for damages, dirt and corrosion.

Maintenance step is considered completed if:

- compressor does not have any noticeable problems
- or any unusual operating noises and vibrations are made note of

5.2.5 Check pipework

Maintenance requirements:

- Check unit pipework for damages, dirt and corrosion (where possible/accessible).
- Check unit insulation for visual damages (where possible/accessible).
- Check unit pipework for fastening and leakage (visual oil traces).

Maintenance step is considered completed if:

- there is no function-affecting dirt
- there is no function-affecting rust at unit and unit pipework
- there are no damages at unit, the unit pipework and the insulation
- any faults are made note of for later repair

5.2.6 Leakage test

Maintenance requirements:

- A leakage test must be done for every condensing unit.
- The test and the test result are to be made note of in the leakage logbook.
- If leaks are detected, they must be repaired at once.

Maintenance step is considered completed if:

- the unit refrigerant circuit is tight
- the test and the test result are made note of in the logbook
- any detected leakage is repaired

5.2.7 Check evaporator electrics

Maintenance requirements:

- Visual check for dirt and damages.
- Check for covers; check fastening of covers.
- Check connecting terminals for fastening. Refasten if necessary.

Maintenance step is considered completed if:

- all covers are there, are clean and correctly fastened
- all connecting terminals are fastened correctly
- missing covers are made note of

5.2.8 Check evaporator

Maintenance requirements:

- Check the evaporator exterior for dirt, damages and corrosion. Clean evaporator exterior if necessary.
- Check the injection valve for icing and/or white frost. Check defrost for correct operation. (Freezer only)

Maintenance step is considered completed if:

- the evaporator is free of dirt, damages and/or corrosion
- the injection valve is fully functional
- the defrosting is fully functional
- or any faults are made note of for later repair

5.2.9 Check evaporator fan

Maintenance requirements:

- Check evaporator fan for correct operation; check for correct fastening; check for dirt, damages and corrosion

Maintenance step is considered completed if:

- all evaporator fans are fully functional, correctly fastened, and free of dirt, damages and corrosion
- any faults are made note of for later repair

5.2.10 Check defrost/condensation water drain

Maintenance requirements:

- Check defrost/condensation water drain of units for correct function. Clean drain if necessary.
- Split unit: Check drain for leakage, blockage, damages and loose fastening.
- If cleaning is necessary, inform the store manager that a cleaning order is necessary.

Maintenance step is considered completed if:

- drain is correctly fastened, not blocked or damaged, and tight
- the store manager is informed in case of blockage; any faults are made note of.

5.2.11 Check drain and defrost heating (Freezer units only)

Maintenance requirements:

- Check condensate drain heating and evaporator defrost heating for correct operation while defrosting. Measure current consumption and temperature.

Maintenance step is considered completed if:

- both the condensate drain heating and the defrost heating are fully functional
- defects are made note of

5.2.12 Check room temperature and air outlet temperature

Maintenance requirements:

- Check the room temperature of every walk-in room.
- Check the air outlet temperature at every cooling unit respectively evaporator. Use an adequate measuring instrument.
- Record the measured values.

Maintenance step is considered completed if:

- temperature of every walk-in room is measured
- air outlet temperature of every cooling unit respectively evaporator is measured
- all measured temperature values are recorded

5.2.13 Check alarm function

Maintenance requirements:

- Check the alarm function. The alarm is activated as soon as a sensor, a pressure transmitter or a pressure switch is deactivated. The alarm is also activated if the condensing unit is disconnected from the power supply.
- Inform store manager and security service of the alarm test beforehand.

Maintenance step is considered completed if:

- the alarm test is successful
- faults are corrected, and the alarm test repetition is successful

5.2.14 Check safety features

Maintenance requirements:

- Check the exterior for dirt, damages and corrosion.
- Check the correct operation of the thermostat. Readjust if necessary.
- Check correct operation of the safety chain, control lights, push-buttons and switches.
- Check contactors and relays for correct operation and unusual operating noises.
- Check the correct operation of the defrost function. Readjust if necessary.

Maintenance step is considered completed if:

- all steps are done successfully
- any faults are made note of for later repair

5.2.15 Check parameter settings

Maintenance requirements:

- Check settings of condensing units and compare to latest parameter settings by either: via XWEB display; these displays are connected to the master condensing unit; to check the slave units a separate display must be connected at the controller for readout;
- Readout controller values and compare them to the latest parameter settings.

Maintenance step is considered completed if:

- all parameters are up-to-date
- all parameters are updated

5.2.21 Check wiring and connections

Maintenance requirements:

- Check electric clamped connections and plug-in connections for correct fastening.

Maintenance step is considered completed if:

- All clamped and plug-in connections are fastened correctly
- or any faults are made note of for later repair

5.2.22 Check air inlets

Maintenance requirements:

- Check air inlets of evaporator and cooling unit for blockage (inlet air; evaporator and condenser outlet air).
- Remove glue remains and objects which hinder the airflow.

Maintenance step is considered completed if:

- all air inlets are free, and airflow is unhindered
- or any faults are made note of for later repair

5.2.23 Check condensation water pump (if applicable)

Maintenance requirements:

- Check condensation water pumps for function (running / not running) and for unusual operating noises like knocking, screeching, whining, wheezing,

significant pitch differences etc.

- Clean dirt sieve. Check inlet and drainage tube for blockages, bends or dirt; clean tube if necessary.

Maintenance step is considered completed if:

- the condensation water pump is fully functional and clean
- or any faults are made note of for later repair

Date:

Tech:

Back Stock Freezer / Delivery Freezer

(Add note and Pictures)

Bakery Freezer

(Add note and Pictures)

Combo Cooler #1

(Add note and Pictures)

Combo Cooler #2

(Add note and Pictures)

5.3 Walk-in Doors

5.3.1 Check of sliding door

5.3.1.1 Check sliding door exterior

Maintenance requirements:

- Check the door exterior for damages.
- Record any damages to the door.

Maintenance step is considered completed if:

- there are no visual damages
- or any faults are made note of for later repair

5.3.1.2 Check door frame tightness

Maintenance requirements:

- Check the door and door frame for icing.
- Remove icing, check door sealing for damages and readjust the door if necessary.
- The replacement of the door sealing is not part of the scope of service.

Maintenance step is considered completed if:

- the door closes tightly and there is no icing
- the sealing is undamaged
- or any faults are made note of for later repair

5.3.1.3 Check allowance for clearance of door handle

Maintenance requirements:

- Check the door handle for fastening, function and damages.
- Check allowance of clearance.

Maintenance step is considered completed if:

- door handle is correctly fastened and undamaged
- there is not too much allowance of clearance
- or any faults are made note of for later repair

5.3.1.4 Check rollers

Maintenance requirements:

- Check rollers for function, wear and tear and for damages.
- Check adjusting ring for stability; retighten if necessary.
- A roller readjustment is not part of the scope of service.

Maintenance step is considered completed if:

- rollers are smooth-running
- there is no wear and tear or damage
- or any faults are made note of for later repair

5.3.1.5 Check door function

Maintenance requirements:

- Check doors for smooth-running.
- If necessary, readjust the door and/or grease.

Maintenance step is considered completed if:

- the doors are smooth-running
- or any faults are made note of for later repair

5.3.2 Check of door frame

5.3.2.1 Check door frame heating

Maintenance requirements:

- Check door frame heating - frame and sill - for fastening, function and damages.
- Check the heating function with your hand. If the door frame is warm to the touch, the heating works.

Maintenance step is considered completed if:

- door frame heating is fully functional, correctly fastened and undamaged
- or any faults are made note of for later repair

5.3.2.2 Check guide rollers

Maintenance requirements:

- Check guide rollers and base plates for functionality and damages.

Maintenance step is considered completed if:

- guide rollers and plates are undamaged
- or any faults are made note of for later repair

5.3.2.3 Check guide rail

Maintenance requirements:

- Check tubular guide rail for correct fastening. Refasten with ring spanner (13) if necessary.

Maintenance step is considered completed if:

- guide rail is correctly fastened
- or any faults are made note of for later repair

5.3.2.4 Check door stop / bumper

Maintenance requirements:

- Check the door stop for function, stability and fastening.

Maintenance step is considered completed if:

- door stop is fully functional
- or any faults are made note of for later repair

5.3.2.5 Check door contact switch

Maintenance requirements:

- Check whether cooling units and evaporator fans shut down when the sliding door is opened.
- Check the door contact switch for fastening. Every single door must be checked.

Maintenance step is considered completed if:

- condensing units and evaporator fans are shut down when door is open
- every door contact switch is correctly fastened
- or any faults are made note of for later repair

5.3.2.6 Check guide rail release bolt

Maintenance requirements:

- Check the guide rail release bolt for stability.

Maintenance step is considered completed if:

- the release bolt is fully functional
- or any faults are made note of for later repair

5.3.3 Check swing door

Maintenance requirements:

- Check the swing door for correct fastening, function and damages.
- Check for finger protection in the swing door joint area.
- Check safety clearance (e.g. storage objects).

Maintenance step is considered completed if:

- swing door is correctly fastened and undamaged
- there are no objects within the swing door area
- there is no icing
- or any faults are made note of for later repair

Date:

Tech:

Back Stock Freezer / Delivery Freezer
(Add notes and Pictures)

Bakery Freezer
(Add notes and Pictures)

Combo Cooler #1
(Add notes and Pictures)

Combo Cooler #2
(Add notes and Pictures)