FIELD SERVICE REPORT

Summary / Labor and Expenses

Heat and Control, Inc. 21121 Cabot Blvd. Hayward, CA. 94545
Phone 510-259-0500 Fax 510-259-0600

Zser/WBS # 2024005241 Report Number DB013124

P.O. Number: HCS2610 Page Number: 1

CUSTOMER

COMPANY:	HARTLEY COLD SERVICES, LLC	**Contact:**	Stephane Comtois
ADDRESS:	56 2nd street SE,	**Title:**	CEO, Owner
CITY/STATE/ZIP:	Hartley, IA 51346	**Phone:**	630 915 2783

EQUIPMENT INFORMATION/SERVICE REQUEST

Equipment/System: HWF-3618 fryer CTHX-2.5, DPF-2724 and CBF-36 **SO Number:** 202002586

Purpose Of Service Visit: To evaluate the condition of recently purchased used H&C equipment

Summary of Visit Days On Site This Week From: 01/31/24 To: 01/31/24

Reason for Visit

Review and evaluate condition of Heat and Control built equipment model# HWF-3618, CTHX-2.5, DPF-2724 and CBF-36 fryer system.

Type of inspection conducted

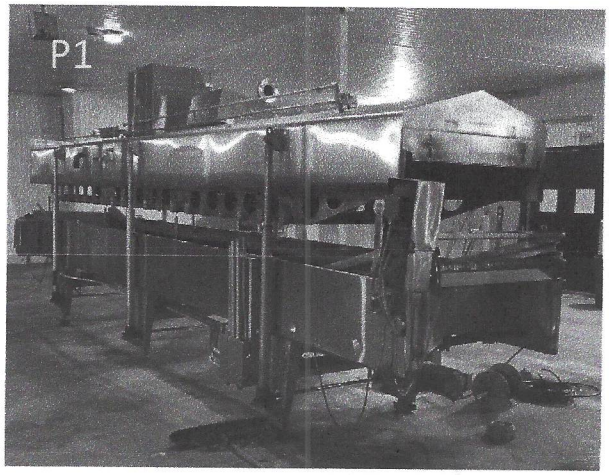
Please note this is a visual inspection report only. The final evaluation of components will need to be made after the system is powered up so that the motors can be "bumped" and other component operations checked. It is also recommended to change the fryer bearings before a startup is attempted.

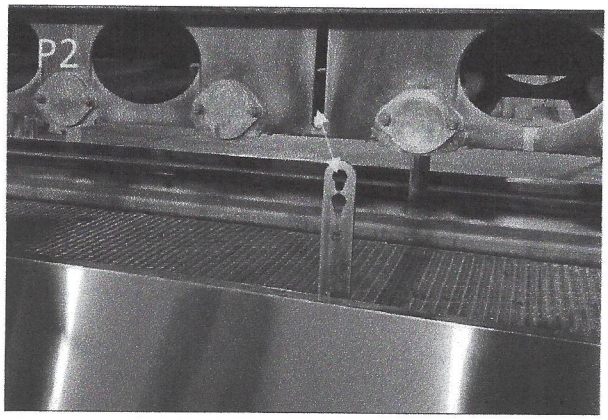
HWF-3618 Fryer

Overall, the fryer structure condition was good, and the fryer was clean. The fryer design is to run product partially submerged at a low oil level depth using "Waterfall Weirs" to pour oil over the top of the exposed portion of the product. The fryer uses a single conveyor running the length of the fryer (when the product enters the fryer at the infeed, the conveyor slopes down to convey product downwards to the oil level, the conveyor then runs straight across the bottom until it gets near the discharge, where the conveyor slopes back up to discharge the product).

Additional Fryer Details

1. The hoist and jack system looked in good condition, on our arrival the hood was in the up position. The hoist position switches were all intact. Reference photo P1.
2. The conveyor belt, motor and shafts were in good condition, with the exception that the conveyor frame was shifted forward and disconnected from the frame. This will need to be realigned with the hood and pan before entering operation (bolt conveyor keyhole into upper slot in frame). Reference photo P2.
3. Flow Weirs, CIP Nozzles and flow Valves were all in place with the exception that the flex hoses that service these manifolds were missing. The CIP drip pan was found loose underneath the hood. Reference photo P3 and P5.
4. The hood condition was good with no signs of major bowing.
5. The fryer Mist Eliminator section was there but has been cut in half, so it will need to be rewelded. No replacement pads were found on site. Reference photo P4.


P1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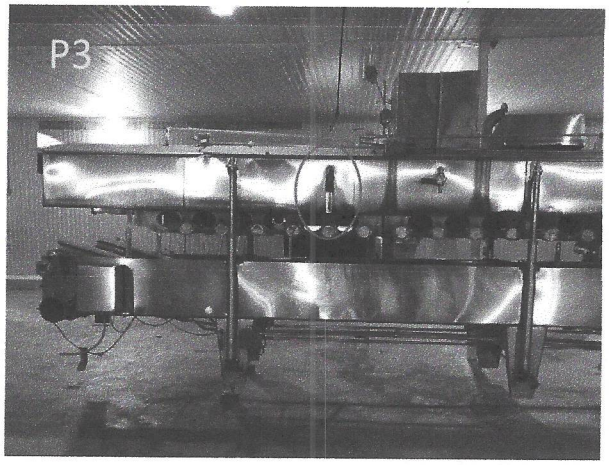
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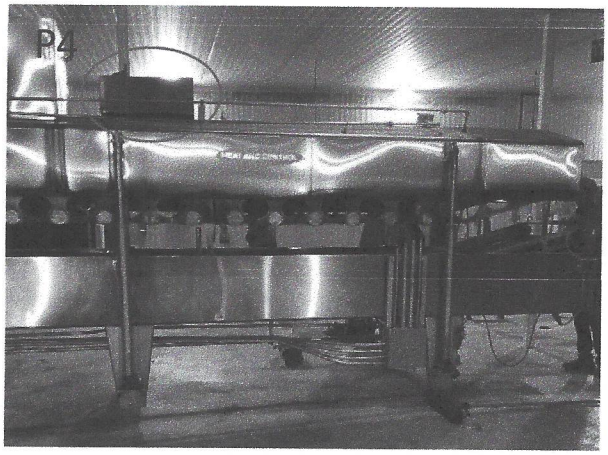
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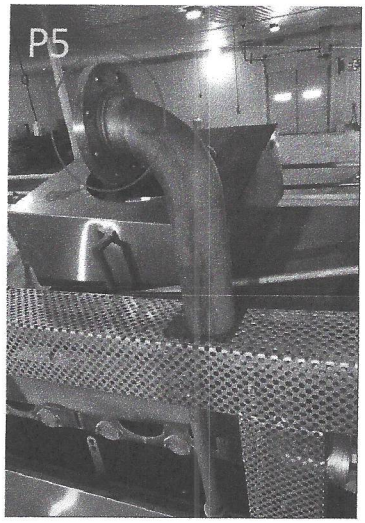
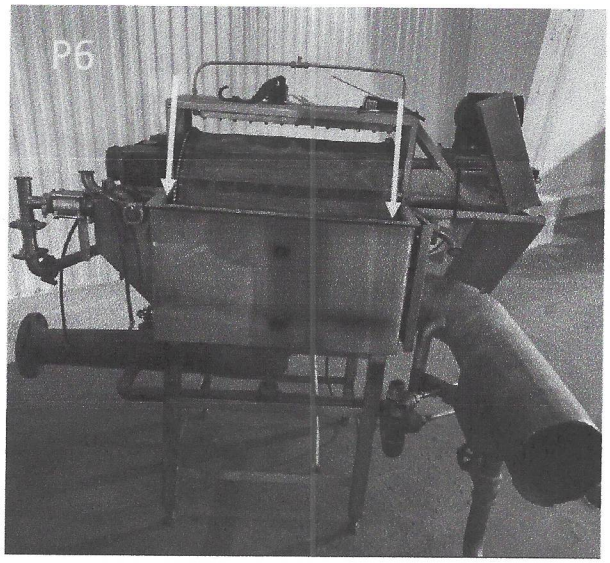

P5

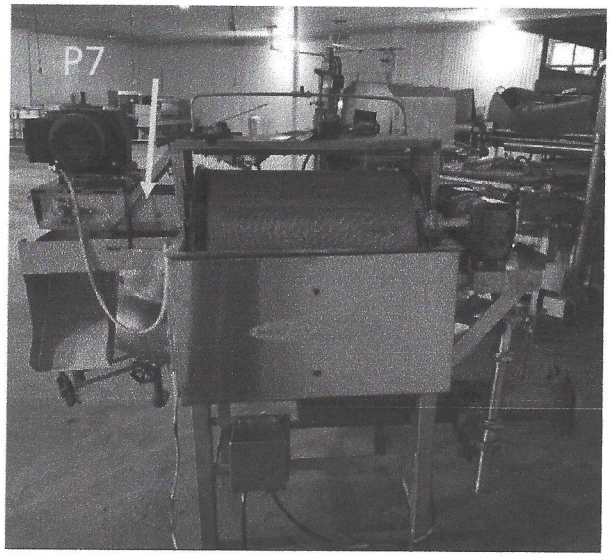
DPF-2724 Drum Prefilter

The DPF was in moderate condition with the drum drive and take-out drive is in place. The covers for the top were found with the associated ME section and the stack adapter. The compressed air blow off manifold was also intact. The DPF pull-out screen for fines discharge is missing and will need to be replaced. Reference photo P7.

Additional Drum Filter Details

This DPF does not have safety switches for the removable covers. Reference photo P6.





CTHX–2.5 Heat Exchanger

The outside casing was in good structural shape with no visible hot spots or warpage.
The burner model was verified as an Eclipse Ratiomatic 400 burner. It was intact and in moderate condition.
The combustion blower was spun by hand and deemed to be in good condition.
Combustion blower filter was in place and in new condition.
The combustion gas train components were intact and in good visual condition.
Interior case inspection revealed the insulation is in poor condition. The insulation is powdery in the bottom, pulling away from the casing and/or missing in other areas. Reference photo P8.
Case interior inspection revealed the coil shows signs of leakage. Reference photo P9.
The heat exchanger control panel is in good visual condition with all wiring to components still intact. Reference photos P10 and P11.

CTHX Functional Component Check

The following components were present, looked good visually and all in place per design.

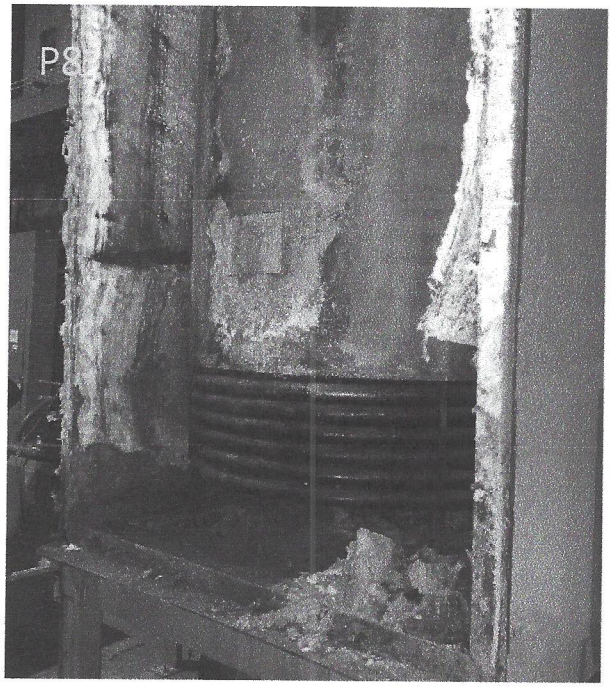
1. SQM50 mod motor
2. SKP25 regulator/shutoff valve
3. Dungs FRG 7 15/16 ratio regulator
4. Pilot pressure regulator (7-12"wc spring)
5. Two pilot shut-off solenoids

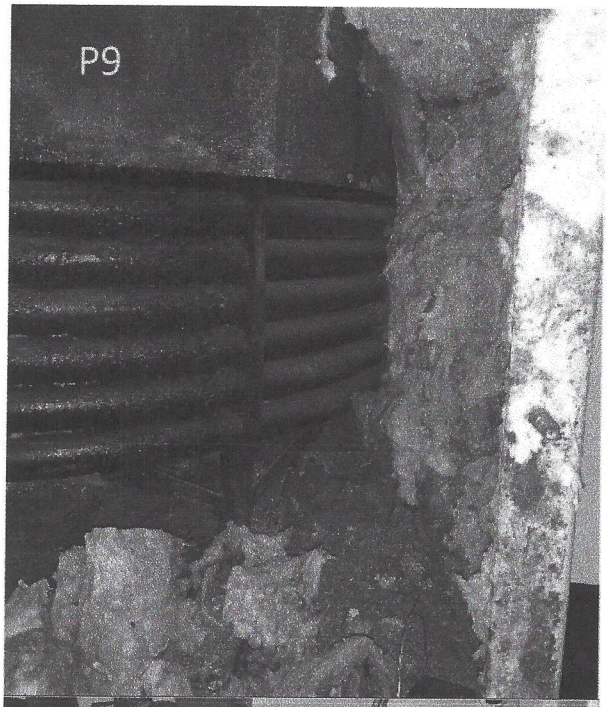
CTHX Safety Component Check

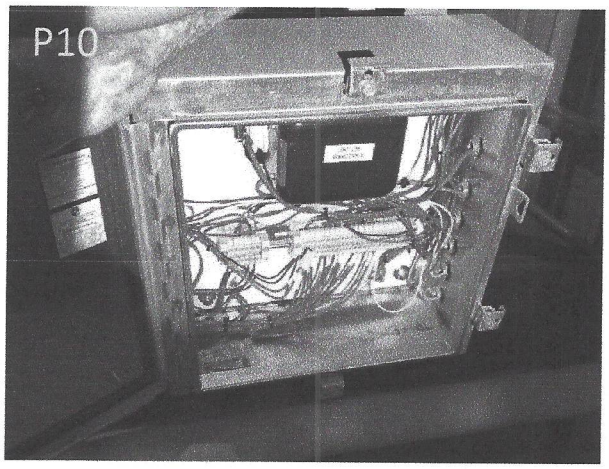
The following components were present, looked good visually and all in place per design.

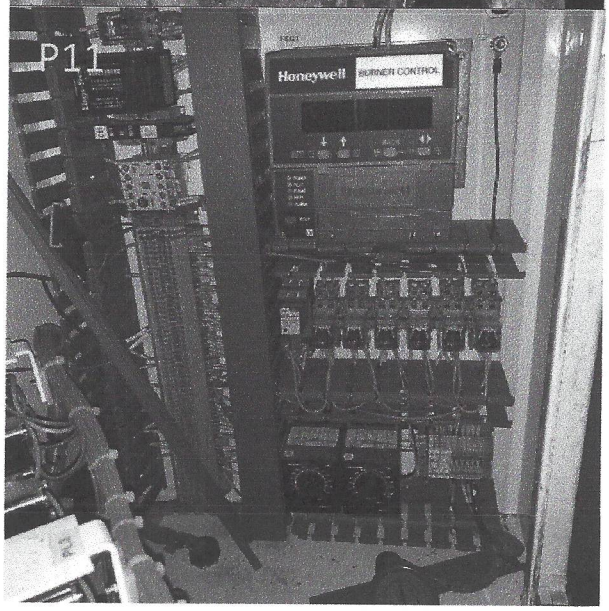
1. Low gas pressure switch
2. High gas pressure switch
3. Combustion air pressure switch
4. Purge air pressure switch

The photos of the CTHX









CTHX–2.5 Heat Exchanger – Recommendations for Repair

The following items are recommended actions for repairs based on our visual inspection.

1. Remove the coil assembly from the heat exchanger.
2. Steam/chemical clean the coil.
3. Cap and pressure test the coil using compressed air at a low pressure of not more than 30 psi. This pressure should hold for at least 3 hrs.
4. If the coil leaks do not attempt to repair! A new coil must be purchased.
5. Remove all old insulation from the casing.
6. Inspect all anchor pins welded onto the casing replace as needed.
7. Reinsulate the casing, door and top pressure relief cover using H&C provided guidelines and materials.
8. Reinstall the old coil or install a new coil (depending on the result of the pressure test).
9. Reinstall the door and top pressure relief cover. Do not bolt the cover directly to the top of the casing, but install it using the existing chains, making sure the cover can lift several inches if needed as designed.
10. Finished.

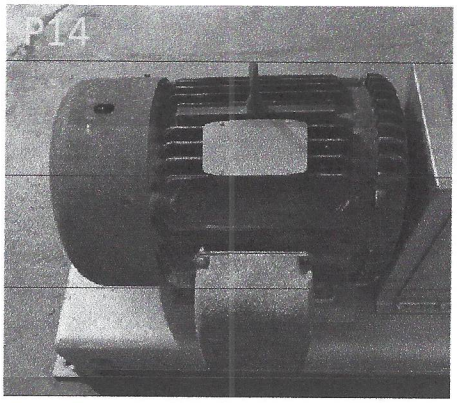
CBF-36 Continuous Belt Filter

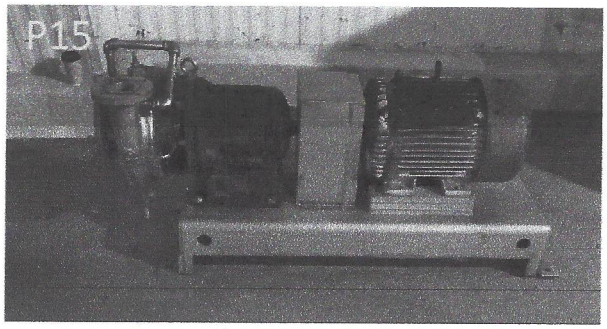
CBF-36 Continuous Belt Filter, motor drives and suction pump were all present on the machine. The CBF was in good condition and very clean. The screen, motor drive, suction pump and all float switches were present on the CBF assembly. The transfer and supply pumps could not be found.

Reference photos P12 and P13 below:

Main Oil Pump

The pump was a bit rusty but in good condition. The pump could be turned by hand, and the coupling, base and motor were all intact.





Miscellaneous piping

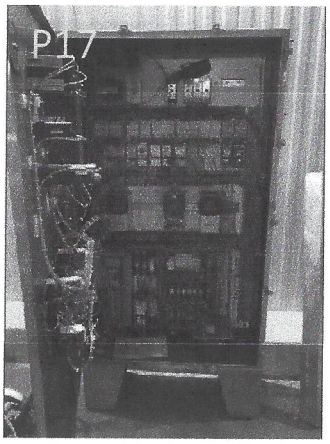
Associated machinery piping was found loose and will need to be pre-assembled to see what may be missing and needed per the P&ID print.

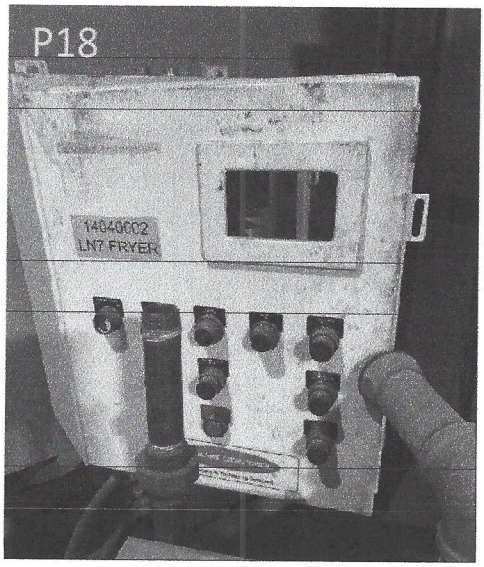
LCA Level Control Switch

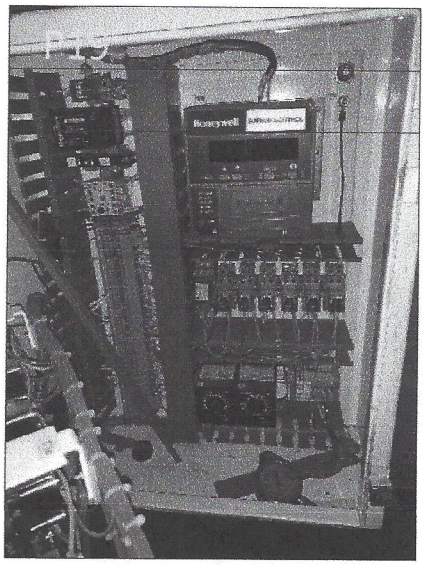
LCA level control switch was intact and located on the side of the fryer (as built) along with the sensing and level adjustment tube. No associated level control supply valves were found.

Electrical Control Panels

Both the fryer and the CTHX control panel look to be in good shape with minimal corrosion. Both panels are relay logic and do not have the current electrical safeties that are present in our newer systems. New sets of electrical prints were left with the customer for filed wiring as needed.







Principles of Design

During our visit we went over the type of equipment they had purchased and the practical uses of the machinery, specifically the heat wave fryer and the heat exchanger. We gave some history on the use of the machinery for various products.

Parts needed

Below is a list of parts that were identified as necessary for commissioning of the reviewed equipment.

1. CTHX insulation
2. Flex hose for CIP
3. Flex hose of oil weirs
4. Dual Type K – TC (thermocouple)
5. Single Type K – TC (thermocouple)
6. ME pads for fryer
7. Chart recorder paper
8. Chart recorder pens
9. DPF fines screen (for fines conveyor)
10. Oil flow pressure switch
11. Oil flow switch
12. Valve tags (stainless steel)
13. Main pump pressure gauge (0-100 psi)
14. Gerand metering orifice VS-500 1 ¼"NPT
15. CBF paper roll
16. Transfer pump

Our Spare part dept. can help get the H&C part numbers for the generic items above.