



***Baron***·***Blakeslee***

*A Wholly-Owned Subsidiary of Service Filtration Corporation*

***Z Series Industrial Vapor Degreasers***



# Baron Blakeslee Z Series



## **Baron Blakeslee Model ZV-10.53SH-EW Solvent Degreaser**

Vapor / Spray, Superheated, Electrically Heated, Water Cooled

Working Dimensions: 10'L x 3'W x 5'H

*Also Pictured, SC-30-EW Solvent Distillation System*

*Some Optional Features Shown*

# **Z Series Industrial Vapor Degreasers**

**Designed For Industrial Cleaning Requirements**

**Very Robust Construction**

**The Basis Of Baron Blakeslee Custom Degreasers**

**Z Series Begins With 48" L X 24" W X 24" D Size**

**Thermal Capacities From 2000 lbs steel per hour**

**Vapor / Spray, Liquid Immersion & Ultrasonic Configurations**

**Many Primary Cooling Options**

**Chilled Water Separator**

**Stainless Steel Finned Condensing Coils**

**Vapor Trap Sub-Zero Freeboard Refrigeration**

**Motorized Cover**

**Manual Spray Wand**

**NESHAP Compliant**

**UL Certification**



# Z Series Technical Specifications

| MODEL NUMBER | DIMENSIONS IN INCHES         |    |    |         |    |     | HEAT INPUT              |               | WORK-LOAD         | SOLVENT CAPACITY (GALLONS) |       | WORK - IDLE DISTILLATION RATE (GPH)<br><small>(Based On nPB)</small> | CRATED WEIGHT (LBS) |
|--------------|------------------------------|----|----|---------|----|-----|-------------------------|---------------|-------------------|----------------------------|-------|--|---------------------|
|              | INSIDE TANK (Work Clearance) |    |    | OVERALL |    |     | STEAM (LBS/HR @ 15 PSI) | ELECTRIC (KW) | LBS. OF STEEL /HR | Boil                       | Spray |  |                     |
|              | L                            | W  | H  | L       | W  | H   |                         |               |                   |                            |       |  |                     |
| ZV-422-EW    | 48                           | 24 | 24 | 81      | 40 | 66  | 54                      | 15            | 2000              | 43                         | 5     | 26-44  | 1200                |
| ZL-422-EW    | 48                           | 24 | 24 | 81      | 40 | 92  | 87                      | 24            | 2000              | 165                        | 5     | 52-70  |                     |
| ZV-533-EW    | 60                           | 36 | 36 | 99      | 52 | 90  | 87                      | 24            | 2500              | 80                         | 6     | 48-70  | 1800                |
| ZL-533-EW    | 60                           | 36 | 36 | 99      | 52 | 128 | 163                     | 45            | 2500              | 420                        | 15    | 108-130  |                     |
| ZV-633-EW    | 72                           | 36 | 36 | 111     | 52 | 90  | 91                      | 25            | 3000              | 96                         | 15    | 44-70  | 2300                |
| ZL-633-EW    | 72                           | 36 | 36 | 111     | 52 | 128 | 180                     | 50            | 3000              | 504                        | 15    | 119-145  |                     |
| ZV-733-EW    | 84                           | 36 | 36 | 123     | 52 | 90  | 91                      | 25            | 3000              | 112                        | 15    | 47-72  | 3050                |
| ZL-733-EW    | 84                           | 36 | 36 | 123     | 52 | 128 | 196                     | 54            | 3000              | 590                        | 20    | 130-157  |                     |
| ZV-844-EW    | 96                           | 48 | 48 | 146     | 64 | 114 | 136                     | 37.5          | 4000              | 170                        | 20    | 74-109   | 3850                |
| ZL-844-EW    | 96                           | 48 | 48 | 146     | 64 | 164 | 271                     | 75            | 4000              | 1112                       | 20    | 182-217  |                     |



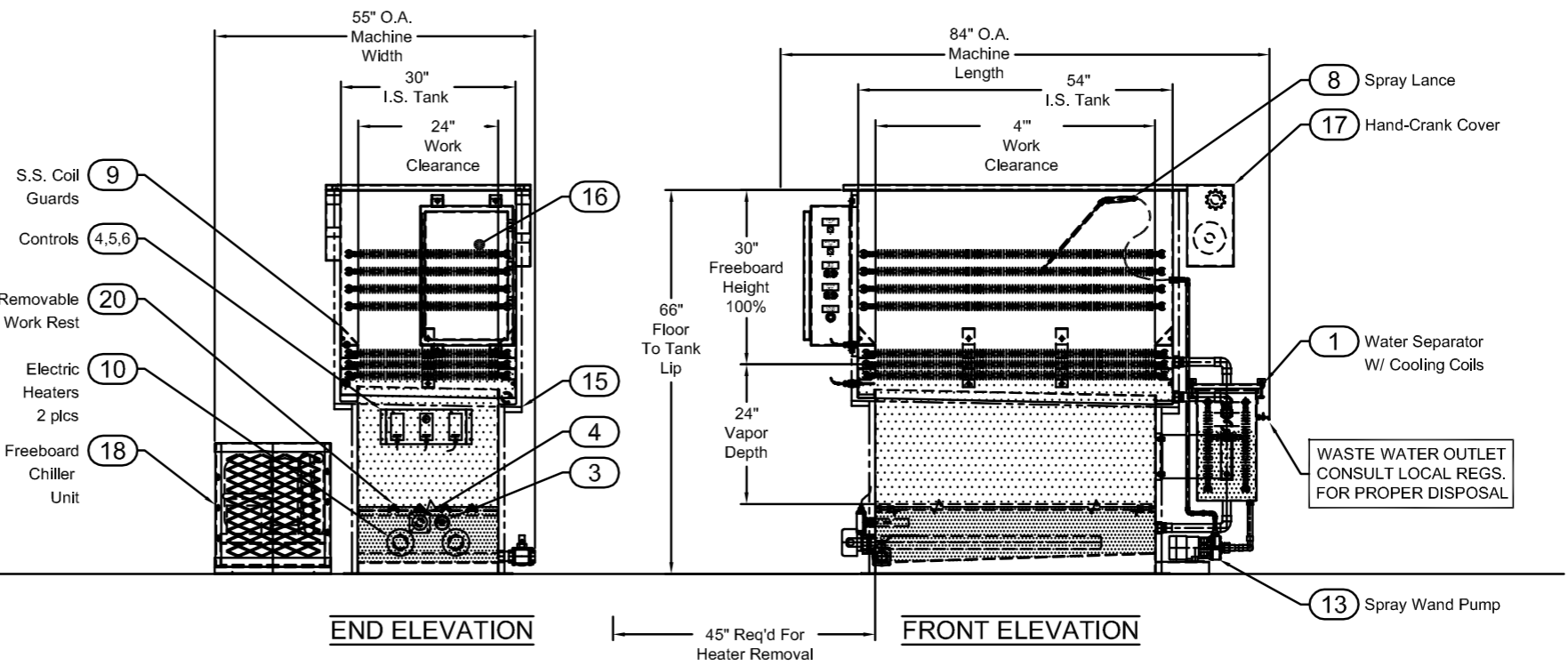
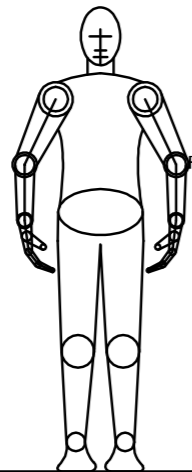
# Z Series Layout

8 7 6 5 4 3 2 1

| DESIGN SPECIFICATIONS |                                      |        |              |
|-----------------------|--------------------------------------|--------|--------------|
| WORK CLEARANCE:       | 48" x 24" x 24"                      |        |              |
| SOLVENT:              | NPB                                  |        |              |
| BOIL SUMP CAPACITY:   | 42 GALLONS                           |        |              |
| TOTAL US GALLONS:     | 50 GALLONS                           |        |              |
| ELECTRICAL SERVICE:   | 240/480V-3PH-60Hz                    |        |              |
| ELECTRICAL FLA:       | 20 FLA @ 480 V / 40 FLA @ 240 V      |        |              |
| PRODUCTION:           | STEEL: 1500 LBS PER HOUR             |        |              |
| BOIL IMMERSION HEAT:  | 18 KW                                |        |              |
| OPTIONAL STEAM HEAT:  | 53 LBS / HR @ 15 PSI (Based On TRI.) |        |              |
| PUMP (SPRAY / WAND):  | 1/15 HP                              |        |              |
| SOLVENT PIPING:       | COPPER                               |        |              |
| WATER PIPING:         | COPPER                               |        |              |
| CONDENSER COILS:      | STAINLESS STEEL                      |        |              |
| COOLING WATER:        | 10° RISE                             | 15 GPM | @ 45°F INLET |
|                       | 25° RISE                             | 6 GPM  | @ 85°F INLET |
|                       | 50° RISE                             | 3 GPM  | @ 60°F INLET |
| DRY WEIGHT:           | @ 750 LBS (Approx.)                  |        |              |

**Model: ZV-422-EW**  
 LOAD SIZE: 48" x 24" x 24"  
 VAPOR SPRAY CLEANING  
 MANUAL SPRAY FLUSHING

- STANDARD FEATURES**
1. Stainless Steel Water Separator
  2. Conveniently located controls
  3. Boil chamber thermometer
  4. Low liquid High Temp. control
  5. Vapor Level control
  6. Vapor-Up control
  7. Water Flow switch (Not Shown)
  8. Light weight spray lance
  9. S.S. coil guards
  10. LowWatt density heaters
  11. Unobstructed work envelope
  12. 304 S.S tank
  13. Mag driven spray lance pump
  14. 100% freeboard
  15. Insulated Tank
  16. Nema 12 Enclosure
  17. Hand-Crank Cover
  18. Freeboard Chiller System  
 Water Cooled: ( 75°F max.) INLET  
 Air Cooled: (110°F max.) AMBIENT
- OPTIONAL EQUIPMENT**
- O1. Powered cover
  - O2. Stainless Steel filtration loop
  - O3. Operator Platform
  - O4. Steam Heating
  - O5. Disconnect Switch
  - O6. Stainless Steel drip pan
  - O7. Automated Hoist / Transporter
  - O8. PLC Control
  - O9. UL Listed Electrical Panel



- MAINTENANCE FEATURES**
- Plug type Immersion Heaters
  - 1 1/2" Sump drain valve
  - Sloped bottom
  - Removable work rests

ADDITIONAL OPTIONS MAY CHANGE MACHINE FOOTPRINT.

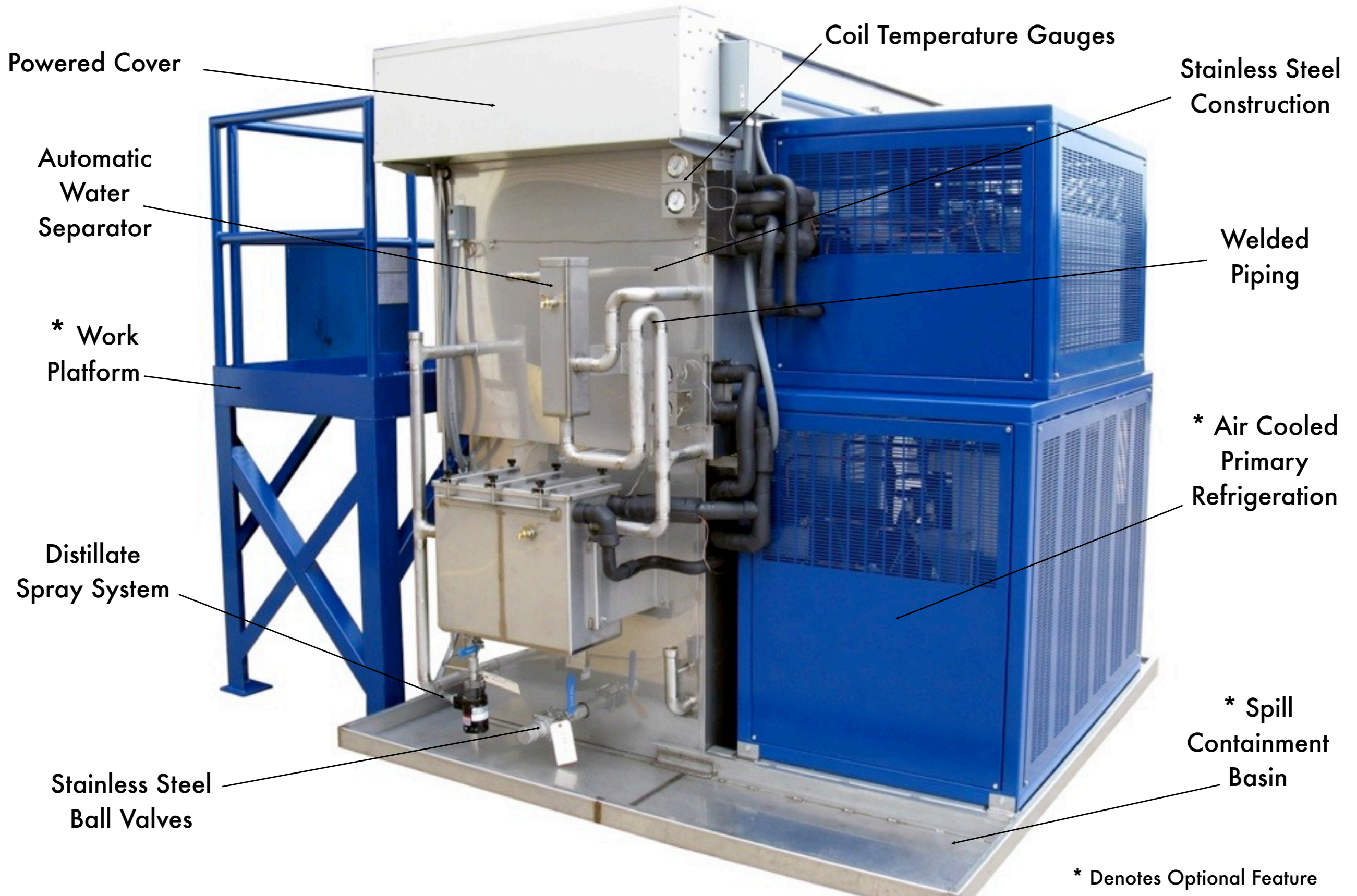
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|---|--|---------|--|--|--|
| DRAWN BY<br>Travis Smith                              |  | 1-31-06 |  | <b>Baron - Blakeslee</b>                         |  |
| CHECKED BY  |  |         |  | TITLE<br>Zone Vapor Electric Heated Water Cooled |  |
| ENG   |  |         |  | PROJECT  |  |
| MFG   |  |         |  | MATERIAL   |  |
| NOTES   |  |         |  | SIZE D SCALE 1" = 1' DWG NO ZV-422-EW REV 2      |  |
| LOCATION Z:\H\PDRAW\Z-Line Degreasers\ZV-(Zone Vapor) |  |         |  | Sheet 1 of 1                                     |  |

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# Baron Blakeslee Z Series



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Electric Immersion Heaters (Steam Available)

Optional Operator Platform

# *Baron Blakeslee Z Series*

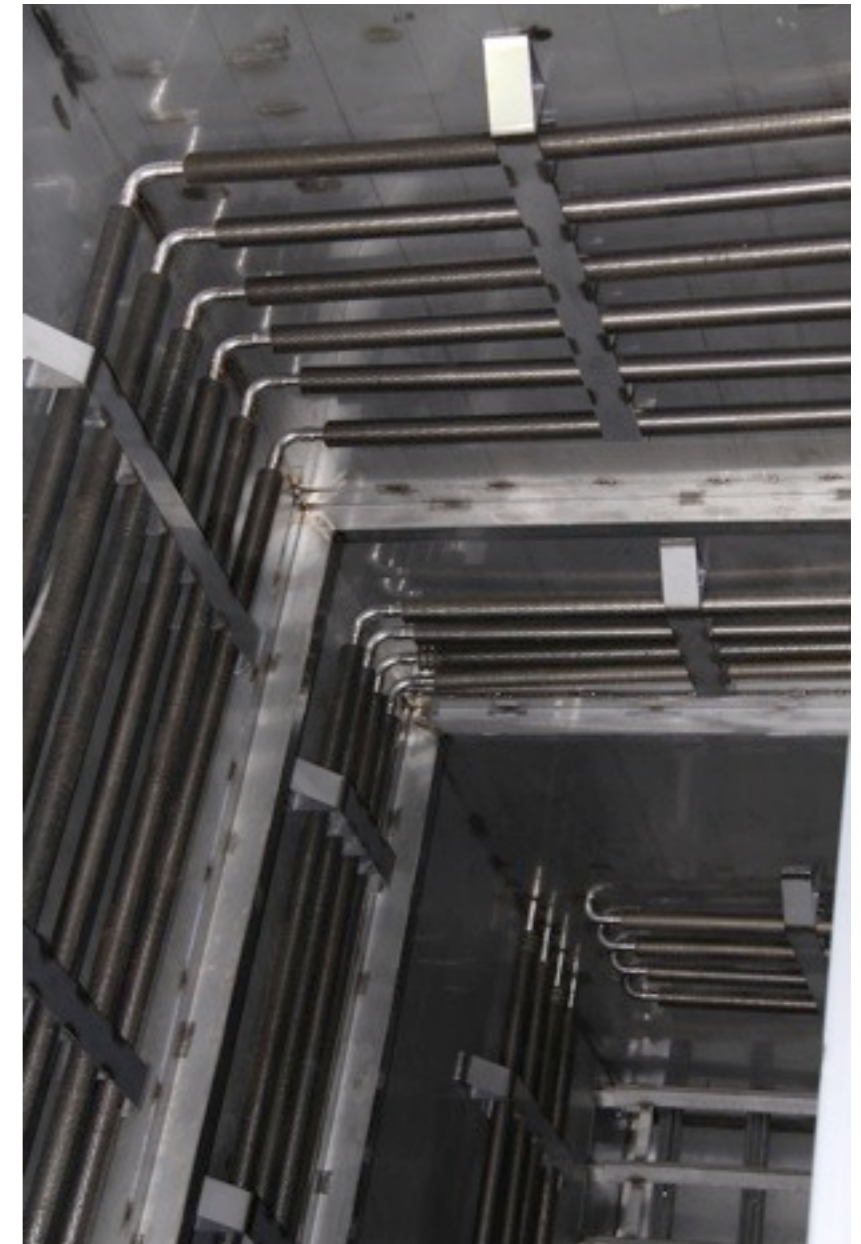




# *Baron Blakeslee Z Series*

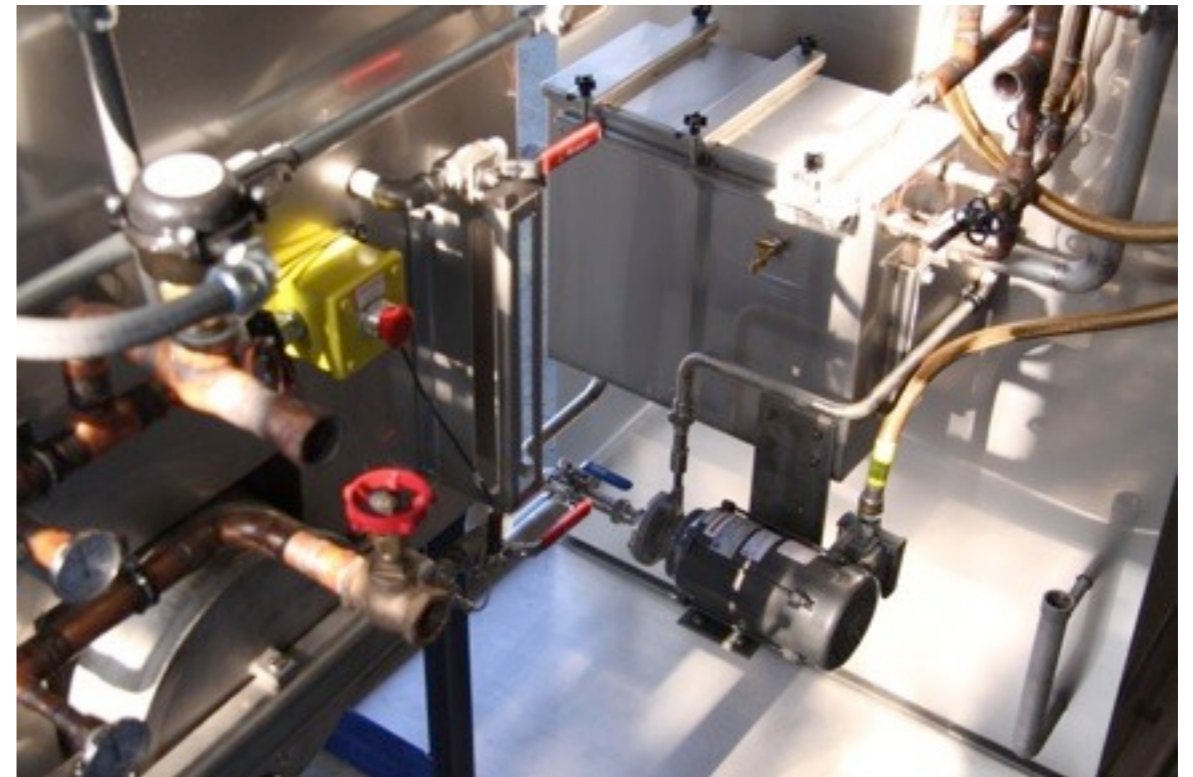


# Baron Blakeslee Z Series Details



Selected Images Intended To Illustrate The Aesthetics, Robust Construction & Intelligent Design Of Baron Blakeslee

# Baron Blakeslee Z Series Details



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# *Z Series Options*

Refrigerant-Cooled Primary Condensing  
Steam Heat

Superheated Vapor

Many Material Handling Options Available

Marine Style Clean Out Port

Stainless Steel Spill Containment Pan

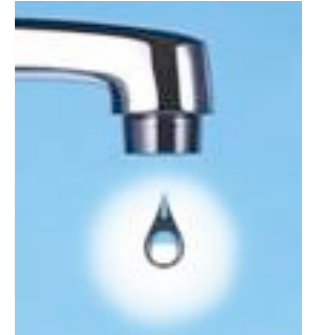
Energy Saving "Hot Shot" Heating System

Service Contracts

Spare Parts Packages



# Z Series Primary Condensing Options #1



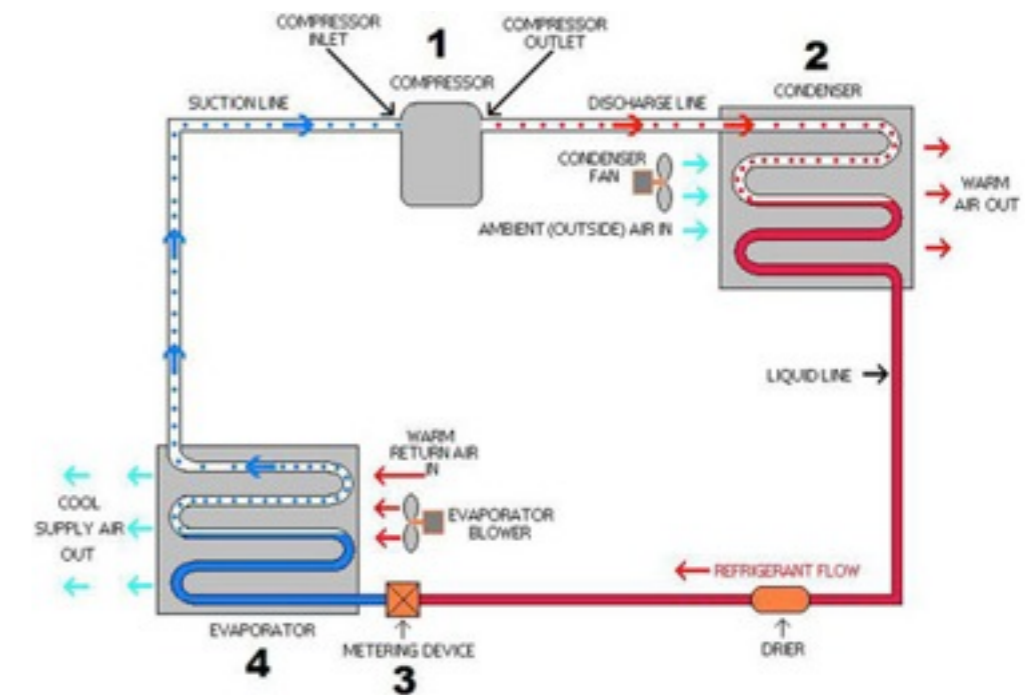
## ➤ Water Cooled Primary Condensing Is Standard

- *Requires A Constant Flow Of Water; Typically From City Source*
- *Thermally Efficient, But Generates A Lot Of Waste Water*
- *Water Effluent Is Hot & May Be Used In Tank Lines, etc, But Contains No Chemical Waste*
- *In The Event Water Is Available, The Sub Zero Freeboard Refrigeration System May Be Equipped With A Water Cooled Condenser*

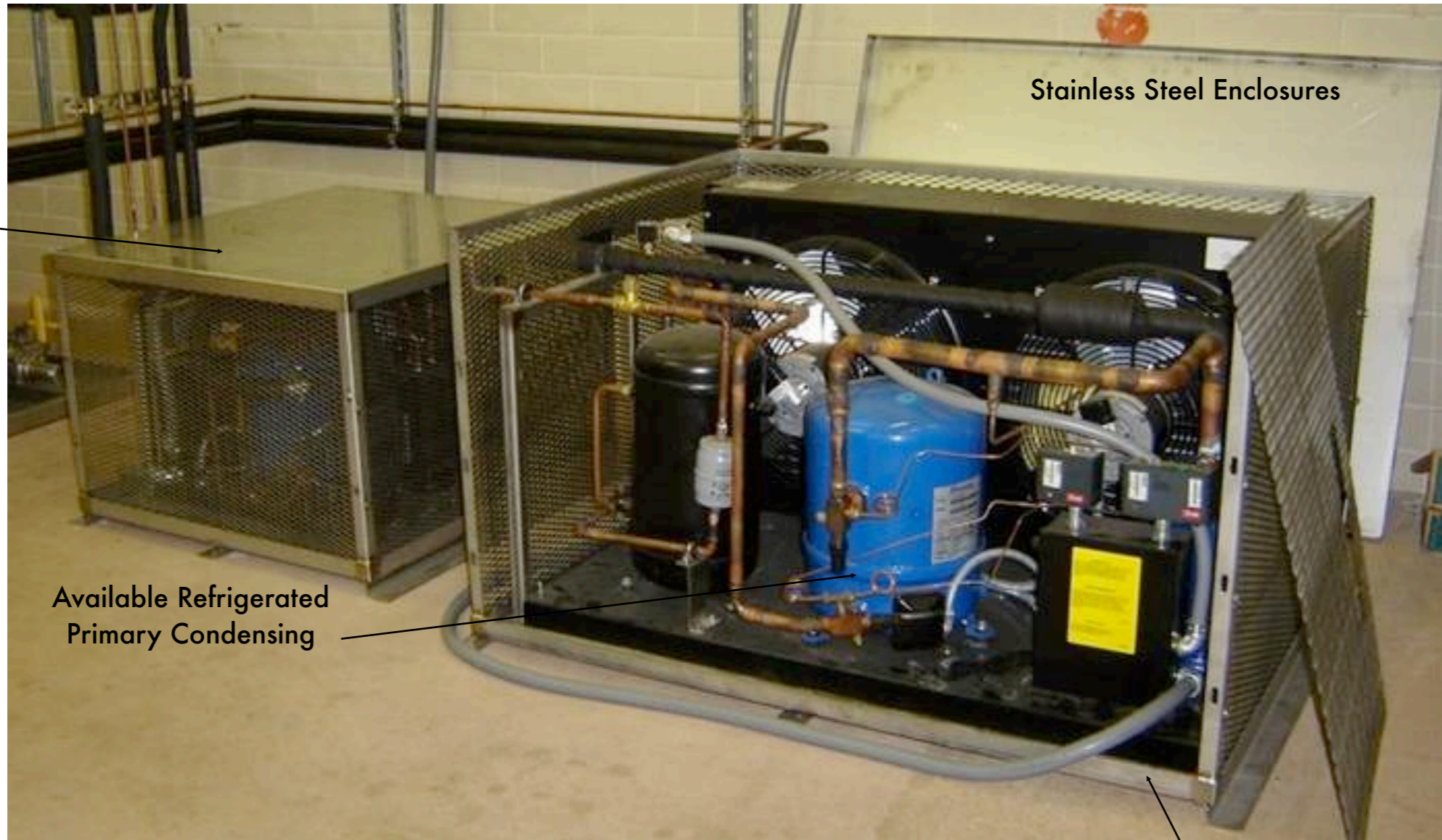
# Z Series Primary Condensing Options #2

## ➤ Direct Expansion Refrigeration

- *May Be Air Or Water Cooled*
- *Thermally Efficient, But Generates Heat & Noise*
- *Highest Capital Cost Method Of Primary Condensing*
- *Not Suited To Environments That Are Oily, Dusty Or Constantly Above 100°F*
- *If Air Cooled, Maintenance Is Required To Keep Condenser Surfaces Clean For Proper Heat Transfer*
- *Air Cooled Condensers May Be Mounted On Exterior Of Building*



# Baron Blakeslee Z Series Refrigeration Systems



Stainless Steel Enclosures

Standard Sub Zero Freeboard Chiller

Available Refrigerated Primary Condensing

Many Location Options

Environmentally Friendly Refrigerants:

R-134a: Primary

R-404a: Freeboard

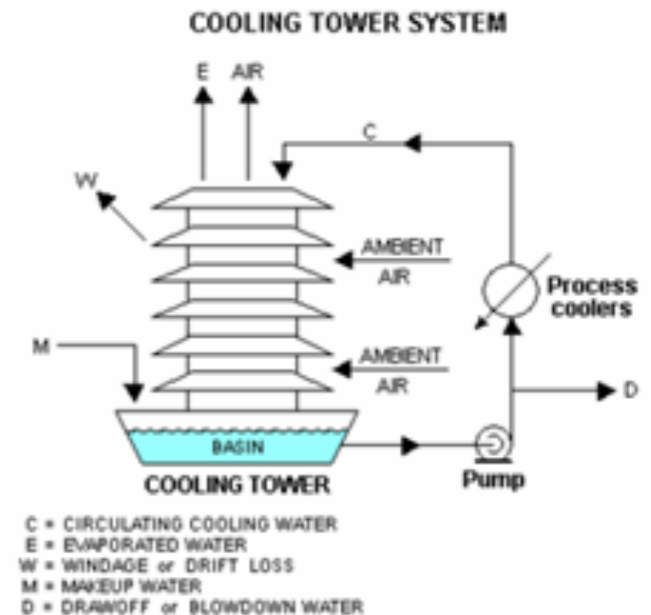
Air Or Water Cooled Condensers Available

Skid Mounted Remote Refrigeration Modules (Stackable)

# Z Series Primary Condensing Options #3

## ➤ Evaporative Cooling Tower

- Lower Capital Cost Method Of Primary Condensing
- May Be Located On Exterior Of Building
- Provides Chilled Water Source For Both Primary Condensing & Sub Zero Freeboard Refrigeration System Condenser
- Easy To Maintain: Requires Water Conditioning, Periodic Blowdown & Storage Tank Heating In Winter (if storage tank is located outside building)

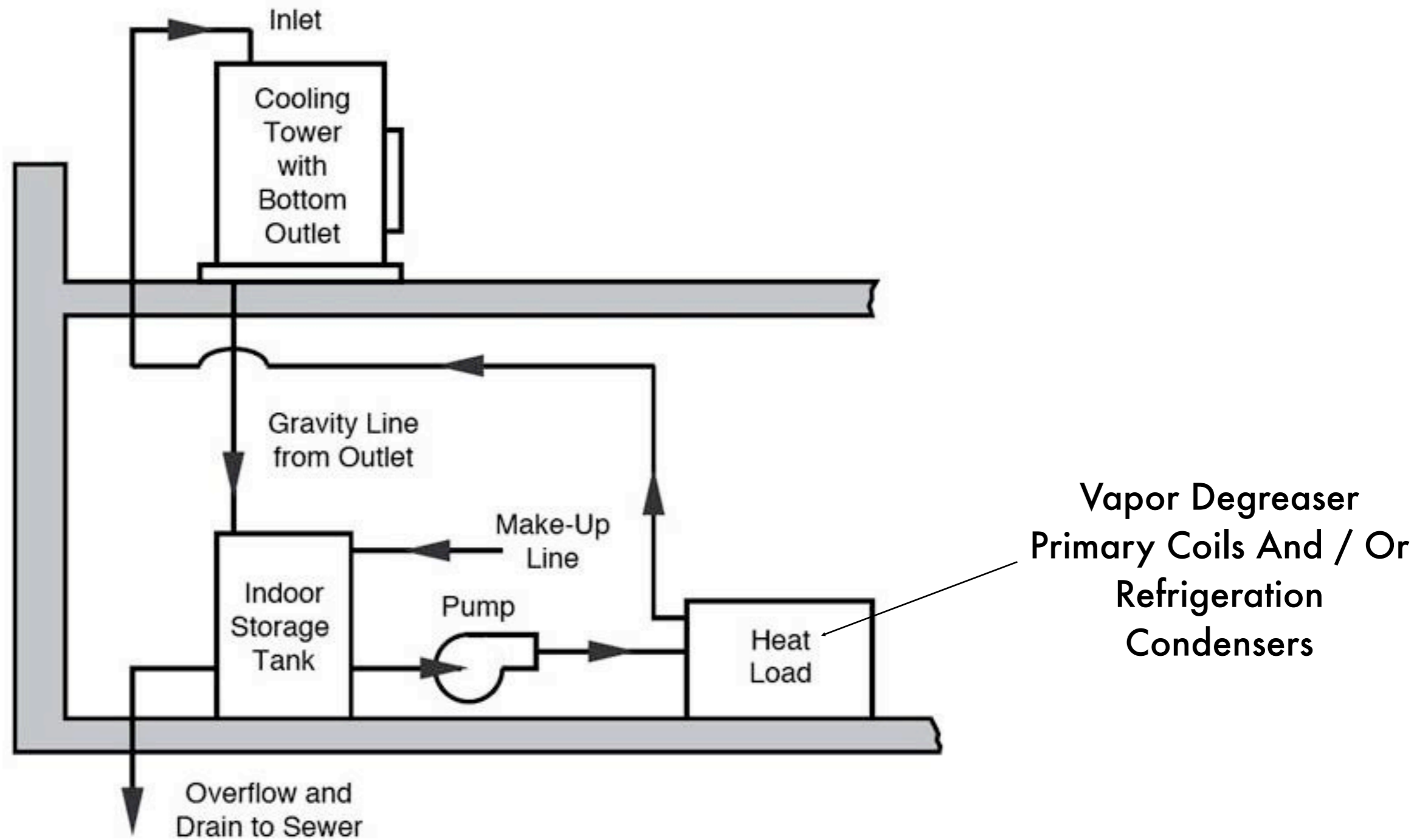




# *Typical Cooling Tower*



# Cooling Tower Schematic



# Baron Blakeslee Z Series Tank Design



Interior Weld  
Passivation

Manual  
Spray  
Wand

Heaters  
Mounted On  
Flanged  
Cleanout Port  
For Easy  
Maintenance

Double Welded  
Liquid Tanks

Finned Stainless Steel Condensing  
Coils

Bustled Coil Design Minimizes Solvent  
Volume & Places Coils Outside Of  
Workspace

Stainless Steel Coil Guards

# Baron Blakeslee Z Coil Layout

Sub Zero  
Freeboard  
Chiller  
(automatic  
hot-gas  
bypass dual  
defrost  
system)

Stainless Steel  
Finned Coils



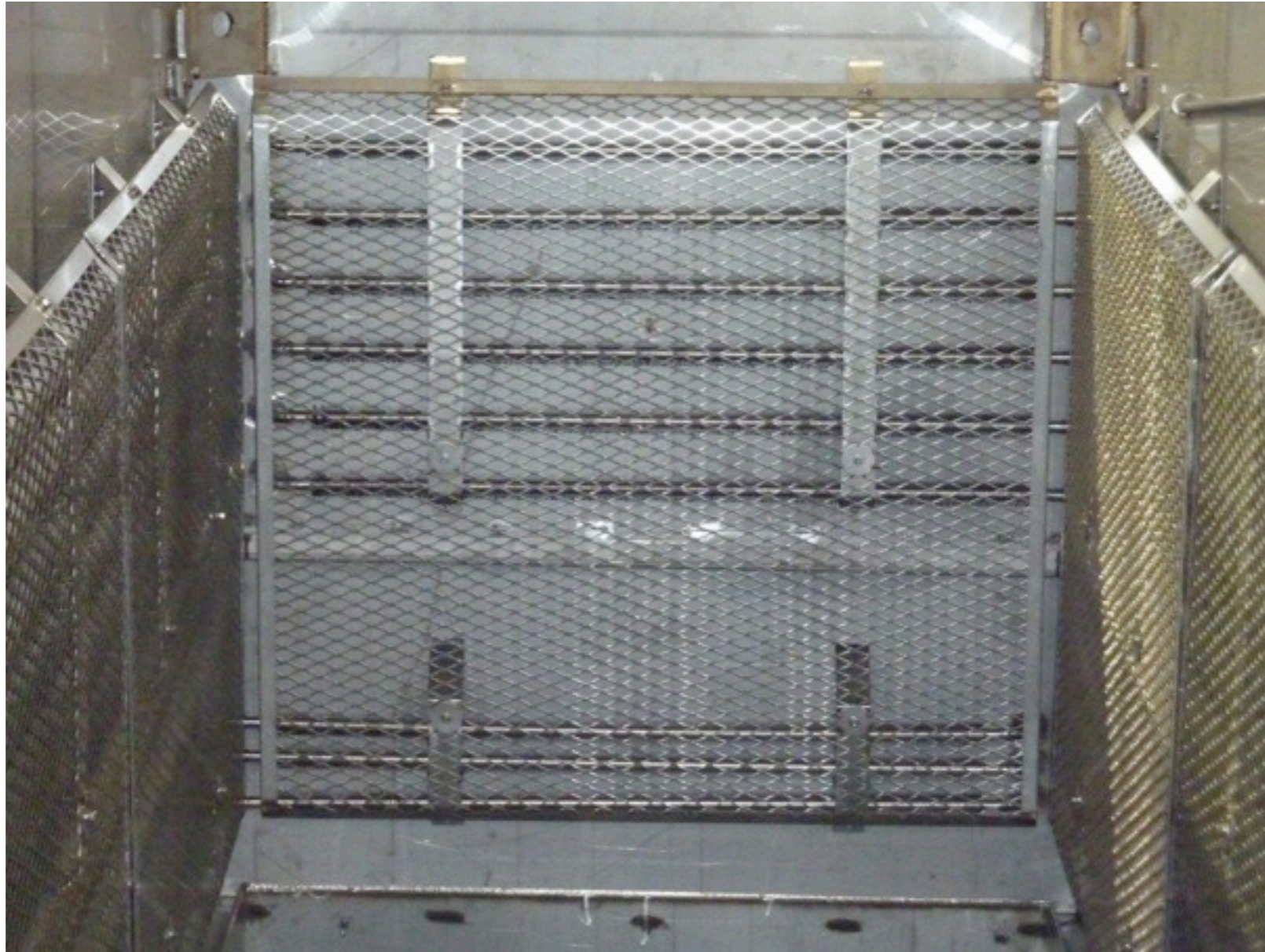
Coil  
Guards

Optional  
Superheat

Optional  
Steam Heat

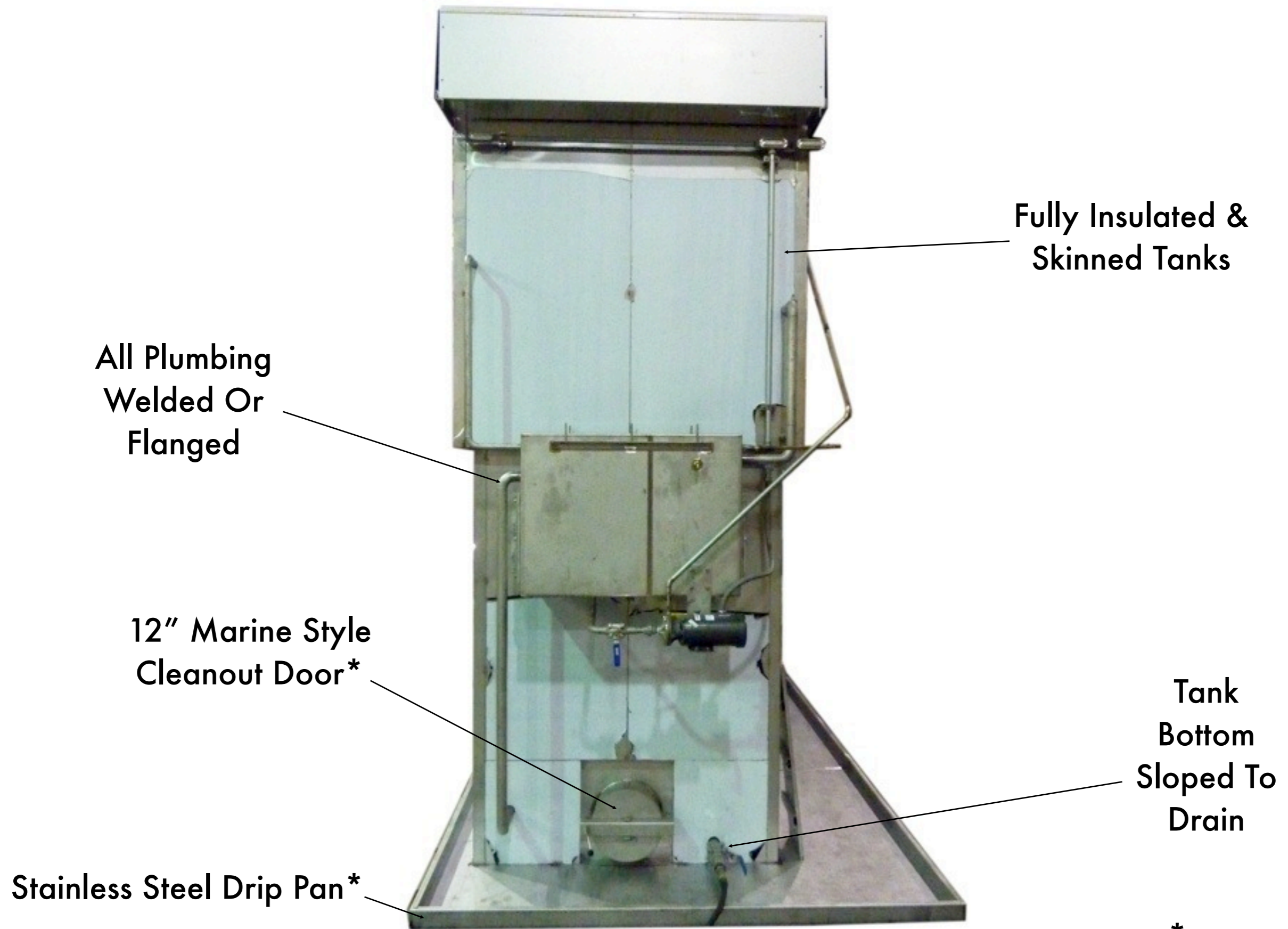
Work Rest  
Grate  
Supports

# *Dual Defrost Freeboard Refrigeration*



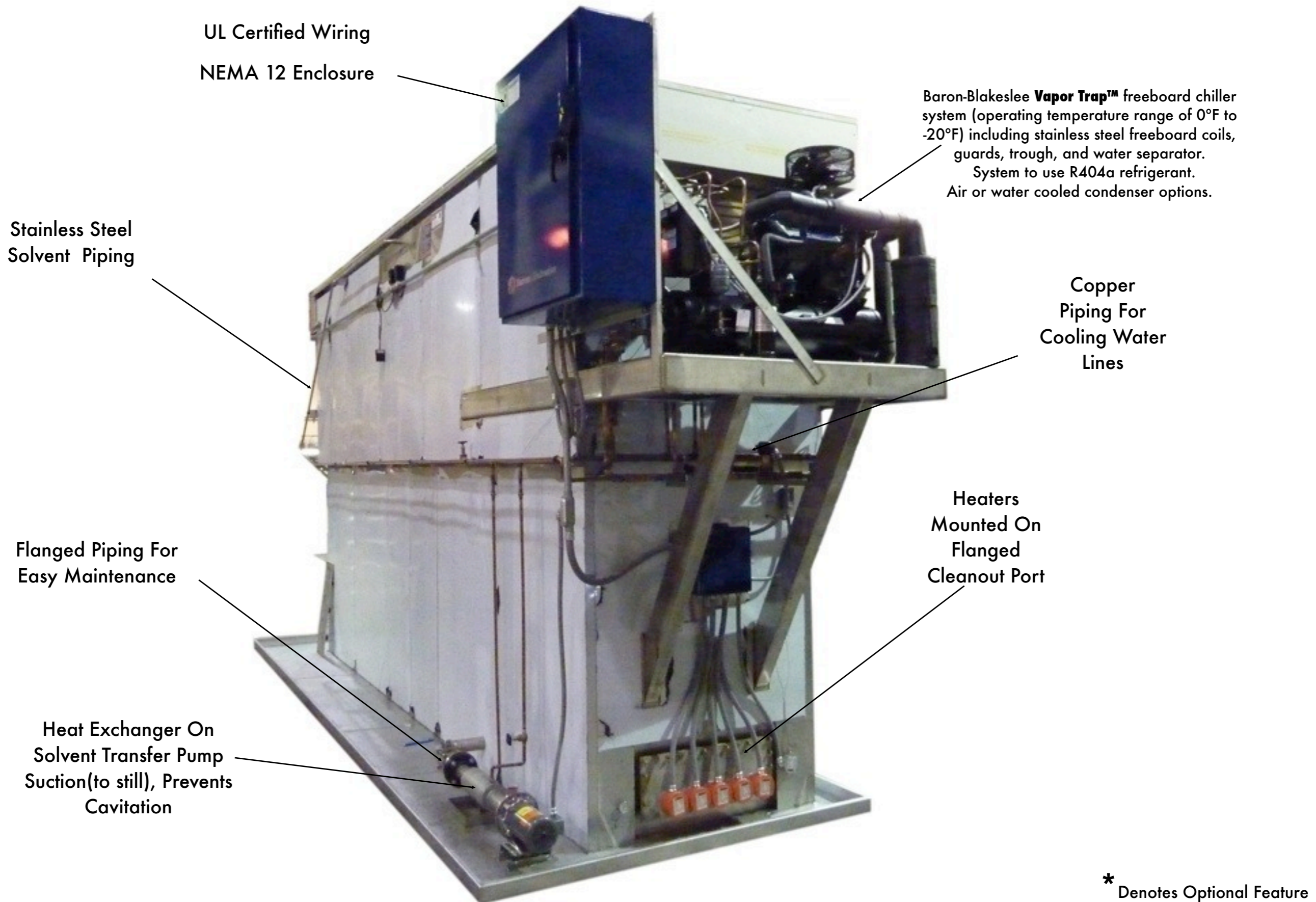
Freeboard Refrigeration System Features Dual Defrost:  
One Set Of Coils Cools While The Other Defrosts

# Other Z Series Features



\* Denotes Optional Feature

# Other Z Series Features



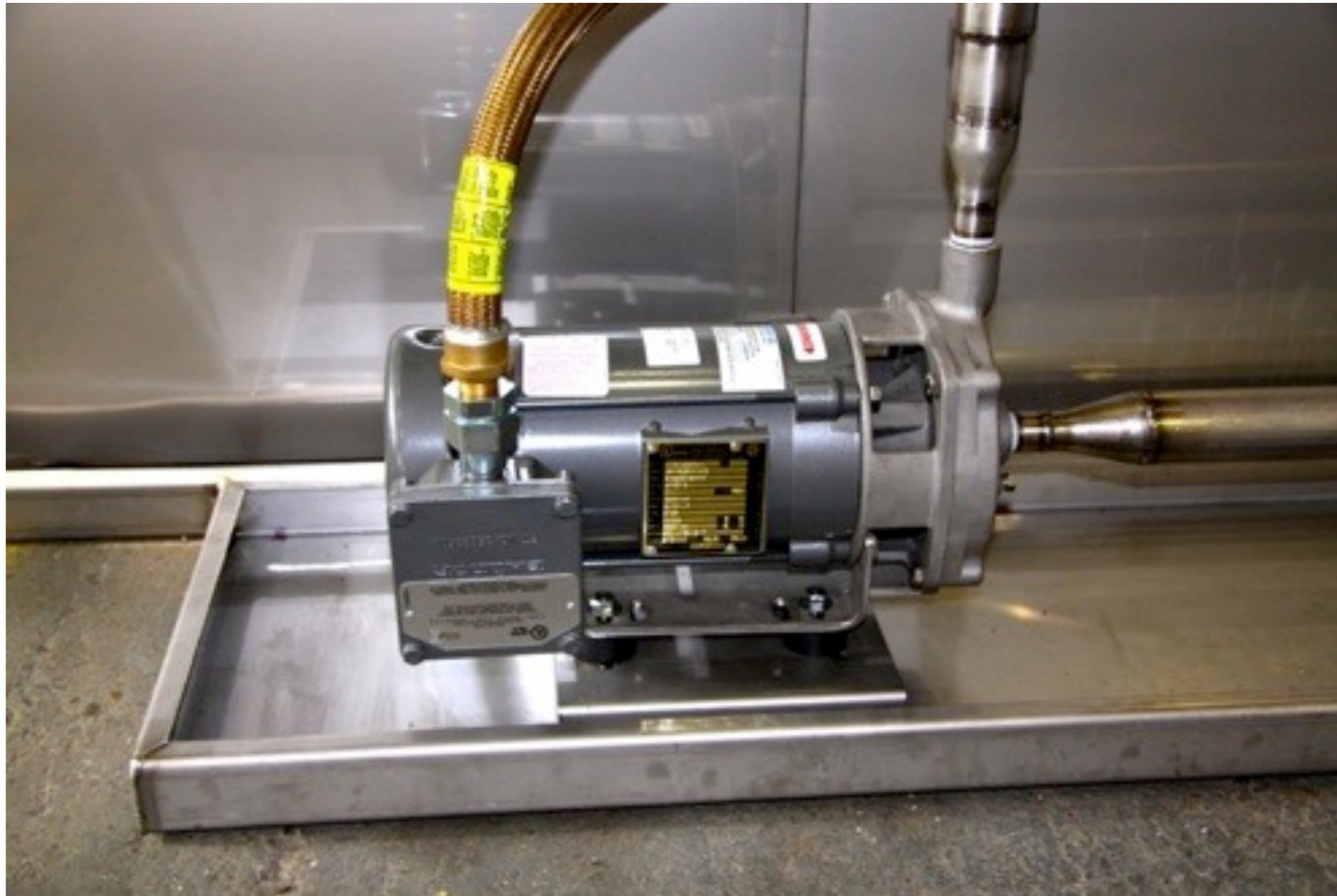
# *Hot Shot Heating System*



*Conserves Energy & Minimizes Solvent Emissions By Controlling Vapor Generation To Match Dynamic Thermal Load*



# *Stainless Steel Drip Pan*



*304 Stainless Steel Construction  
Liquid Present Alarm Available  
125% Volume Containment Available*

# Z Series Touchscreen Control

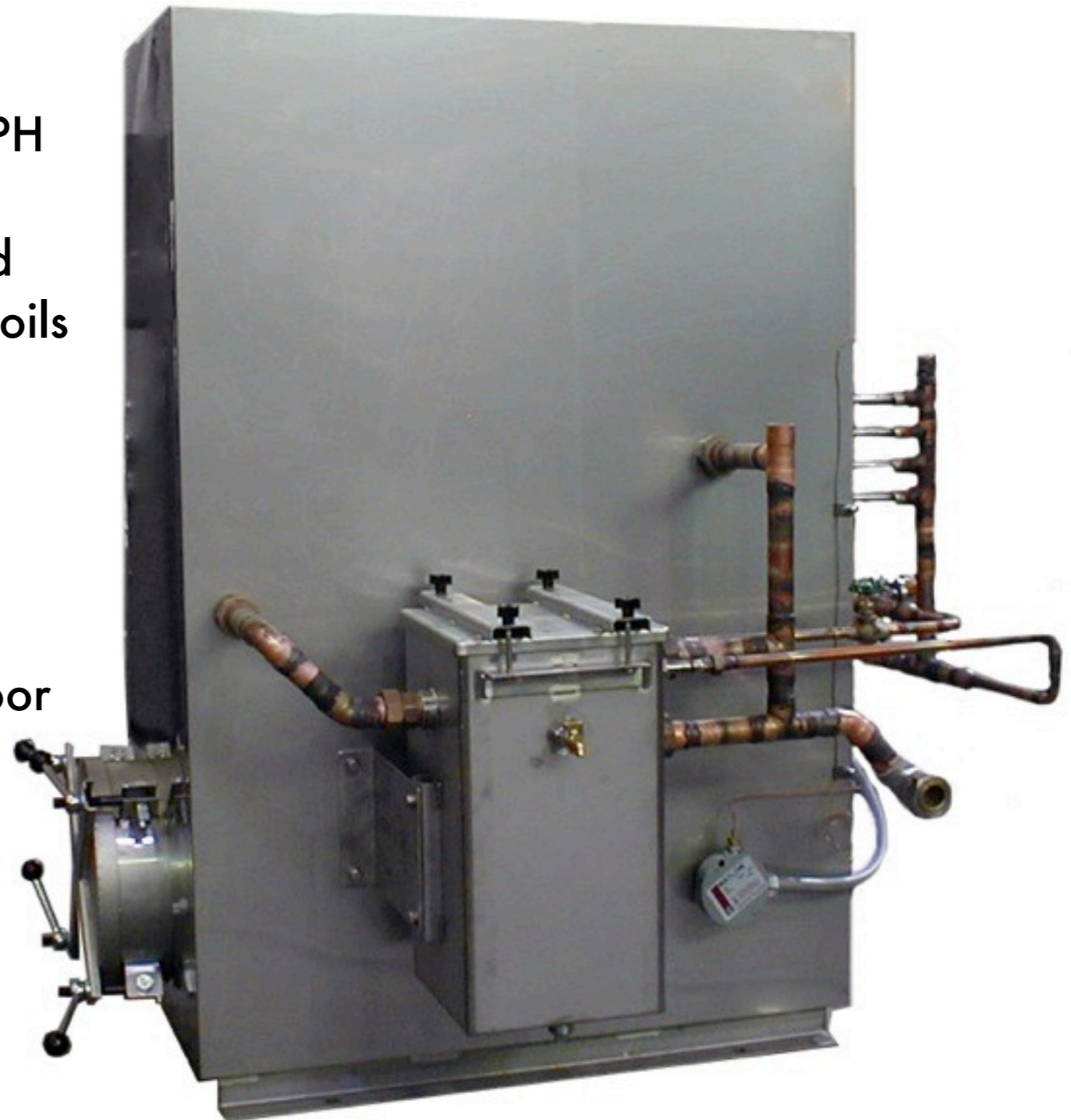


# Z Series Electrical Panel



# ***Baron Blakeslee SC Series Stills***

Capacities From 30 GPH - 1000 GPH  
Custom Capacities Available  
Electrically Heated, Water Cooled  
Stainless Steel Finned Condensing Coils  
Chilled Water Separator  
UL Certification  
Optional Steam Heat  
Optional Cooling Tower  
Optional Storage Tanks  
Optional Marine Style Cleanout Door



# *Marine Style Cleanout Door*

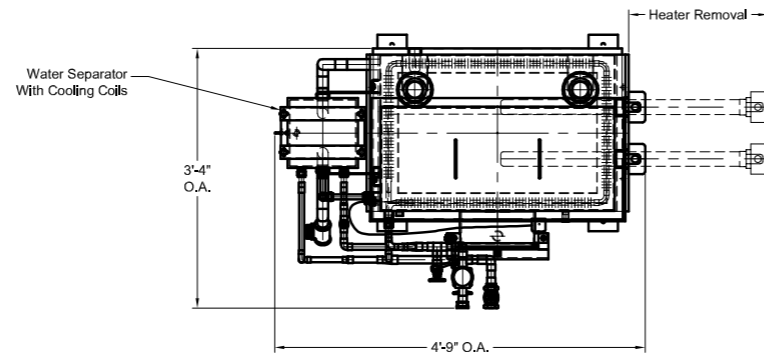


*Facilitates Maintenance  
Tool-Less Quick Access  
12" ID Circular Opening*

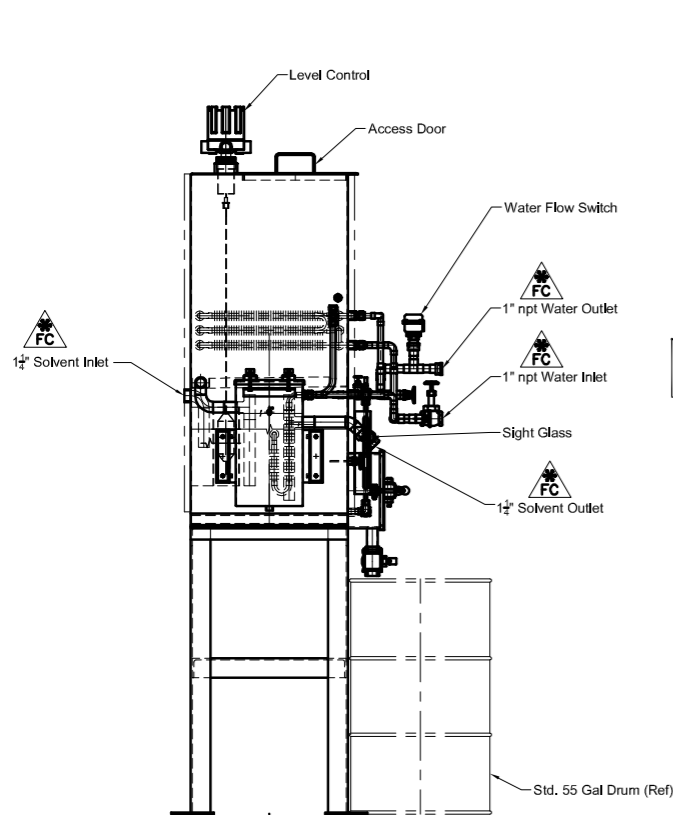
# SC Series Still Layout

## DESIGN SPECIFICATIONS

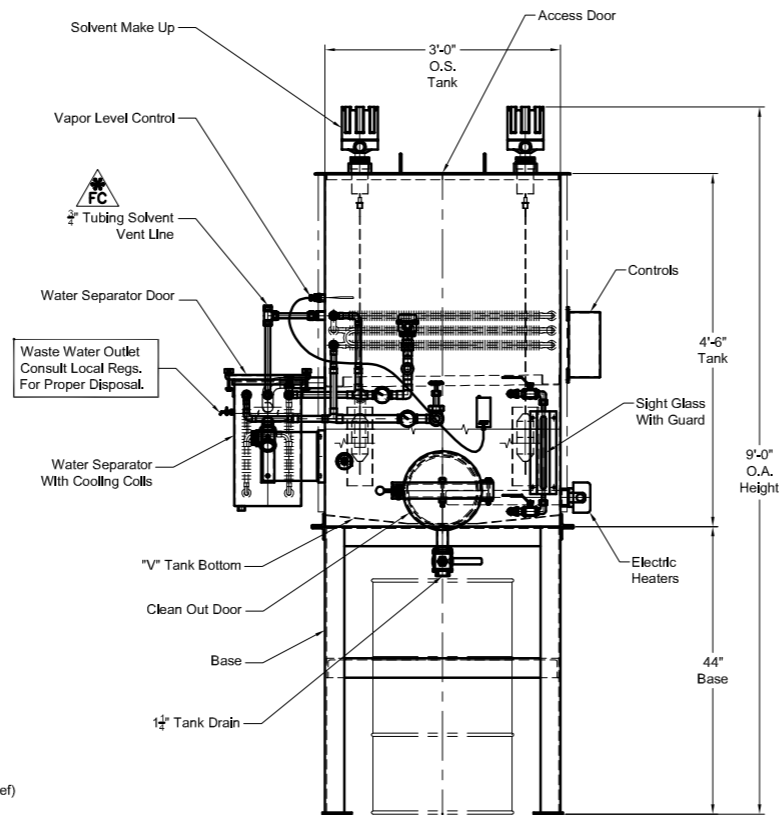
|                     |  |
|---------------------|--|
| SOLVENT CAPACITY:   | 65 GALLONS NORMAL OPERATING CAPACITY           |
| ELECTRICAL SERVICE: | 230/460V-3PH-60Hz CONTROL SERVICE NEMA 1 PANEL |
| WATER SEPARATOR:    | STAINLESS STEEL TYPE 304 WITH COOLING COILS    |
| DISTILLATION RATE:  | 30 GALLONS PER HOUR NOMINAL                    |
| DIRECT HEAT:        | ELECTRIC HEATED                                |
| COOLING WATER:      | STAINLESS STEEL TYPE 304 CONDENSER COILS       |
| CITY (50° RISE)     | 2 GPM (60" INLET, 110" OUTLET)                 |
| TOWER (25° RISE)    | 4 GPM (85" INLET, 110" OUTLET)                 |
| SOLVENT PIPING:     | STAINLESS STEEL                                |
| WATER PIPING:       | COPPER, BRONZE VALVES                          |
| STANDARD CONTROLS:  | WATER FLOW SWITCH                              |
|                     | VAPOR LEVEL CONTROL                            |
|                     | LOW LEVEL CONTROL                              |
| INSULATION:         | TANK 1"  |
| TANK SKIN:          | TYPE 304 STAINLESS STEEL                       |



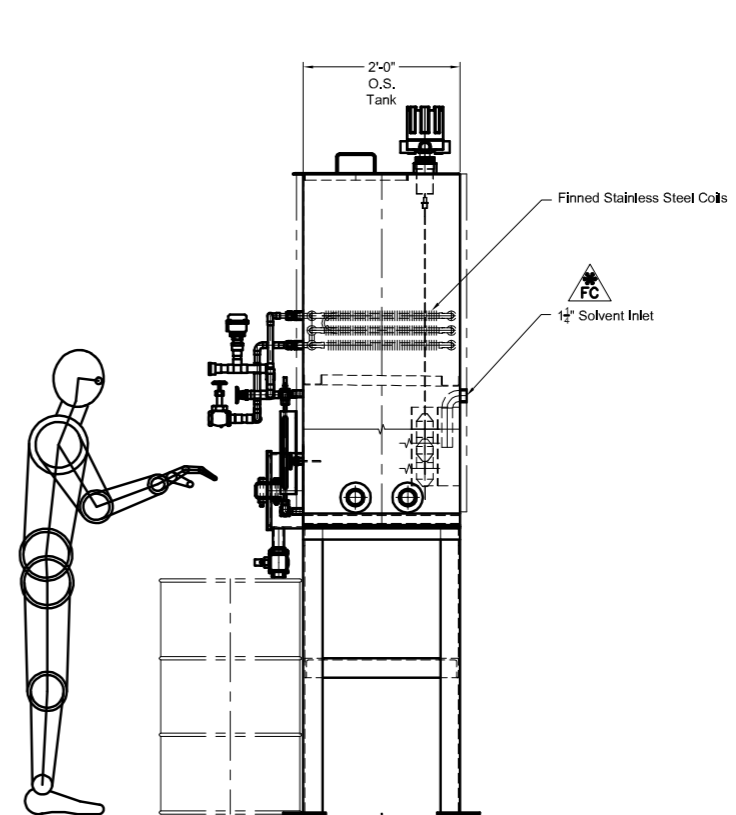
Plan View



Left End View



Side Elevation View



Right End View

|   |  |   |           |                             |                          |              |
|---|--|---|-----------|-----------------------------|--------------------------|--------------|
| DRAWN BY  |  | Eng                                     | 2-17-2009 |                             | <b>Baron - Blakeslee</b> |              |
| CHECKED BY  |  |   |           |                             | TITLE                    |              |
| ENG   |  |   |           | PROJECT                     |                          |              |
| MFG   |  |   |           | SC-30-EW                    |                          |              |
| NOTES   |  |   |           | Solvent Distillation System |                          |              |
| MATERIAL  |  |   |           | SIZE                        | SCALE                    | DWG NO       |
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| LOCATION  |  | Z:\H\DRAW\STILLS\SC STILLS\SC-30-EW-STD |           | REV                         | 0                        |              |

# Solvent Vapor Recovery Modules

## Carbon Adsorption Systems

Ideal For Large Degreasers

Generally Used With Chlorinated Solvents

Steam-Strippable For Closed Loop Process

Recirculating & Vent To Atmosphere Styles

Ideal For Applications With High Dragout Potential



# *Isolation Hood System*



*Bi-Parting Hood System Has Two Sets Of Doors, Opening In The Front To Allow The Load To Enter & Exit The Hood. Opening At The Top To Allow The Cables Of The Programmable Crane To Enter & Exit The Hood.*



# Contact Information

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