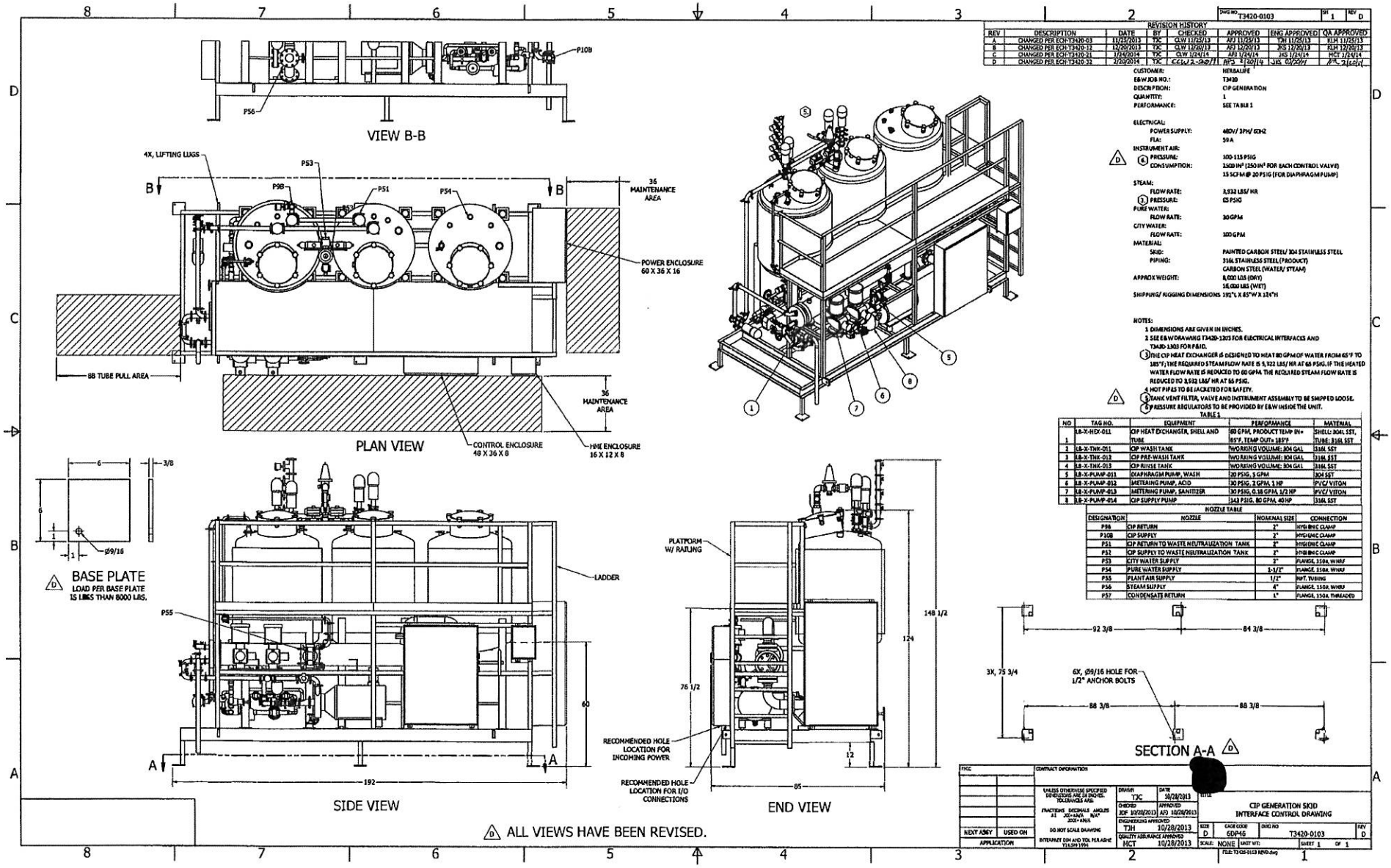

DWG NO. T3420-0103	SH 1	REV D

REVISION HISTORY

REV	DESCRIPTION	DATE	BY	CHECKED	APPROVED	ENG APPROVED	QA APPROVED
A	CHANGED PER ECN-T3420-03	11/25/2013	TJC	CLW 11/25/13	AFJ 11/25/13	TJH 11/25/13	KLH 11/25/13
B	CHANGED PER ECN-T3420-13	12/20/2013	TJC	CLW 12/20/13	AFJ 12/20/13	JRS 12/20/13	KLH 12/20/13
C	CHANGED PER ECN-T3420-21	1/24/2014	TJC	CLW 1/24/14	AFJ 1/24/14	JRS 1/24/14	MCT 1/24/14
D	CHANGED PER ECN-T3420-32	2/20/2014	TJC	CLW 2-20-14	AFJ 2/20/14	JRS 02/20/14	MCT 2/20/14

CUSTOMER: HERBALIFE
E&W JOB NO.: T3420
DESCRIPTION: CIP GENERATION
QUANTITY: 1
PERFORMANCE: SEE TABLE 1

ELECTRICAL:
POWER SUPPLY: 480V/ 3PH/ 60HZ
FLA: 59 A

INSTRUMENT AIR:
(4) PRESSURE: 100-115 PSIG
CONSUMPTION: 1500 IN³ (250 IN³ FOR EACH CONTROL VALVE)
15 SCFM @ 20 PSIG (FOR DIAPHRAGM PUMP)

STEAM:
FLOW RATE: 3,932 LBS/ HR
(3) PRESSURE: 65 PSIG

PURE WATER:
FLOW RATE: 30 GPM

CITY WATER:
FLOW RATE: 100 GPM

MATERIAL:
SKID: PAINTED CARBON STEEL/ 304 STAINLESS STEEL
PIPING: 316L STAINLESS STEEL (PRODUCT)
CARBON STEEL (WATER/ STEAM)

APPROX WEIGHT: 8,000 LBS (DRY)
16,000 LBS (WET)

SHIPPING/ RIGGING DIMENSIONS 192"L X 85"W X 124"H

NOTES:
1. DIMENSIONS ARE GIVEN IN INCHES.
2. SEE E&W DRAWING T3420-1203 FOR ELECTRICAL INTERFACES AND T3420-1303 FOR P&ID.
3. THE CIP HEAT EXCHANGER IS DESIGNED TO HEAT 80 GPM OF WATER FROM 65°F TO 185°F; THE REQUIRED STEAM FLOW RATE IS 5,922 LBS/ HR AT 65 PSIG. IF THE HEATED WATER FLOW RATE IS REDUCED TO 60 GPM, THE REQUIRED STEAM FLOW RATE IS REDUCED TO 3,932 LBS/ HR AT 65 PSIG.
4. HOT PIPES TO BE JACKETED FOR SAFETY.
5. TANK VENT FILTER, VALVE AND INSTRUMENT ASSEMBLY TO BE SHIPPED LOOSE.
6. PRESSURE REGULATORS TO BE PROVIDED BY E&W INSIDE THE UNIT.

TABLE 1

NO.	TAG NO.	EQUIPMENT	PERFORMANCE	MATERIAL
1	LB-X-HEX-011	CIP HEAT EXCHANGER, SHELL AND TUBE	80 GPM, PRODUCT TEMP IN= 65°F, TEMP OUT= 185°F	SHELL: 304L SST, TUBE: 316L SST
2	LB-X-TNK-011	CIP WASH TANK	WORKING VOLUME: 304 GAL	316L SST
3	LB-X-TNK-012	CIP PRE-WASH TANK	WORKING VOLUME: 304 GAL	316L SST
4	LB-X-TNK-013	CIP RINSE TANK	WORKING VOLUME: 304 GAL	316L SST
5	LB-X-PUMP-011	DIAPHRAGM PUMP, WASH	20 PSIG, 5 GPM	304 SST
6	LB-X-PUMP-012	METERING PUMP, ACID	30 PSIG, 2 GPM, 1 HP	PVC/ VITON
7	LB-X-PUMP-013	METERING PUMP, SANITIZER	30 PSIG, 0.38 GPM, 1/2 HP	PVC/ VITON
8	LB-X-PUMP-014	CIP SUPPLY PUMP	143 PSIG, 80 GPM, 40 HP	316L SST

NOZZLE TABLE

DESIGNATION	NOZZLE	NOMINAL SIZE	CONNECTION
P9B	CIP RETURN	2"	HYGIENIC CLAMP
P10B	CIP SUPPLY	2"	HYGIENIC CLAMP
P51	CIP RETURN TO WASTE NEUTRALIZATION TANK	2"	HYGIENIC CLAMP
P52	CIP SUPPLY TO WASTE NEUTRALIZATION TANK	2"	HYGIENIC CLAMP
P53	CITY WATER SUPPLY	2"	FLANGE, 150#, WNRF
P54	PURE WATER SUPPLY	1-1/2"	FLANGE, 150#, WNRF
P55	PLANT AIR SUPPLY	1/2"	REF. TUBING
P56	STEAM SUPPLY	4"	FLANGE, 150#, WNRF
P57	CONDENSATE RETURN	1"	FLANGE, 150#, THREADED

CONTRACT INFORMATION

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES. TOLERANCES ARE: FRACTIONS ±1/64 DECIMALS .XX=±N/A .XXX=±N/A ANGLES XX°=±N/A N/A° DO NOT SCALE DRAWING INTERPRET DIM AND TOL PER ASME Y14.5M-1994

NEXT ASSY | USED ON
APPLICATION

DRAWN TJC 10/28/2013
CHECKED JDF 10/28/2013
ENGINEERING APPROVED TJH 10/28/2013
QUALITY ASSURANCE APPROVED MCT 10/28/2013
APPROVED AFJ 10/28/2013

TITLE: CIP GENERATION SKID INTERFACE CONTROL DRAWING

SIZE D | CAGE CODE 6DP46 | DWG NO T3420-0103 | REV D
SCALE: NONE | UNIT WT: | SHEET 1 OF 1
FILE: T3420-0103 REVD.dwg