



Sand Filters / Sand Cyclones / Sand Flowback

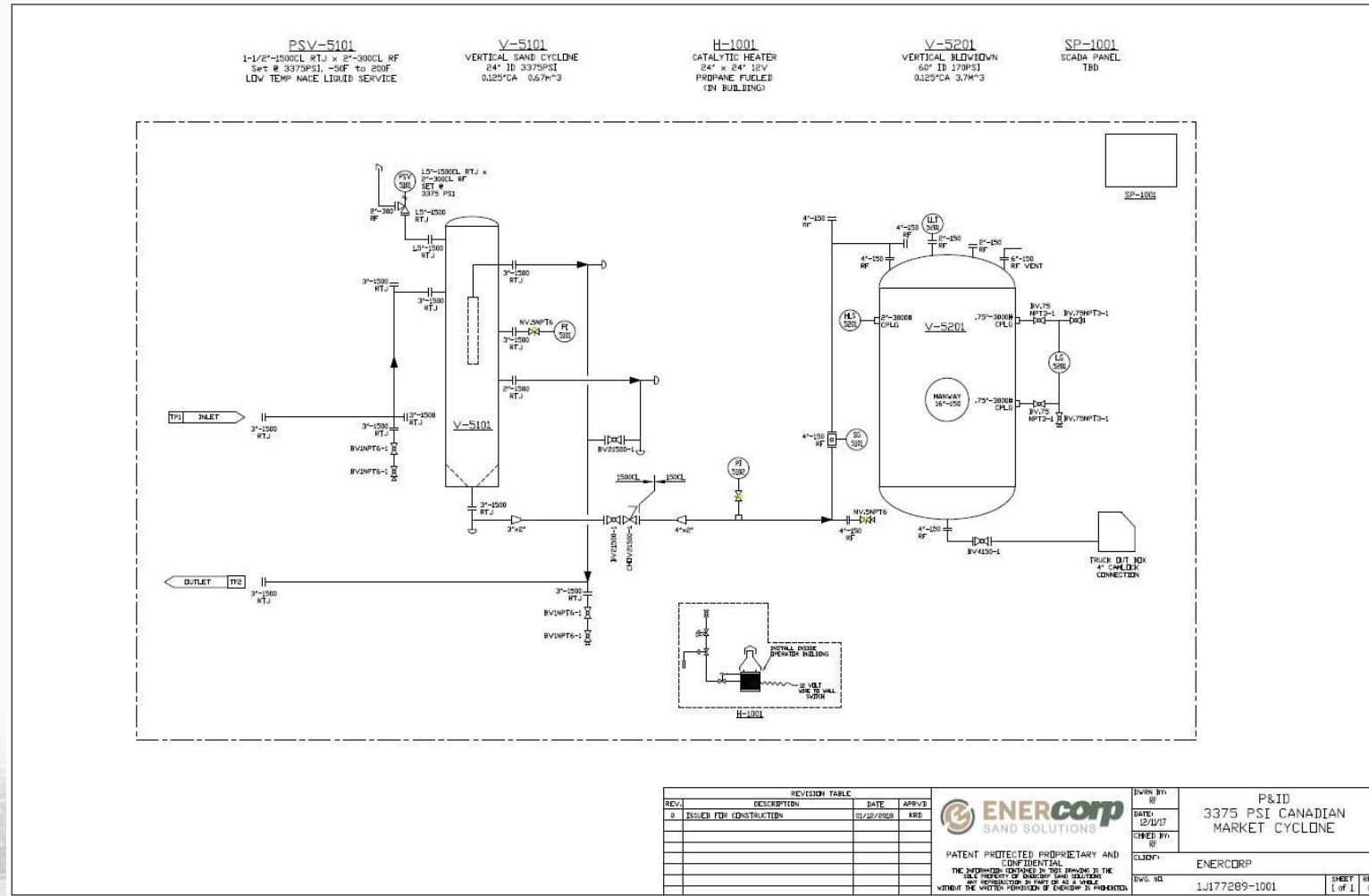


3k Cyclone Combo

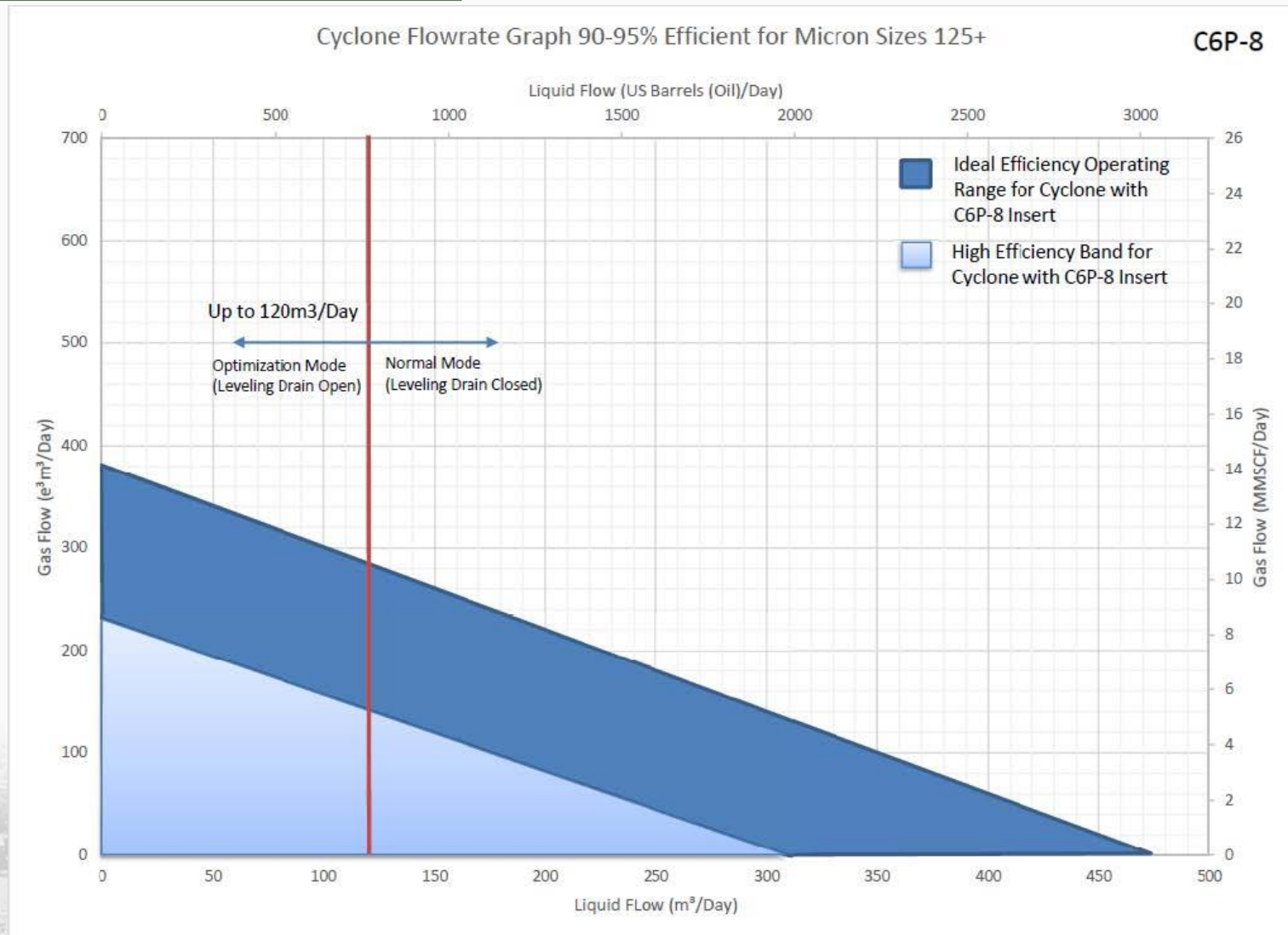
PROVIDING SAND SOLUTION TECHNOLOGY & SERVICE



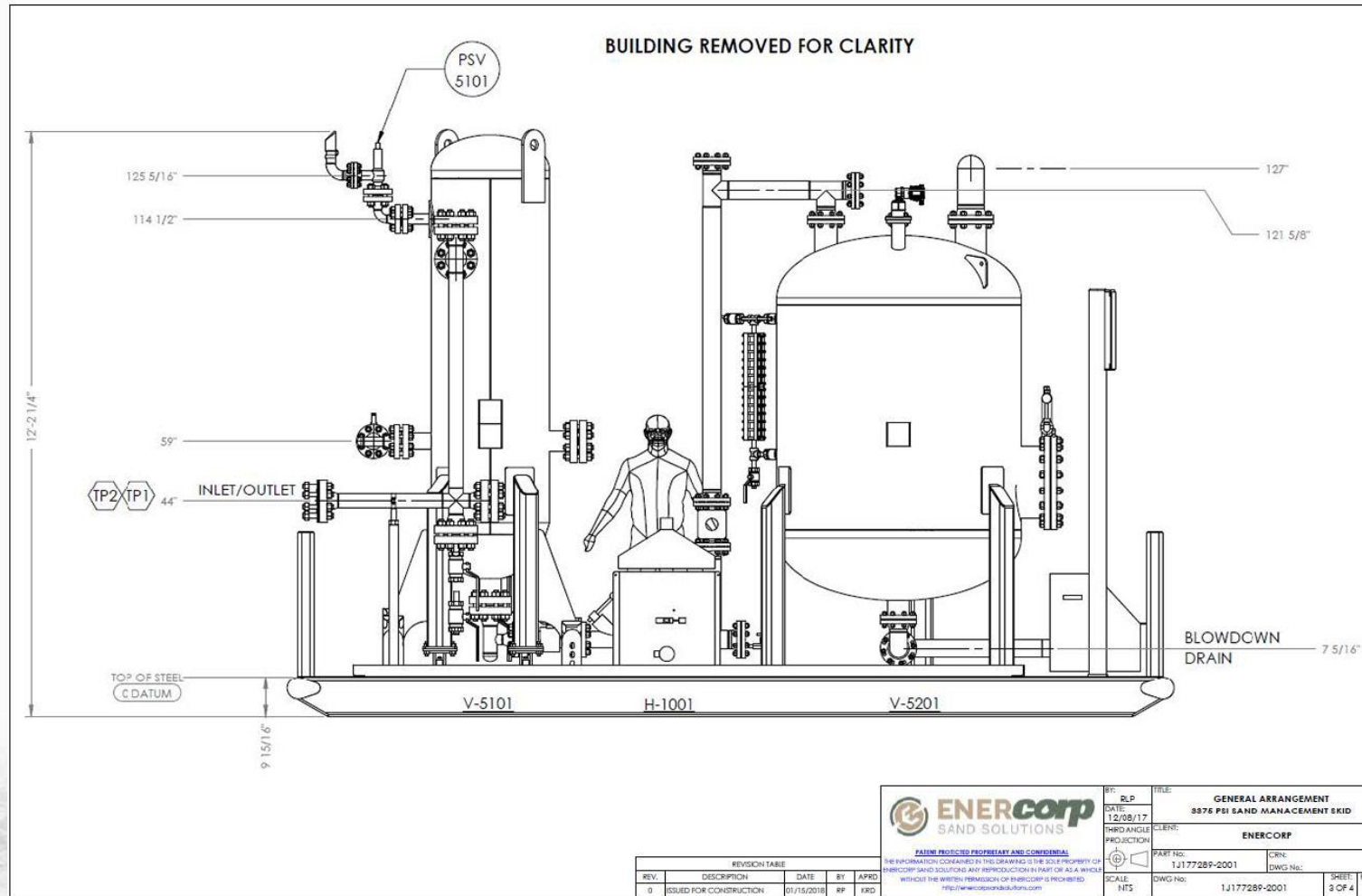
3k Cyclone Combo P&ID



3k Cyclone Combo Flow Rate Graph



3k Cyclone Combo Layout



SUMMARY OF THE 3-5K CYCLONE

Benefits of the EnerCorp Cyclone Units:

Scales under Cyclone vessel

- Allows operator to see when Cyclone requires Blowdown
- Weight chart for optimal efficiency and recommended blowdown
- Tied to SCADA for operator call out

SCADA Panel

- Tracks Blowdown frequency
- Tracks accumulative weight
- Blowdown vessel volumes
- Operator call out

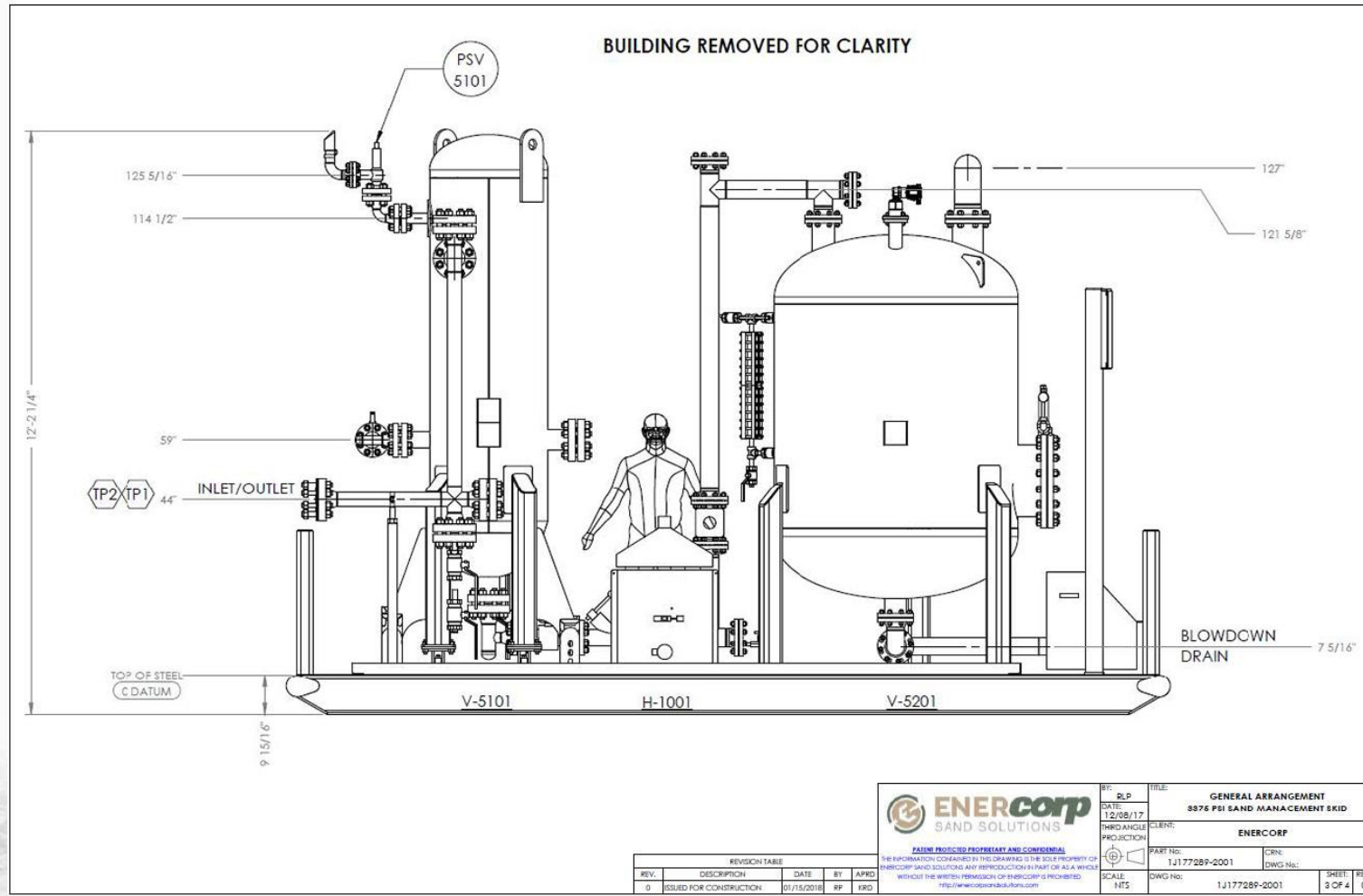
LLT Level Transmitter

- Indicates Blowdown vessel volume
- Tied to SCADA for operator call out

SOR Level Switch

- Secondary backup for LLT
- Tied to SCADA for operator call out

3k Cyclone Combo Layout cont'd.



SUMMARY OF THE 3-5K CYCLONE CONT'D

Site Glass on Blowdown Tank

- Visual for volume in tank

Site Glass spool on Blowdown Line

- Visual for sand when Blowing down Cyclone vessel

Choke Valve

- Minimal moving parts
- Durable

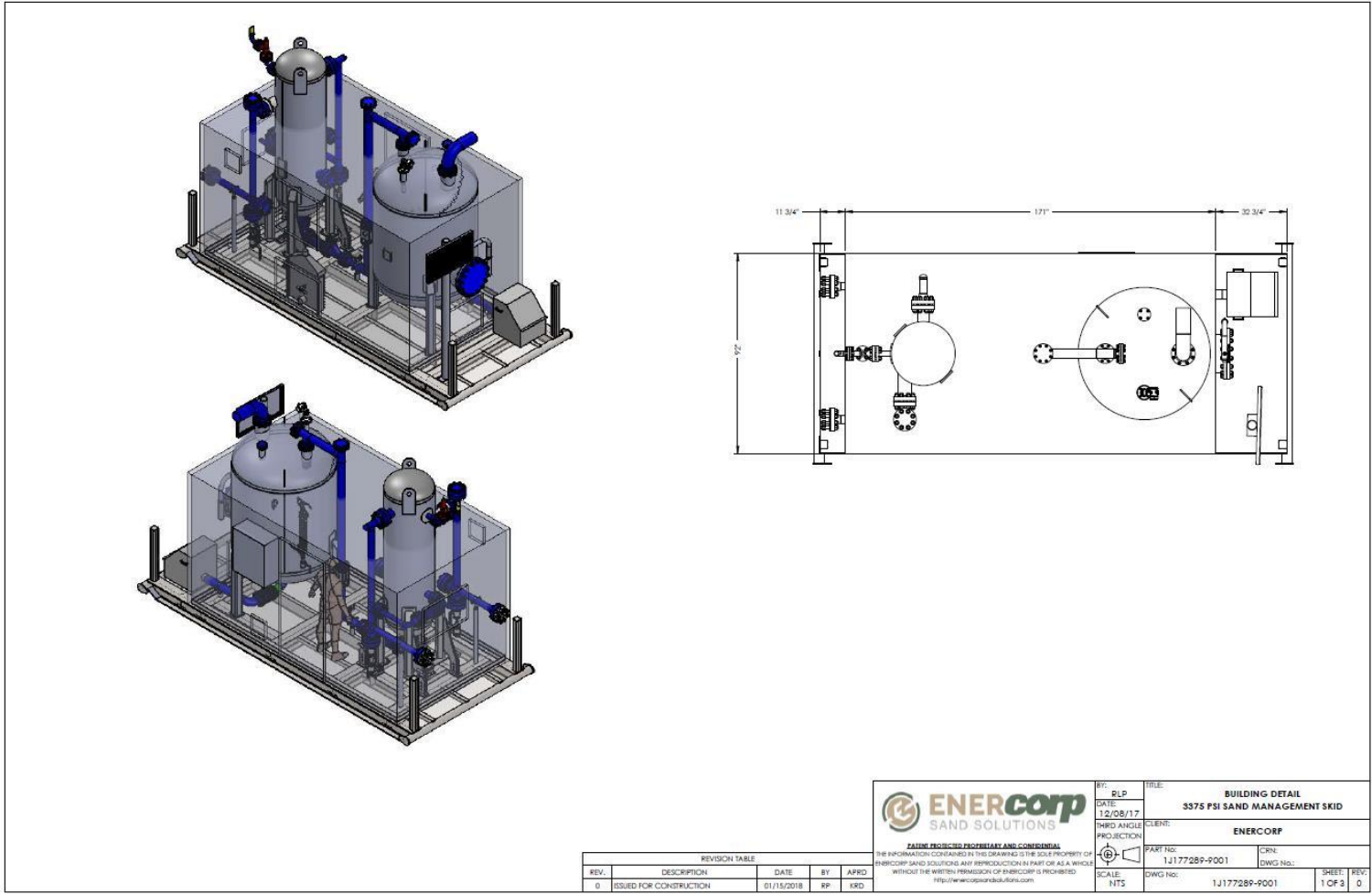
Large building with 24"x24" CAT heater 12V

- Will assist with battery life from cold temperatures
- Large heater to keep all lines from freezing

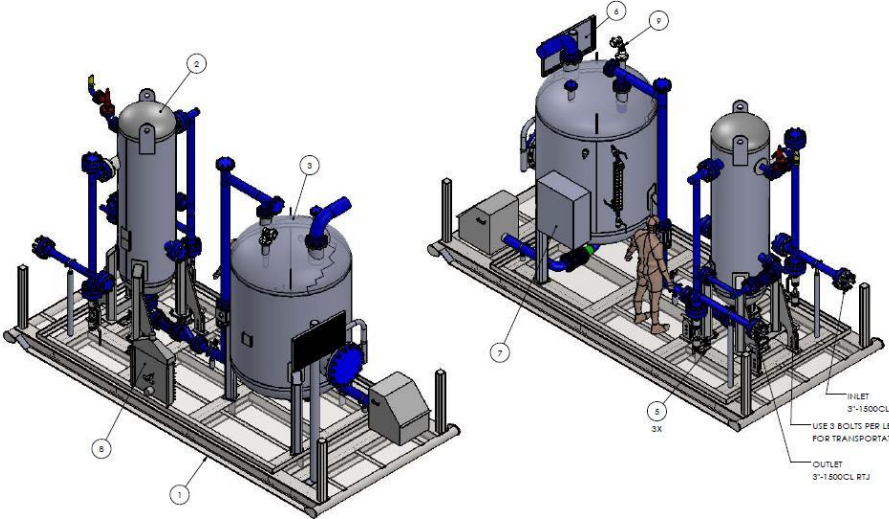
Detailed SOP

- Full SOP sent with each package for operator reference
- Field Assistance
- Start up assistance, free of charge

3k Cyclone Combo 3D GA



3k Cyclone Combo 3D Without Building



3D exploded view of the 3k Cyclone Combo unit. The diagram shows the main cylindrical vessel (1) with various assemblies (2, 3, 4, 5, 6, 7, 8, 9) attached. A person is shown for scale next to the unit. Labels indicate 'INLET 3"-1500CL RTJ' and 'OUTLET 3"-1500CL RTJ'. A note says 'USE 3 BOLTS PER LEG FOR TRANSPORTATION'.

ITEM NO.	QTY.	PART NO.	DESCRIPTION
1	1	1J177289-2001	SKID ASSEMBLY
2	1	1J177289-5101	3375PSI VERTICAL CYCLONE
3	1	1J177289-5201	170 PSI VERTICAL BLOWDOWN
4	1	1J177289-9001	BUILDING ASSEMBLY
5	2	702038	LOAD BEARING ASSEMBLY
6	1	PP	SOLAR PANEL
7	1	PP	CONTROL PANEL
8	1	PP	CATADLYNE HEATER 24" x 24" LP L.HOOD
9	1	PP	LASER LEVEL TRANSMITTER 2-15

GENERAL NOTES:

1. BASELINE UT REQUIRED ON VESSELS AND PIPING
2. WEIGHT (APPROX.): 23,500 LBS

PAINT SPECS:

3. SANDBLAST TO SP6
4. PRIMER - ENDURA 521 EPOXY - 3 MILS
5. FINISH COAT - ENDURA EX2C - 3MILS
6. COLOR - PIPING AND SKID - KHAKI PANTONE 7529C
7. VESSELS - GREEN PANTONE 5615C



ENERcorp SAND SOLUTIONS

REV. 0 ISSUED FOR CONSTRUCTION 01/15/2019 RP XRD

REV.	DESCRIPTION	DATE	BY	APPROVED
0	ISSUED FOR CONSTRUCTION	01/15/2019	RP	XRD

DATE: 12/08/17
PROJECTION: THIRD ANGLE
SCALE: NTS

GENERAL ARRANGE 3375 PSI SAND MANAGE
CLIENT: ENERCORP
PART NO: 1J177289-2001
DWG NO: 1J177289-2001



3k Cyclone Combo Weigh Scale

3000PSI 24" CYCLONE 0.74m3 TOTAL VOLUME (750 KG Full Vessel Volume)				LEVELING VALVE CLOSED		
			WATER THEORETICAL WEIGHTS (kg)	CONDENSATE THEORETICAL WEIGHTS (kg)	VESSEL VOLUME (L)	VESSEL LEVEL (IN)
		LEVEL (%)				
	W A T E R L E V E L	0%	0	0	0	0
		20%	104	95	90	16
		40%	195	155	180	28
		60%	320	220	270	40
		80%	370	280	360	52
		100%	490	345	445	65
	S A N D L E V E L	0%	490	345	0	0
		20%	530	395	42	9
		40%	560	445	84	15
		60%	600	500	126	21
		80%	640	550	168	26
		100%	685	600	210	32
RECOMMENDED BLOWDOWN OF CYCLONE BETWEEN 640 KG - 685 KG (WHEN MAJORITY OF FLUIDS ARE WATER)						
RECOMMENDED BLOWDOWN OF CYCLONE BETWEEN 550 KG - 600 KG (WHEN MAJORITY OF FLUIDS ARE CONDI)						



US: (1-800) 654-6026 // **CDN:** (403) 217-1332
enercorpsandsolutions.com
sales@enercorpsandsolutions.com
rentals@enercorpsandsolutions.com