

TL SERIES | Nitrogen Generators

Transmission Line Pressurization



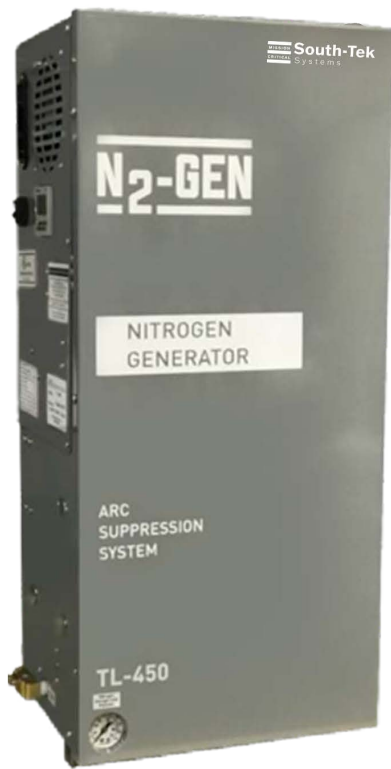
N₂-GEN[®]

Arc Suppression System



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MISSION
CRITICAL **South-Tek**
Systems



N₂-GEN®

Arc Suppression System

The N₂-GEN® provides an infinite supply of 98%+ pure Nitrogen, ensuring a constant -10° to -50° F dew point within the transmission line. By freeing the environment of oxygen, moisture and contaminants, the N₂-GEN® maintains the integrity of the transmission line and prevents voltage arcing.

The N₂-GEN® was designed with minimal circuitry and moving parts, limiting failure points and maximizing life expectancy. Unlike a dehydrator, there is no need to constantly monitor, recharge, or replace desiccant material. With Pressure Swing Adsorption (PSA) technology, the N₂-GEN® requires only one quick and inexpensive filter change-out per year.

ABOUT SOUTH-TEK SYSTEMS

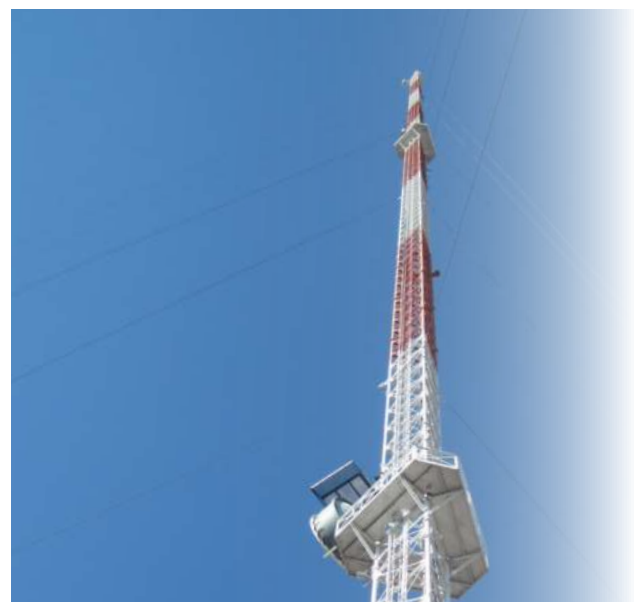
We *ARE* Nitrogen

Our team is dually focused on customer support and a technical, in-depth understanding of applications such as the pressurization of transmission lines - *ensuring the ultimate user experience*. Because of this dedication, South-Tek has become one of the largest manufacturers of Nitrogen Generation equipment with over 10,000 systems installed in the United States and abroad. Those range from the small start-up research laboratory or local industrial equipment shop to a full listing of Fortune 50 Industrial plant sites, many of which have chosen us as their worldwide standard for Nitrogen Generation.

With a commitment to ongoing research and development, we've created Patented technologies that maximize the longevity and efficiency of Nitrogen Generators. Not only do we provide the best user experience, but we're the most innovative manufacturer of Nitrogen Generation technology.

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TL SERIES

Nitrogen Generators

N₂-GEN® - TL-450

- | UL 508A listed, wall-mount unit
- | Pressure Swing Adsorption (PSA) technology
- | Preventative maintenance reminder
- | Provided with integral Air Compressor
- | Includes 28 gal. N₂ receiver tank (14" dia. x 47" H)

Specifications

- | Minimum nitrogen purity 98%
- | Minimum flow rate 450 SCFD
- | Dew point -10° to -50° F
- | Electrical 110 VAC, 15 AMPS
- | Dimensions 28.5" H x 12.8" W x 10.2" D

TL-450

*Backup cylinder not included



N₂-GEN® - TL-1050

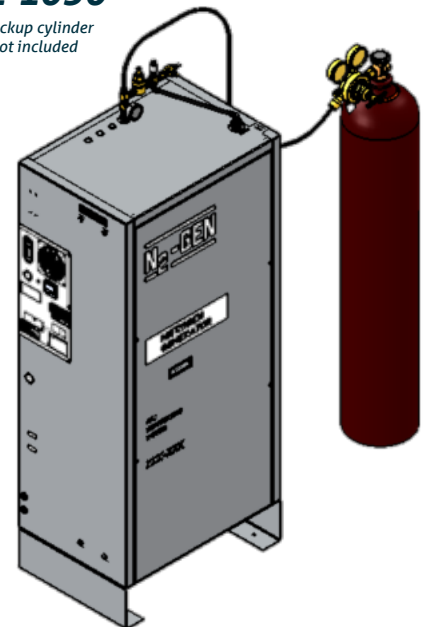
- | UL 508A listed, cabinet enclosed unit
- | Pressure Swing Adsorption (PSA) technology
- | Preventative maintenance reminder
- | Provided with integral Air Compressor
- | Integrated 15.5 gal. N₂ receiver tank

Specifications

- | Minimum nitrogen purity 98%
- | Minimum flow rate 1,050 SCFD
- | Dew point -10° to -50° F
- | Electrical 110 VAC, 15 AMPS
- | Dimensions 58" H x 26" W x 18" D

TL-1050

*Backup cylinder not included



TL SERIES

Nitrogen Generators

N₂-GEN® - TL-1825

- | UL 508A listed, cabinet enclosed unit
- | Pressure Swing Adsorption (PSA) technology
- | Preventative maintenance reminder
- | Requires STS-NF-C-2-J Air Compressor Package
- | Integrated 15.5 gal. N₂ receiver tank

Specifications

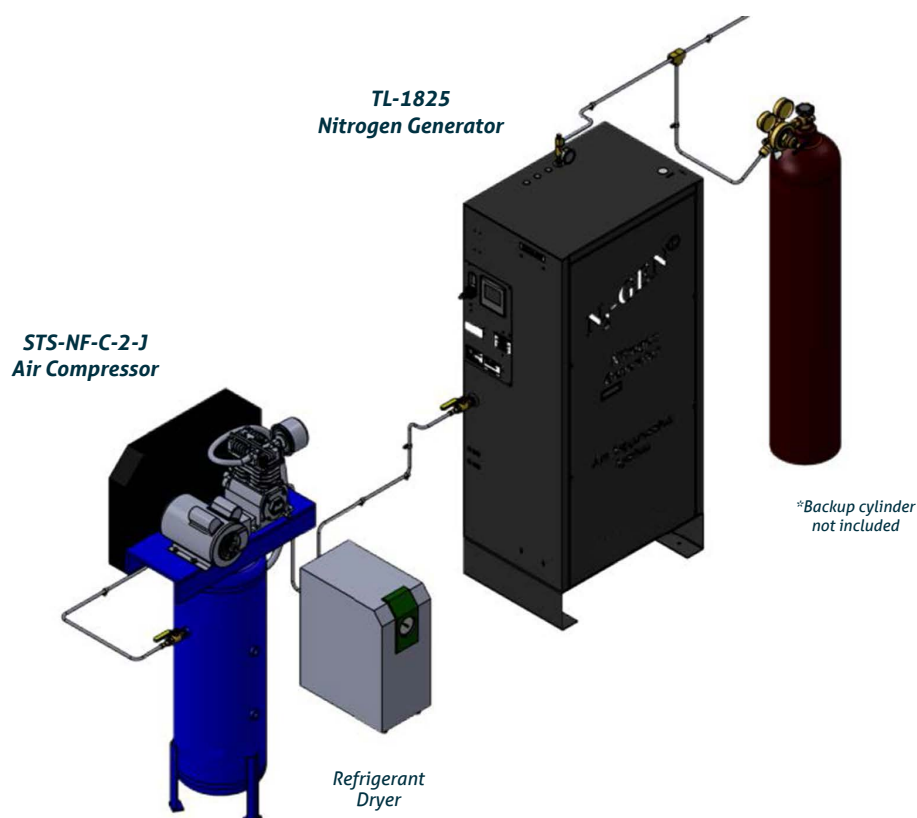
Minimum nitrogen purity	98%
Minimum flow rate (SCFD)	1,825
Dew point	-10° to -50° F
Dimensions	58" H x 26" W x 18" D
N ₂ generator electrical	110 VAC, 15 AMPS

STS-NF-C-2-J Air Compressor Package

- | 2 hp piston, oil lubricated w/ after-cooler
- | 17 gal. tank w/ pneumatic auto-drain
- | Added filtration to ensure dry, oil-free air
- | Complete with refrigerant dryer

Specifications

Air flow output	7.6 SCFM @ 125 PSI
Air compressor dim.	57"H x 27"W x 16"D
Refrigerant dryer dim.	15"H x 9"W x 16"D
Refrigerant dryer elec.	115 VAC, 10 AMPS
Air compressor elec.	1Ph 120/230V 3 Ph 230/460V



TL SERIES

Nitrogen Generators

N₂-GEN® - TL-2625

- | UL 508A listed, skid-mount unit
- | Pressure Swing Adsorption (PSA) technology
- | Preventative maintenance reminder
- | Requires STS-NF-C-2-J Air Compressor Package
- | Includes 30 gal. N₂ receiver tank (skid mount)

Specifications

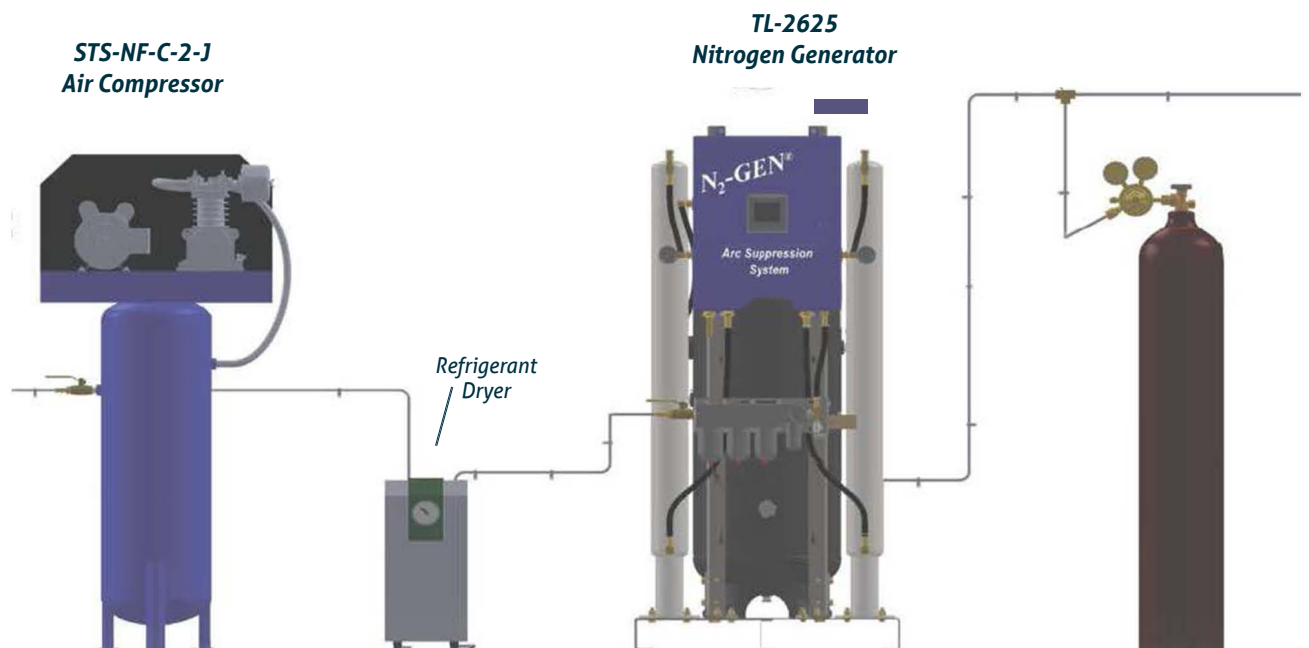
Minimum nitrogen purity	98%
Minimum flow rate (SCFD)	2,625
Dew point	-10° to -50° F
Skid weight	315 lbs.
Skid dimensions	66" H x 29" W x 33" D
N ₂ generator electrical	110 VAC, 8 AMPS

STS-NF-C-2-J Air Compressor Package

- | 2 hp piston, oil lubricated w/ after-cooler
- | 17 gal. tank w/ pneumatic auto-drain
- | Added filtration to ensure dry, oil-free air
- | Complete with refrigerant dryer

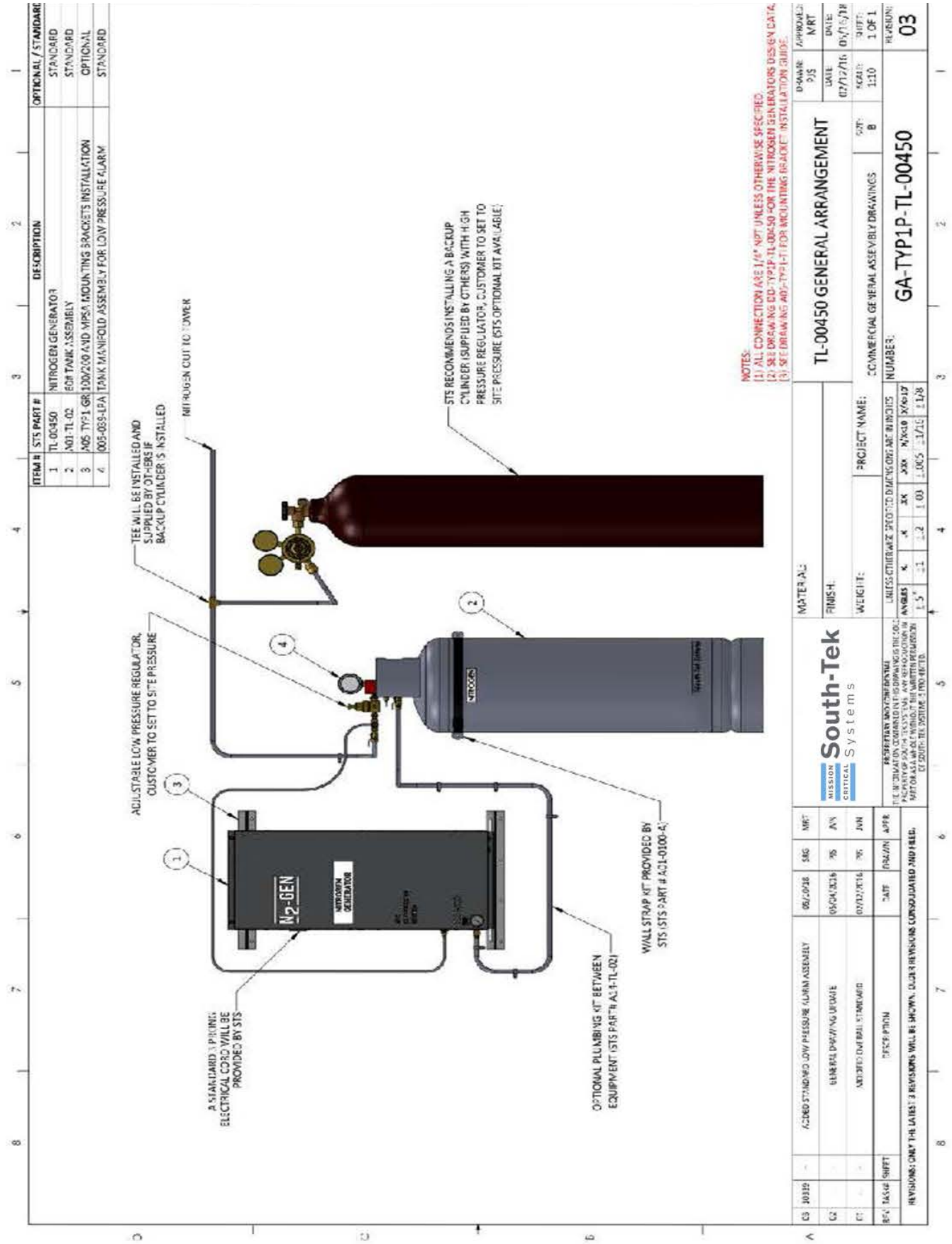
Specifications

Air flow output	7.6 SCFM @ 125 PSI
Air compressor dim.	57"H x 27"W x 16"D
Refrigerant dryer dim.	15"H x 9"W x 16"D
Refrigerant dryer elec.	115 VAC, 10 AMPS
Air compressor elec.	1Ph 120/230V
	3Ph 208/230/460V

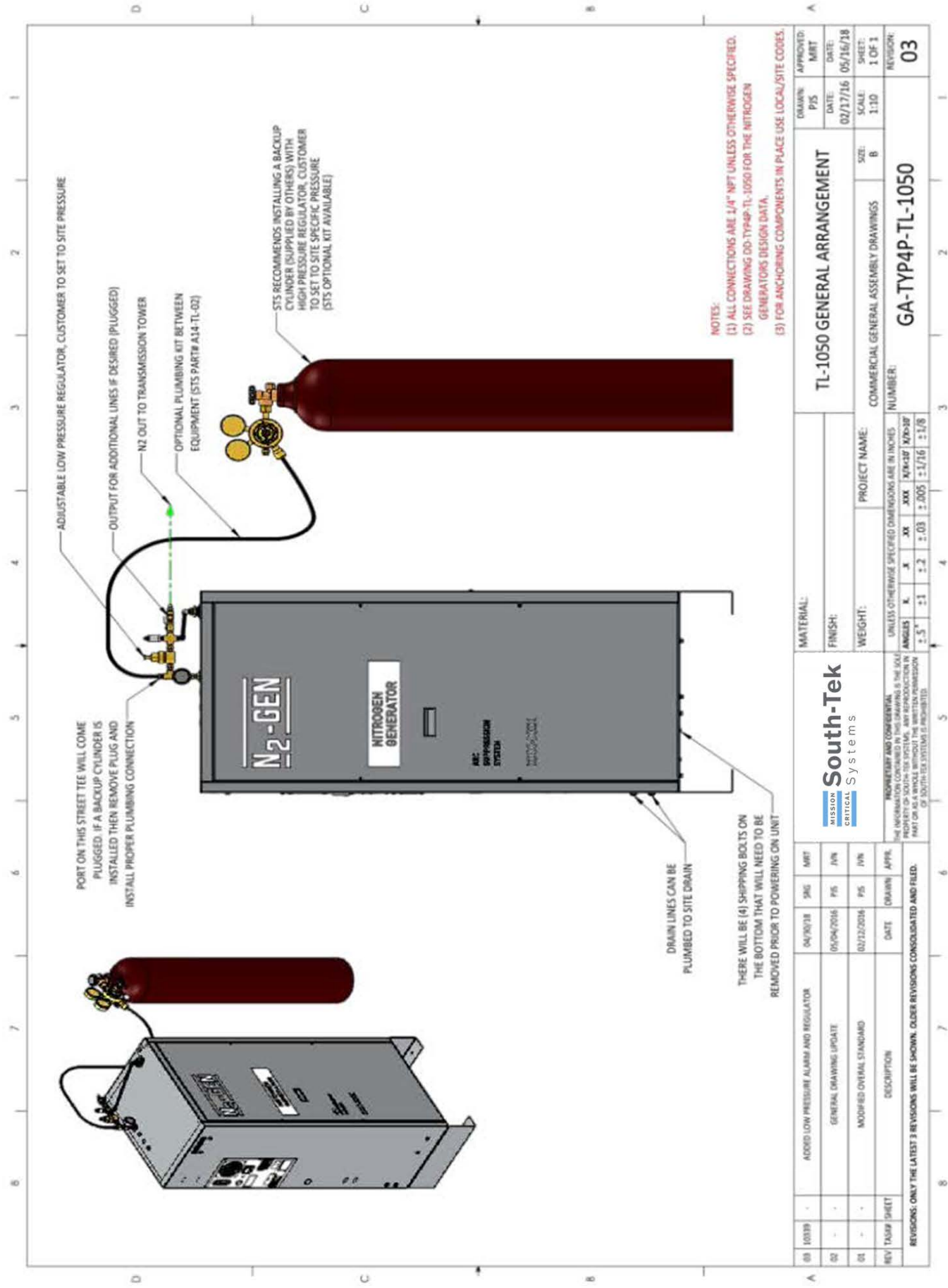


*Backup cylinder
not included

TL-450 INSTALLATION SCHEMATIC



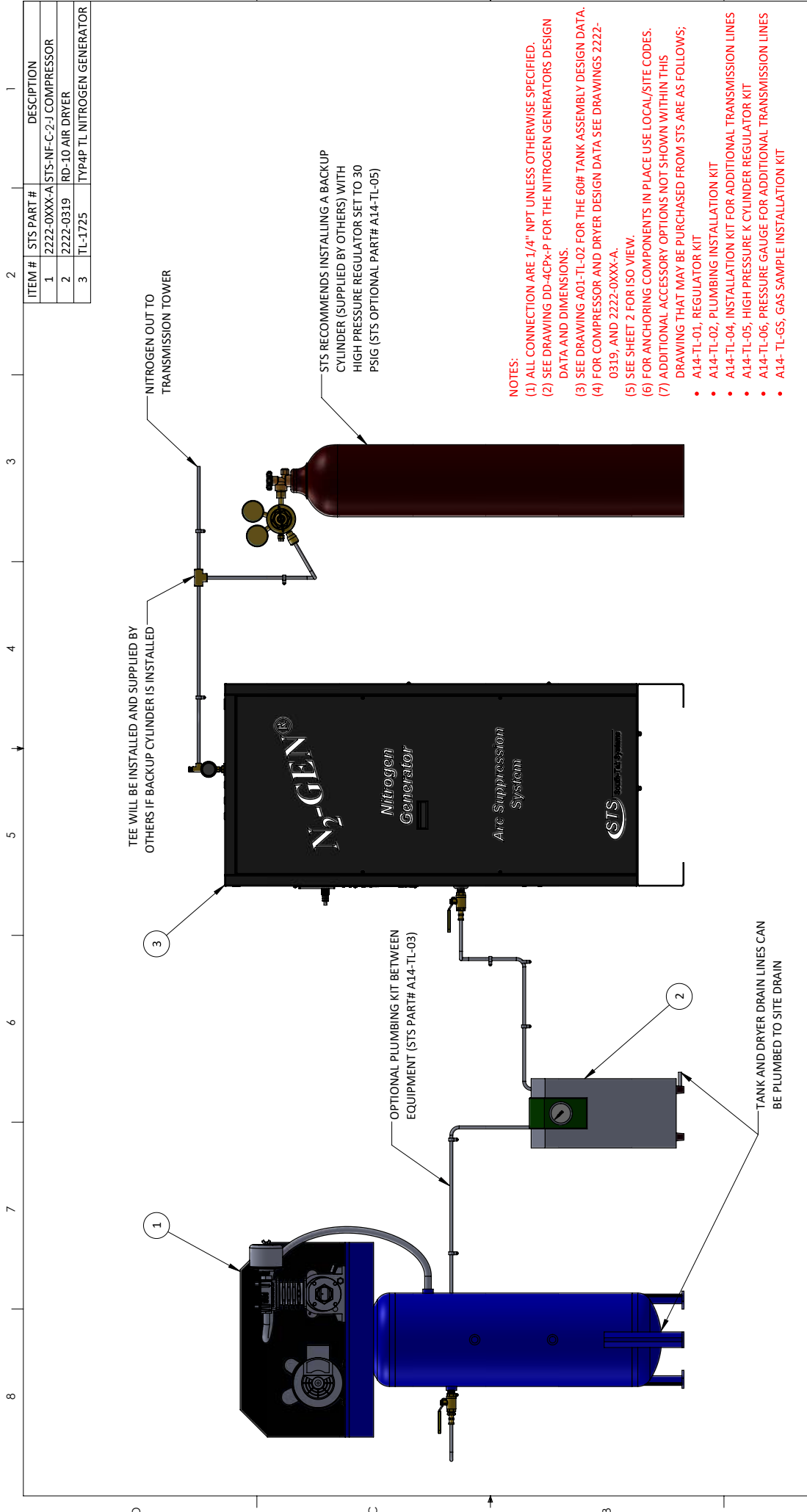
TL-1050 INSTALLATION SCHEMATIC



00	10039	-	ADDED LOW PRESSURE ALARM AND REGULATOR	04/20/18	SMG	MFT
01	-	-	GENERAL DRAWING UPDATE	05/04/2016	PKS	IVN
02	-	-	MODIFIED OVERALL STANDARD	03/12/2016	PKS	IVN
REV	TASK#	SHEET	DESCRIPTION	DATE	DRAWN	APPR.
REVISIONS: ONLY THE LATEST 3 REVISIONS WILL BE SHOWN. OLDER REVISIONS CONSOLIDATED AND FILED.						

MATERIAL:		TL-1050 GENERAL ARRANGEMENT	
FINISH:		COMMERCIAL GENERAL ASSEMBLY DRAWINGS	
WEIGHT:		NUMBER:	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES		GA-TYP4P-TL-1050	
±.5"	±1	±.2	±.03
±.1/16"	±.005	±.1/16"	±.1/8

MISSION CRITICAL SYSTEMS	PROJECT NAME:	SIZE:	SHEET:
South-Tek Systems		B	1 OF 1
PROPRIETARY AND CONFIDENTIAL			REVISION:
THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF SOUTH-TEK SYSTEMS. IT IS TO BE USED ONLY FOR THE PROJECT AND SITE SPECIFIC FOR WHICH IT WAS PREPARED. NO PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF SOUTH-TEK SYSTEMS IS PROHIBITED.			03



- NOTES:**
- (1) ALL CONNECTION ARE 1/4" NPT UNLESS OTHERWISE SPECIFIED.
 - (2) SEE DRAWING DD-4CPX-P FOR THE NITROGEN GENERATORS DESIGN DATA AND DIMENSIONS.
 - (3) SEE DRAWING A01-TL-02 FOR THE 60# TANK ASSEMBLY DESIGN DATA.
 - (4) FOR COMPRESSOR AND DRYER DESIGN DATA SEE DRAWINGS 2222-0319, AND 2222-0XXX-A.
 - (5) SEE SHEET 2 FOR ISO VIEW.
 - (6) FOR ANCHORING COMPONENTS IN PLACE USE LOCAL/SITE CODES.
 - (7) ADDITIONAL ACCESSORY OPTIONS NOT SHOWN WITHIN THIS DRAWING THAT MAY BE PURCHASED FROM STS ARE AS FOLLOWS;
 - A14-TL-01, REGULATOR KIT
 - A14-TL-02, PLUMBING INSTALLATION KIT
 - A14-TL-04, INSTALLATION KIT FOR ADDITIONAL TRANSMISSION LINES
 - A14-TL-05, HIGH PRESSURE K CYLINDER REGULATOR KIT
 - A14-TL-06, PRESSURE GAUGE FOR ADDITIONAL TRANSMISSION LINES
 - A14-TL-05, GAS SAMPLE INSTALLATION KIT

ITEM #	STS PART #	DESCRIPTION
1	2222-0XXX-A	STS-NF-C-2-J COMPRESSOR
2	2222-0319	RD-10 AIR DRYER
3	TL-1725	TYP4P TL NITROGEN GENERATOR

REV	TASK#	SHEET	DESCRIPTION	DATE	APPR.	DATE	APPR.	DATE	APPR.
00	10204		RELEASE FOR USE IN DRAWING PACKAGES (REPLACES GA-TYP3P-TL)	05/12/17		05/12/17			

MISSION CRITICAL		South-Tek Systems		TYP4P TL GENERAL ARRANGEMENT DRAWING	
THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF SOUTH-TEK SYSTEMS. ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF SOUTH-TEK SYSTEMS IS PROHIBITED.		PROJECT NAME: TRANSMISSION LINE		SCALE: 1:12	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES		PROJECT NAME: TRANSMISSION LINE		SCALE: 1:12	
ANGLES	X, X, X	X, X, X	X/X-10'	X/X-10'	X/X-10'
	± 5°	± 1	± 2	± 0.03	± 1/16 ± 1/8
DRAWN: PJS		DATE: 05/12/17		APPROVED: MRT	
SHEET: 1 OF 2		REVISION: 00		NUMBER: GA-TYP4P-TL-1725	

9 TL-2625 INSTALLATION SCHEMATIC

ITEM #	STS PART #	DESCRIPTION	OPTIONAL / STANDARD
1	2222-0XXX-A	STS-NF-C-2-J COMPRESSOR	OPTIONAL
2	2222-0319	RD-10 AIR DRYER	OPTIONAL
3	TL-2625-TS	TYP3P NITROGEN GENERATOR	STANDARD

TEE WILL BE INSTALLED AND SUPPLIED BY OTHERS IF BACKUP CYLINDER IS INSTALLED

NITROGEN OUT TO TRANSMISSION TOWER

STS RECOMMENDS INSTALLING A BACKUP CYLINDER (SUPPLIED BY OTHERS) WITH HIGH PRESSURE REGULATOR SET TO 30 PSIG (STS OPTIONAL PART# A14-TL-05)

3

OPTIONAL PLUMBING KIT BETWEEN EQUIPMENT (STS PART# A14-TL-03)

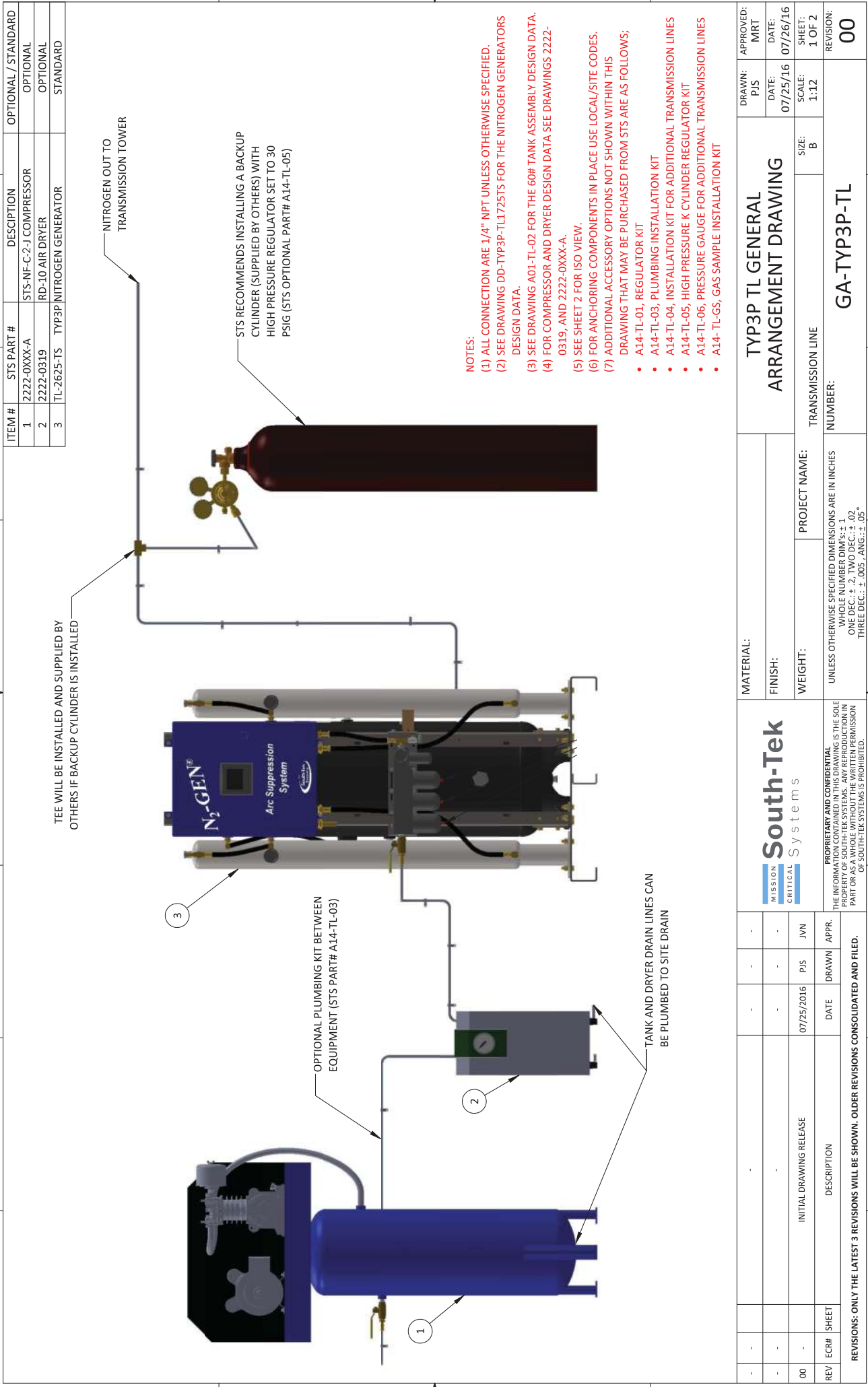
1

2

TANK AND DRYER DRAIN LINES CAN BE PLUMBED TO SITE DRAIN

NOTES:

- (1) ALL CONNECTION ARE 1/4" NPT UNLESS OTHERWISE SPECIFIED.
- (2) SEE DRAWING DD-TYP3P-TL1725TS FOR THE NITROGEN GENERATORS DESIGN DATA.
- (3) SEE DRAWING A01-TL-02 FOR THE 60# TANK ASSEMBLY DESIGN DATA.
- (4) FOR COMPRESSOR AND DRYER DESIGN DATA SEE DRAWINGS 2222-0319, AND 2222-0XXX-A.
- (5) SEE SHEET 2 FOR ISO VIEW.
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- (7) ADDITIONAL ACCESSORY OPTIONS NOT SHOWN WITHIN THIS DRAWING THAT MAY BE PURCHASED FROM STS ARE AS FOLLOWS;
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 - A14-TL-03, PLUMBING INSTALLATION KIT
 - A14-TL-04, INSTALLATION KIT FOR ADDITIONAL TRANSMISSION LINES
 - A14-TL-05, HIGH PRESSURE K CYLINDER REGULATOR KIT
 - A14-TL-06, PRESSURE GAUGE FOR ADDITIONAL TRANSMISSION LINES
 - A14-TL-05, GAS SAMPLE INSTALLATION KIT



REV	ECR#	SHEET	DESCRIPTION	DATE	DRAWN	APPR.	MATERIAL:	PROJECT NAME:	TRANSMISSION LINE NUMBER:	SCALE:	SIZE:	APPROVED:
-	-	-	-	-	-	-	TYP3P TL GENERAL ARRANGEMENT DRAWING			1:12	B	MRT
00	-	-	INITIAL DRAWING RELEASE	07/25/2016	PJS	JVN						DATE: 07/25/16
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES WHOLE NUMBER DIMS: ± .1 ONE DEC.: ± .2 TWO DEC.: ± .02 THREE DEC.: ± .005 / ANG.: ± .05°												
REVISIONS: ONLY THE LATEST 3 REVISIONS WILL BE SHOWN. OLDER REVISIONS CONSOLIDATED AND FILED.												
GA-TYP3P-TL												
REVISION: 00												



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South-Tek Systems Warranties

WE DESIGN BEST IN CLASS, DEPENDABLE NITROGEN GENERATION SYSTEMS. IT ONLY SEEMS RIGHT TO OFFER A WARRANTY TO MATCH.



N₂-GEN® Nitrogen Generators¹

South-Tek Systems warrants to the purchaser that all Nitrogen generators and other products manufactured by South-Tek Systems shall be free of defects in material and workmanship for a period of one (1) year from the date of shipment to the purchaser or within 1,000 hours of runtime, whichever comes first (per South-Tek Systems' Terms & Conditions). The South-Tek Systems warranty only applies to products manufactured by South-Tek Systems.

STS-NF-C-J Series Air Compressor Packages²

The STS-NF-C-J Series Air Compressor Packages are warranted for one (1) year from date of purchase. The manufacturer will repair, without charge, any defects due to faulty materials or workmanship. This warranty does not apply to accessories or damage caused where repairs have been made or attempted by others. This warranty gives you specific legal rights and you may have other rights which vary in certain states or provinces.

RD Series Air Dryer Packages²

The RD Series Air Dryer Packages have a one (1) year warranty against defects in materials or workmanship under normal use and service, from the date of installation or eighteen (18) months from the date of shipment by the manufacturer or a manufacturer's distributor, whichever may occur first. Heat Exchangers are warranted for five (5) years.

¹Per South-Tek Systems' Terms and Conditions

²Per the Manufacturer's Terms and Conditions



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