

TL SERIES | Nitrogen Generators

Transmission Line Pressurization



N₂-GEN®

Arc Suppression System



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N₂-GEN[®]

Arc Suppression System

The N₂-GEN[®] provides an infinite supply of 98%+ pure Nitrogen, ensuring a constant -40° to -70° 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 the equipment or purchase annual "rebuild kits". 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 8,000 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 TYPE 1 MODELS

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 -40° to -70° F
- | Electrical 110 VAC, 15 AMPS
- | Dimensions 28.5" H x 12.8" W x 10.2" D

N₂-GEN® - TL-1050

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

Specifications

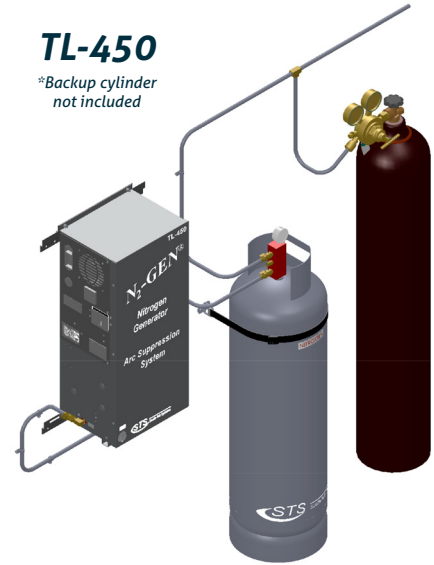
- | Minimum nitrogen purity 98%
- | Minimum flow rate 1,050 SCFD
- | Dew point -40° to -70° F
- | Electrical 110 VAC, 15 AMPS
- | Dimensions 58" H x 26" W x 18" D

Installation & Alarm Integration Options

- | Type 1 Installation Kit (TL-450 & 1050)
- | Regulator Kit
- | Gas Sampling Kit
- | Power Failure Alarm
- | System Diagnostic & Leak Detection Alarm
- | Low Pressure Alarm (requires Gas Sampling Kit)
- | Dew Point Alarm (requires Gas Sampling Kit)
- | Low Pressure & Dew Point Combination Package
- | Quick-Check® - Portable N₂ Purity Sensor
- | Annual Filter Replacement Kit

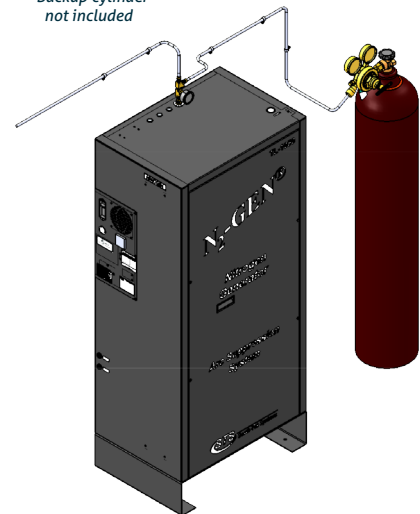
TL-450

*Backup cylinder not included



TL-1050

*Backup cylinder not included



TL SERIES TYPE 3 MODELS

N₂-GEN® - TL-1725 & TL-2625

- | UL 508A listed, skid-mount units
- | Pressure Swing Adsorption (PSA) technology
- | Preventative maintenance reminder
- | Requires STS-NF-C-3-J Air Compressor Package
- | Includes 30 gal. N₂ receiver tank (skid-mount)

Specifications

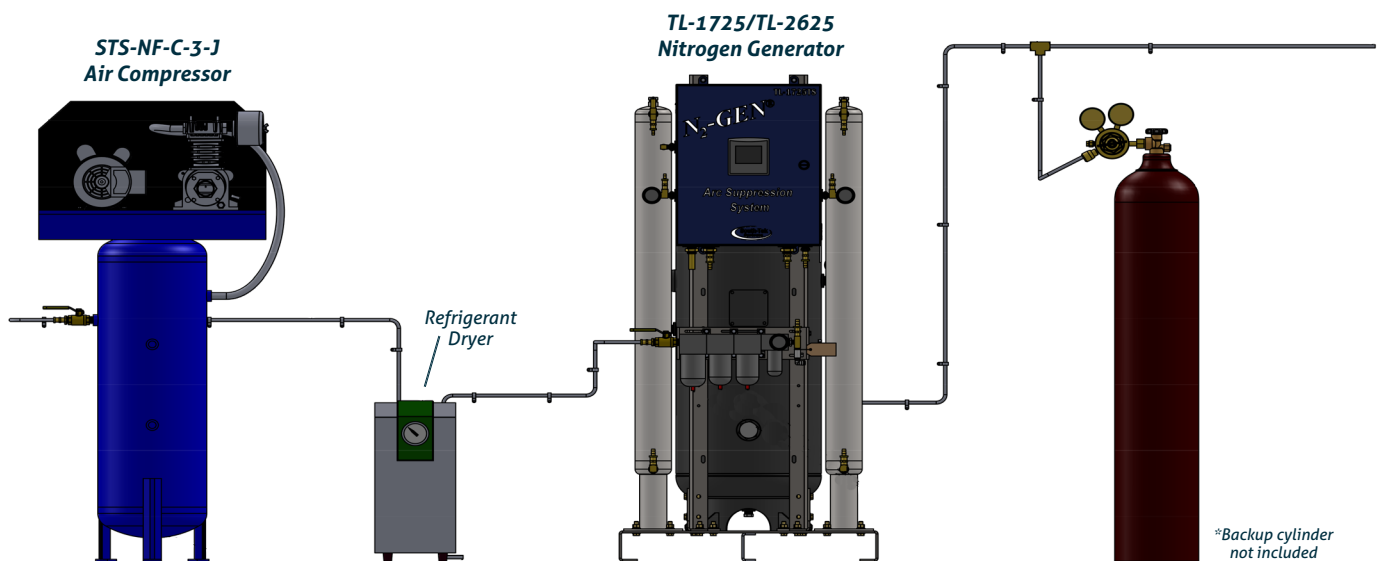
Minimum nitrogen purity	98%
Minimum flow rate (SCFD)	1,725 / 2,625
Dew point	-40° to -70° F
Skid weight	315 lbs.
Skid dimensions	66" H x 29" W x 33" D
N ₂ generator electrical	110 VAC, 8 AMPS

STS-NF-C-3-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

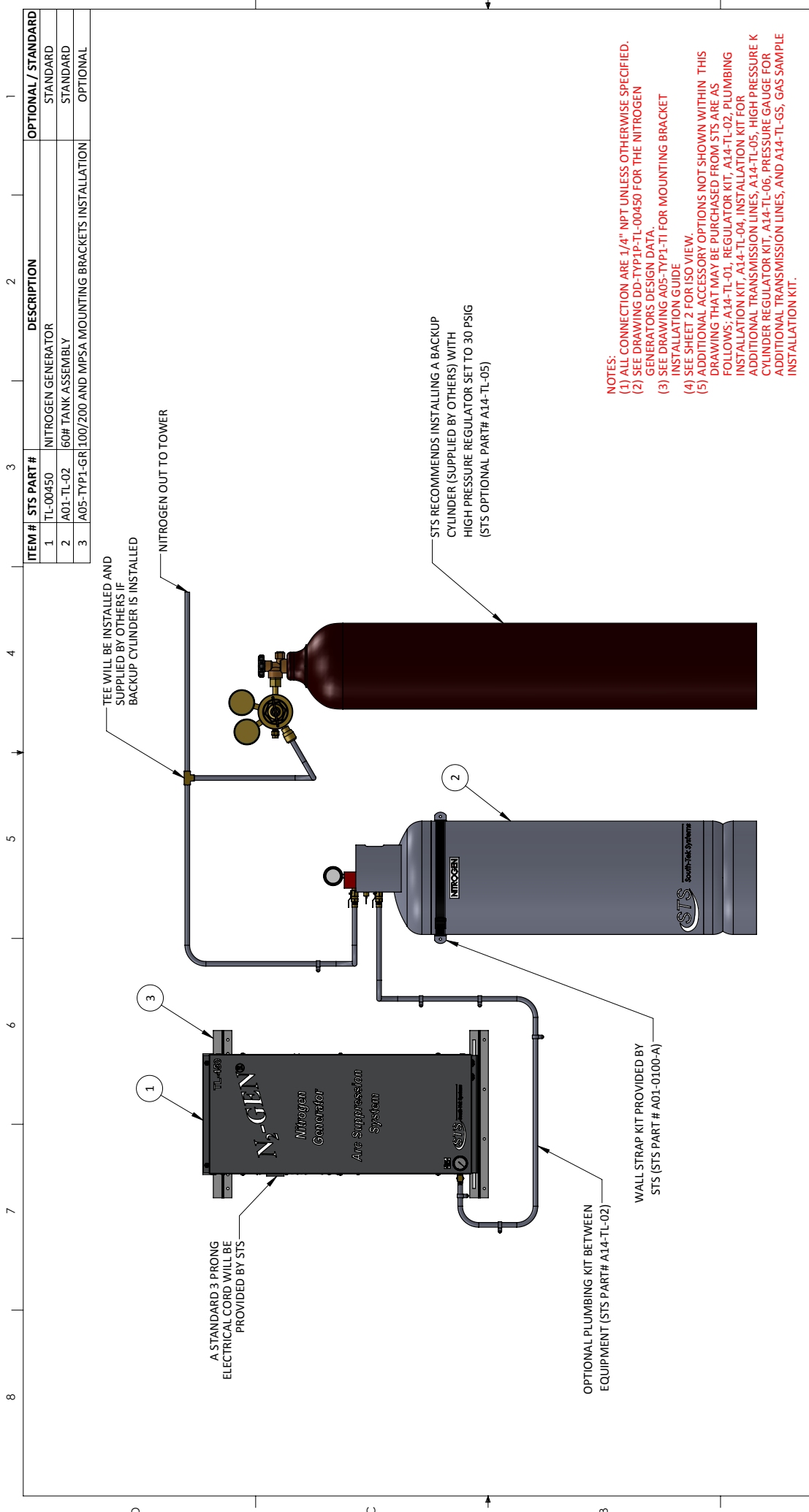
Air flow output	7.6 SCFM @ 125 PSI
Air compressor dim.	57"H x 27"W x 16"D
Refrigerant dryer dim.	15"H x 9"W x 16"D
Refrigerant dryer elec.	115 VAC, 10 AMPS
Air compressor elec.	1Ph 120/208/230V 3Ph 208/230/460V



Installation & Alarm Integration Options

- | Type 3 Installation Kit (TL-1725)
- | Regulator Kit
- | Gas Sampling Kit
- | Power Failure Alarm
- | System Diagnostic & Leak Detection Alarm
- | Low Pressure Alarm (requires Gas Sampling Kit)
- | Dew Point Alarm (requires Gas Sampling Kit)
- | Low Pressure & Dew Point Combination Package
- | Quick-Check® - Portable N₂ Purity Sensor
- | N₂ Generator & Air Compressor Filter Replacement Kits

5 TL-450 INSTALLATION SCHEMATIC



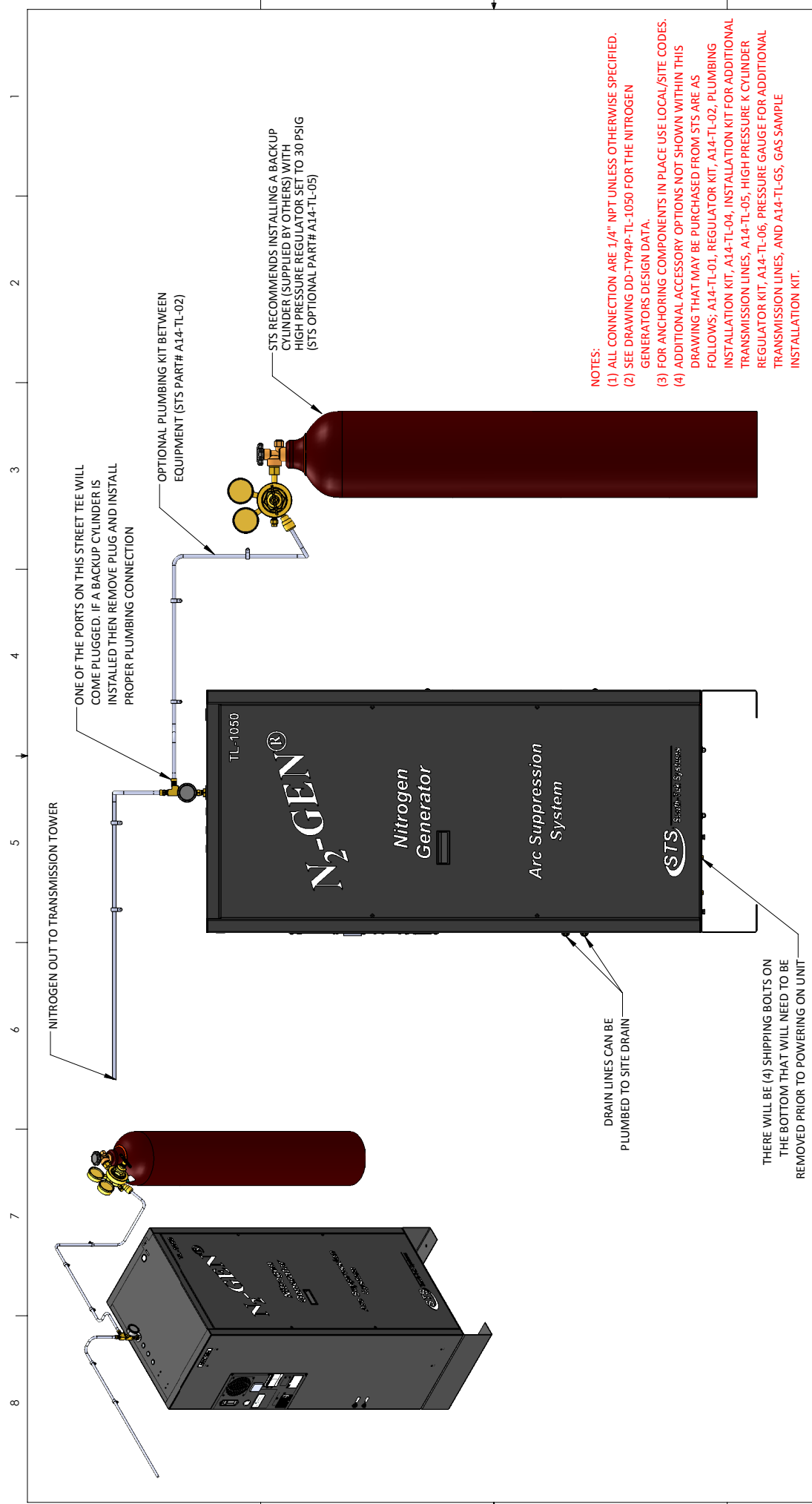
- NOTES:**
- (1) ALL CONNECTION ARE 1/4" NPT UNLESS OTHERWISE SPECIFIED.
 - (2) SEE DRAWING DD-TYP1P-TL-00450 FOR THE NITROGEN GENERATORS DESIGN DATA.
 - (3) SEE DRAWING A05-TYP1-TI FOR MOUNTING BRACKET INSTALLATION GUIDE
 - (4) SEE SHEET 2 FOR ISO VIEW.
 - (5) ADDITIONAL ACCESSORY OPTIONS NOT SHOWN 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, AND A14-TL-GS, GAS SAMPLE INSTALLATION KIT.

ITEM #	STS PART #	DESCRIPTION	OPTIONAL / STANDARD
1	TL-00450	NITROGEN GENERATOR	STANDARD
2	A01-TL-02	60# TANK ASSEMBLY	STANDARD
3	A05-TYP1-GR	100/200 AND MP5A MOUNTING BRACKETS INSTALLATION	OPTIONAL

REV		ECR#	SHEET	DESCRIPTION	DATE	DRAWN	APPR.	REVISIONS: ONLY THE LATEST 3 REVISIONS WILL BE SHOWN. OLDER REVISIONS CONSOLIDATED AND FILED.	
02	-			GENERAL DRAWING UPDATE	02/04/2016	PJS	JVN		
01	-			MODIFIED OVERALL STANDARD	02/12/2016	PJS	JVN		
00	-			INITIAL DRAWING RELEASE	02/10/2015	PJS	JVN		
MATERIAL:		UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES							
FINISH:		UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES							
WEIGHT:		UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES							
PROJECT NAME:		COMMERCIAL GENERAL ASSEMBLY DRAWINGS							
NUMBER:		GA-TYP1P-TL-00450							
DRAWN:		JVN		APPROVED:		JVN		DATE:	
DATE:		02/12/16		DATE:		02/12/16		SHEET:	
SCALE:		1:10		SCALE:		1:10		1 OF 2	
REVISION:		1 OF 2		REVISION:		02			

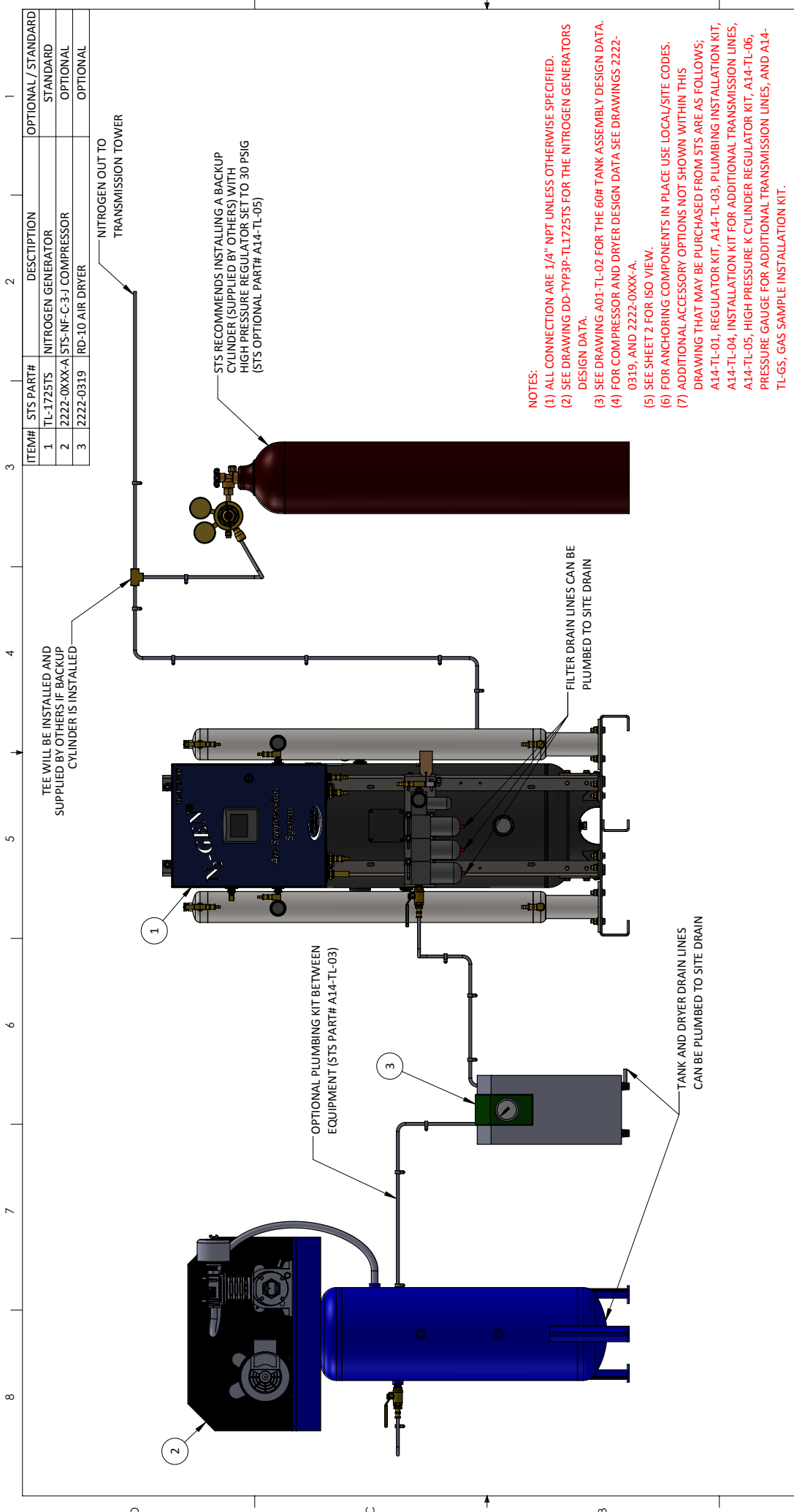
PROPRIETARY AND CONFIDENTIAL
THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF SOUTH-TEK SYSTEMS. ANY REPRODUCTION IN PART OR IN WHOLE WITHOUT THE WRITTEN PERMISSION OF SOUTH-TEK SYSTEMS IS PROHIBITED.

6 TL-1050 INSTALLATION SCHEMATIC



02	-			05/04/2016	PIS	JVN	MATERIAL:		TL-1050 GENERAL ARRANGEMENT		DRAWN:	APPROVED:	
01	-			02/12/2016	PIS	JVN	FINISH:				DATE:	DATE:	
00	-			01/19/2015	PIS	JVN	WEIGHT:		COMMERCIAL GENERAL ASSEMBLY DRAWINGS		02/17/16	02/17/16	
REV	EGR#	SHEET	DESCRIPTION	DATE	DRAWN	APPR.	UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES WHOLE NUMBER DIM'S: ± .1 ONE DEC: ± .2, TWO DEC: ± .02 THREE DEC: ± .005, ANG: ± .05°		NUMBER:		SCALE:	SHEET:	
REVISIONS: ONLY THE LATEST 3 REVISIONS WILL BE SHOWN. OLDER REVISIONS CONSOLIDATED AND FILED.							PROJECT NAME:		GA-TYP4P-TL-1050		1:10	1 OF 1	
							OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES WHOLE NUMBER DIM'S: ± .1 ONE DEC: ± .2, TWO DEC: ± .02 THREE DEC: ± .005, ANG: ± .05°						REVISION:
													02

TL-1725 & TL-2625 INSTALLATION SCHEMATIC



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

DRAWN: PJS		APPROVED: JVN	
DATE: 02/15/16		DATE: 02/16/16	
SCALE: 1:12		SIZE: B	
SHEET: 1 OF 2		REVISION: 02	
<p>TL-1725 GENERAL ARRANGEMENT</p> <p>MATERIAL:</p> <p>FINISH:</p> <p>WEIGHT:</p> <p>PROJECT NAME:</p> <p>COMMERCIAL GENERAL ASSEMBLY DRAWINGS</p> <p>NUMBER: GA-TYP3P-TL1725</p>			
<p>UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES</p> <p>WHOLE NUMBER DIM'S: ± .1</p> <p>ONE DEC.: ± .2, TWO DEC.: ± .02</p> <p>THREE DEC.: ± .005, ANG.: ± .05°</p>			
<p>REVISIONS: ONLY THE LATEST 3 REVISIONS WILL BE SHOWN. OLDER REVISIONS CONSOLIDATED AND FILED.</p>			

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REV	ECR#	SHEET	DESCRIPTION	DATE	DRAWN	APPR.
02	-	-	GENERAL DRAWING UPDATE	05/04/2016	PJS	JVN
01	-	-	MODIFIED OVERALL STANDARD	02/15/2016	PJS	JVN
00	-	-	INITIAL DRAWING RELEASE	02/19/2015	PJS	JVN



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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