Schroeder SMART TECHNOLOGY INSIDE

Triton Dehydration Station®

Triton-E

U.S. Patent 8491785

Features and Benefits

- Patented mass transfer technology uses ambient air to optimize and control dewatering rates
- High Dewatering Rates and particulate removal in one system
- Simple Controls - maintenance, operation and troubleshooting instructions are available in the Human Machine Interface (HMI) Touch Screen
- Reduce fluid recycling cost
- No expensive vacuum pump to service and replace
- Compact, efficient footprint
- Remove free and dissolved water
- Highly effective in low and high humidity elements

Part of Schroeder Industries Energy Sustainability Initiative

15 gpm
56.78 L/min

Description

Water contamination in hydraulic systems can severely reduce the life of hydraulic systems and fluids. The Triton Dehydration Station® is designed to eliminate 100% of free and up to 90% of dissolved water. The Triton-E can handle large quantities of oil from sizeable hydraulic reservoirs, lubricating circuits, totes and large gear boxes due to the high flow rate of the unit. Using a patented mass transfer process, the Triton Dehydration Station® efficiently removes water and particulate contamination quickly in all environments. A proprietary design reduces aeration of free and entrained gases of returned fluid. The unit is designed to be extremely portable using either the integrated lifting lugs located on each corner of the cart or the optional wheeled version.

Principle of Operation

The Triton Dehydration Station® uses patented mass transfer dewatering technology. Ambient air is conditioned to increase its water holding capability before injecting to the reaction chamber. Fluid is equally distributed and cascaded down through reticulated media and the conditioned air stream. Water is transformed to water vapor and is expelled from the unit as moist air/stream. The relative humidity of the incoming fluid is continually monitored by an integral TestMate® Water Sensor (TWS) and displayed real-time on the control panel in percent saturation.

Specifications

Dimensions:	32"W x 59"L x 70.25" H
Dry Mass:	1000 lbs (453 kg)
Inlet Connections:	1-1/2" MJIC
Outlet Connections:	1-1/2" MJIC
Flow Rate:	15 gpm Standard, (other options available - see Box 2 on the next page)
Inlet Pressure:	Atmospheric
Outlet Pressure:	to 125 psi (8.62 bar)
Fluid Service Temperature:	50° F to 175°F (10°C to 79°C)
Fluid Viscosity:	70-2000 SUS (13 -539 cSt), 2500 with heater
Power Supply:	460 V/3/60 Hz, 13 amps 460 V/3/60 Hz, 28 amps w/heater 575 V/3/60 Hz, 10.5 amps 575 V/3/60 Hz, 23 amps w/heater
Attainable Water Content:	< 50 ppm
Relative Humidity Display:	Standard, 0-99% Range
Construction:	Base Frame: Carbon Steel Vessel: Stainless Steel Seals: Viton®
Protection Class:	NEMA 2

Element Performance

Media	Filter Rating	DHC (gm)	Media	Filter Rating	DHC (gm)
Z1	ß $4.2_{(C)}$ ≥1000	55	Z10	ß $10_{(C)}$ ≥1000	52
Z3	ß $4.8_{(C)}$ ≥1000	57	Z25	ß $24_{(C)}$ ≥1000	48
Z5	ß $6.3_{(C)}$ ≥1000	62			

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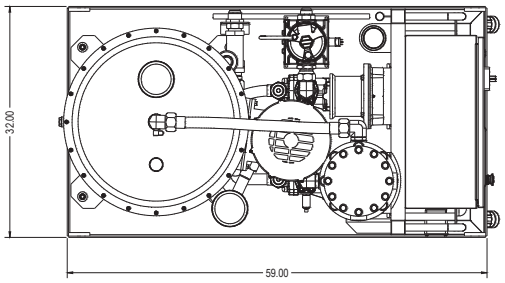
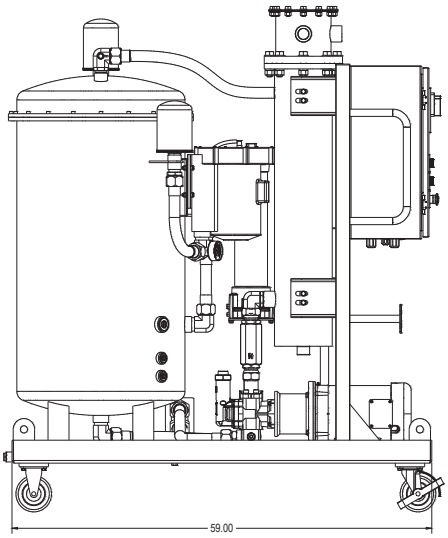
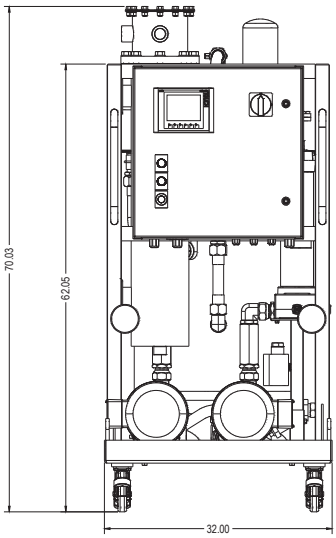
TRITON DEHYDRATION STATION®







Metric dimensions in ( ).

= TDSEVMABG05H

Model Number Selection

How to Build a Valid Model Number for a Schroeder Triton-E:

BOX 1	BOX 2	BOX 3	BOX 4	BOX 5	BOX 6	BOX 7	BOX 8	BOX 9
TDSE–		–	–	–	–	–	–	–

Example: *NOTE: One option per box*

BOX 1	BOX 2	BOX 3	BOX 4	BOX 5	BOX 6	BOX 7	BOX 8	BOX 9	
TDSE–		– V	– M	– A	– B	– K	– 05	– H	**= TDSEVMABK05H**

BOX 1 – Model

TDSE

BOX 2 – Flow Rate

Omit = 15 gpm
22 = 22 gpm
VF = 3-15 gpm (Variable)

BOX 3 – Seals

V = Viton®

BOX 4 – Mobility

S = Stationary
M = Caster Base

BOX 5 – Voltage

A = 460V/3/60 Hz
B = 575V/3/60 Hz

BOX 6 – Air Source

B = Integral Blower

BOX 7 – FIlter Housing

K = 27" filter housing
Q = 39" QF5 filter housing

BOX 8 – Media*

01 = 1 µm Z-Media
03 = 3 µm Z-Media
05 = 5 µm Z-Media
10 = 10 µm Z-Media
25 = 25 µm Z-Media

BOX 9 – Option

H = 12500 W Heater

NOTES:

*K filter housing will use the GeoSeal® elements

Q filter housing will use the 39QCLQF Filter Systems elements