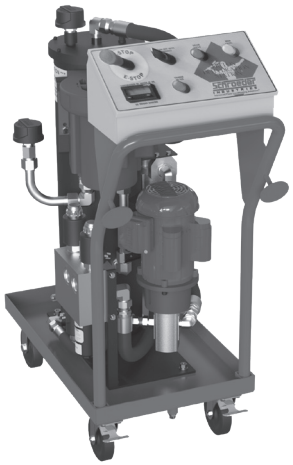
TRITON DEHYDRATION STATION®

Triton Dehydration Station®

U.S. Patent 8491785

Triton-A



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
- 2.4kW heater option for unheated reservoirs
- Simple Controls; RUN/DRAIN modes
- 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 environments

Part of Schroeder Industries Energy Sustainability Initiative

2.0 gpm
7.6 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 from small reservoirs, barrels, and gear boxes. 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 was designed to be extremely portable using the optional cart to access tight areas.

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 a moist air stream. The relative humidity of the incoming fluid is continually monitored by an integral AS1000 and displayed real-time on the control panel.

Specifications

Dimensions:	45.2"(H) x 36.7"(W) x 20.3"(D)
Dry Mass:	295 lbs (134 kg)
Inlet Connections:	1" SAE
Outlet Connections:	1" SAE
Flow Rate:	120 gallons/hour or 2.0 gpm (7.6 L/min)
Permissible Inlet Pressure Range:	-5.8 psig (-0.4 bar) to 32 psia (2.2 bar)
Max. Permissible Outlet Pressure:	75 psig (5 bar)
Fluid Service Temperature:	100° F to 150°F (40°C to 65.5°C)
Fluid Viscosity:	70- 1000 SUS (13 - 215 cSt), Explosion-proof: 500 SUS maximum
Power Supply:	110 VAC, 60 Hz, 12 amp
Attainable Water Content:	< 50 ppm
Heater Options:	220V/ 60hz/ 1 Phase, 460V/ 60hz/ 3 Phase
Relative Humidity Display:	Standard, 0-99% Range
Construction:	Reaction Vessel: Stainless Steel Seals: Viton®
Protection Class:	NEMA 2

Element Performance

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

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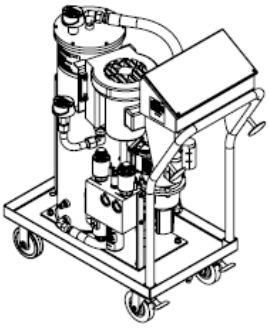
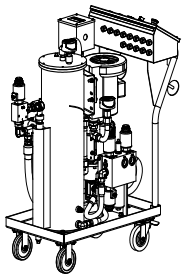
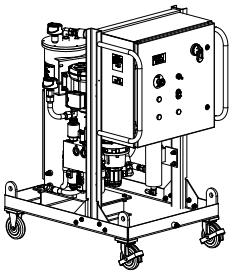
TDSAVMABxx1



TDSA Standard (110V)



TDSA With Heater (220V)



TDSA With Heater (460V)

Dimensions in inches.

Model Number Selection

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

BOX 1	BOX 2	BOX 3	BOX 4	BOX 5	BOX 6	BOX 7	BOX 8
TDS							

Example: NOTE: One option per box

BOX 1	BOX 2	BOX 3	BOX 4	BOX 5	BOX 6	BOX 7	BOX 8	
TDS	A	V	M	A	B	05	1	= TDSAVMAB051H

BOX 1

Model
TDS

BOX 2

Flow Rate
A = 2.0 gpm

BOX 3

Seals
V = Viton®

BOX 4

Mobility
S = Stationary
M = Caster Base

BOX 5

Voltage
A = 110V/60 Hz/ 1 Phase
B = 220V/60 HZ/ 1 Phase
C = 220V/50 Hz/ 1 Phase
D = 460V/60 HZ/ 3 Phase (Heater Option Only)

BOX 6

Air Source
B = Integral Blower

BOX 7

Media
01
03
05
10
25

BOX 8

Option
X = Class 1, Div 2 explosion-proof
1 = Cart Version
Y = Built with CSA approved components (requires CSA inspection on-site)
H = Heater Option (220 V/ 60Hz, OR 460V/ 60Hz ONLY)

For replacement element part numbers, please see "Appendix Section - Replacement Elements" of this catalog.