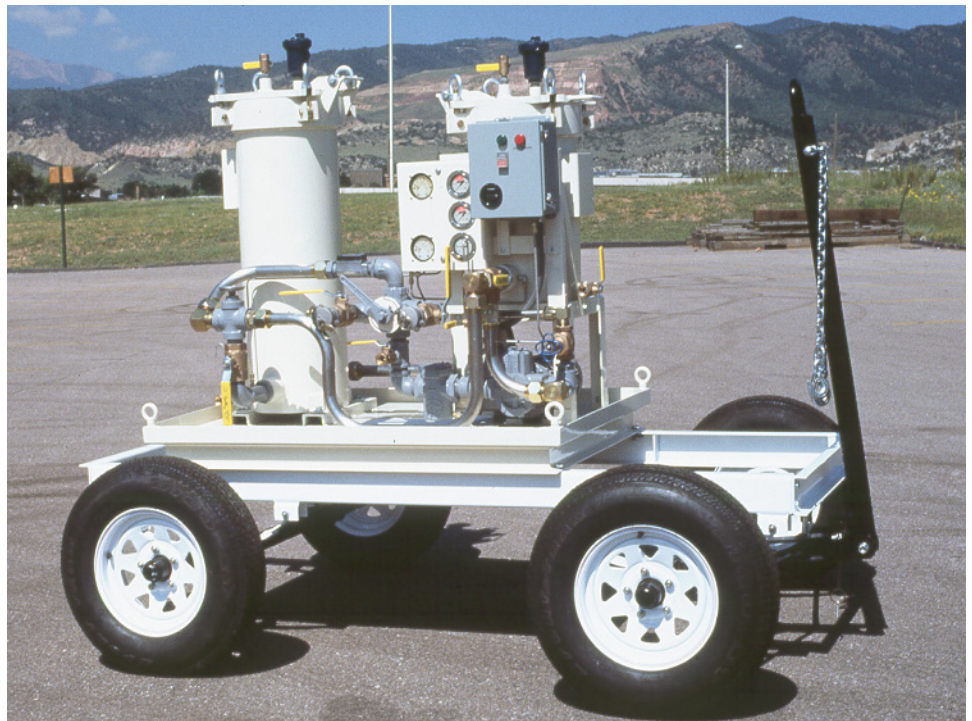


## Transformer Oil Dehydration System

The SDS20 Transformer Oil Dehydration System utilizes Velcon's **Superdri**<sup>®</sup> technology to remove dissolved water from transformer oil. The dual stage unit processes oil to reach moisture levels of 10 parts per million of dissolved water or less in a single pass. The SDS20 can dramatically reduce oil filling costs by eliminating the need for costly heat and vacuum units to dehydrate transformer oil. The system is designed with all the necessary features required for critical transformer filling operations. These features help reduce downtime and eliminate added cost from sampling error, or from improper use of filter cartridges.



### APPLICATIONS

The SDS20 System with **Superdri**<sup>®</sup> cartridges can be used for oil processing situations where removal of dissolved water in insulating oil is necessary.

- Use the SDS20 System to process oil used to fill new distribution and EHV transformers. Avoids the need for heat and vacuum systems to dry the oil
- Filter and dehydrate transformer oil used to fill existing transformers after repair or service
- Use the SDS20 System to enable oil to meet moisture critical ASTM D-1816 dielectric strength requirements
- Purify oil used for circuit breakers and other high voltage apparatus that is sensitive to dissolved water
- Dehydrate oil in storage tanks and tankers that have accumulated a high level of dissolved water
- The SDS20 can be fitted with standard **Aquacon**<sup>®</sup> filters for routine oil maintenance work

SDS20 **Superdri**<sup>®</sup> Filter System mounted to off-road steerable trailer.

**Superdri**<sup>®</sup> and **Aquacon**<sup>®</sup> are trademarks of Velcon Filters, LLC.

## SPECIFICATIONS

### General

- Skid mounted on drip pan base (with drain)
- Welded carbon steel components
- 304 stainless steel tubing, JIC fittings
- Stainless steel sample ports
- Polyester polyurethane powder coat paint
- Electrical grounding lug
- Lifting lugs

### Electrical

- 2 hp, 1800 rpm, TEFC motor
- NEMA 4 control box
- Motor run lamp
- Magnetic motor starter with manual reset and overload protection
- Adjustable high pressure shut-off switch with indicator lamp
- Hour meter
- All electrical components UL listed/CSA approved
- User to supply power cord and plug

### Mechanical

- Positive displacement 30 gpm gear pump with mechanical seal and internal adjustable pressure relief bypass
- Adjustable flow control bypass – allows flow adjustment from 10 to 30 gpm
- Inline basket strainer with tool-less basket access
- ASME code design model VF-1222 pre-filter vessel with automatic air eliminator accepts a Velcon **Aquacon**<sup>®</sup> cartridge, part number AC-822P3, for removal of solid contaminants and free water.
- ASME code design model VF-1229 **Superdri**<sup>®</sup> filter vessel with automatic air eliminator accepts 4 Velcon **Superdri**<sup>®</sup> cartridges, part number SD-1107, for removal of dissolved water
- Oil make-up port
- 30" 0 - 60 psi compound gauge at pump inlet
- 0 - 50 PSID differential pressure gauge across each vessel
- Digital flow meter/totalizer with LCD readout indicates flow rate, batch gallons pumped (resettable) and total gallons pumped
- Shipping weight: 1,150 lbs
- Crated Dimensions: 54" x 39" x 63"

## OPTIONS & ACCESSORIES

- 553Z050 4-Way Inlet Valve
- 554Y032 Powered vessel drains
- 681Y510 Ground reel (w/50 ft cable)
- 491Y002 8" polyurethane casters
- 490Y020 Offroad steerable trailer mount
- 661Y012 Remote Stop/Start Switch (w/25 ft cord)
- 746Y005 On-line PPM Doble Domino<sup>®</sup> Moisture Sensor
- 150Y6xx Hose w/Male x Female Cams  
(Specify length in ft, xx= 10, 15, 20, 25)
- 151Y6xx Hose w/Female Cams  
(Specify length in ft, xx = 10, 15, 20, 25)
- 165X054 Female Cam x Male NPT Fitting  
(1 ea, shipped loose)
- 165X052 Male Cam x Male NPT Fitting  
(1 ea, shipped loose)

## ORDERING INFORMATION

- SDS20-1 115 v, 1 ph, 60 hz
- SDS20-2 230 v, 1 ph, 60 hz
- SDS20-3 230 v, 3 ph, 60 hz
- SDS20-4 460 v, 3 ph, 60 hz
- SDS20-5 575 v, 3 ph, 60 hz

Also available: 50 hz power, explosion proof motor, low RPM motor (contact factory)

## RECOMMENDED SPARES

- 2 ea G-2031 Standard buna lid gasket
- 4 ea SD-1107 **Superdri**<sup>®</sup> cartridges
- 1 ea AC-822P3 **Aquacon**<sup>®</sup> cartridge



Velcon products are sold and serviced by a world-wide representative network. To order, contact Headquarters or your **LOCAL REPRESENTATIVE**:

**COMPANY HEADQUARTERS:**  
Velcon Filters, LLC  
1210 Garden of the Gods Road  
Colorado Springs, CO 80907-3410  
Phone: 1.800.531.0180 / 1.719.531.5855  
Fax: 719.531.5690  
e-mail: vfsales@velcon.com  
www.velcon.com

**MANUFACTURING PLANTS LOCATED AT:**  
Colorado Springs, Colorado  
Sylacauga, Alabama  
Henryetta, Oklahoma

**OFFICES & AFFILIATES IN:**  
Canada, Germany, Singapore & Spain



**Liquid Filtration  
and Separation  
Specialists**