



# TFSR Centrifugal Separator Project Specifications

**150 PSI MAX • 120°F MAX • SEPARABLE SOLIDS TO 50 MICRONS**

Model Number	Flow Rate @ 75"TDH	Pump HP	Connection Inlet	Connection Outlet	Purge Size
TFSR-0065	65	3	2" fpt	1.5" mpt	3/4" fpt
TFSR-0080	80	3	2.5" flng	2" mpt	3/4" fpt
TFSR-0100	100	5	3" flng	2.5" mpt	3/4" fpt
TFSR-0200	200	7.5	4" flng	3" flng	1-1/2" fpt
TFSR-0350	350	10	6" flng	4" flng	1-1/2" fpt
TFSR-0450	450	15	6" flng	5" flng	1-1/2" fpt
TFSR-0800	800	25	8" flng	6" flng	2" fpt
TFSR-1200	1200	30	10" flng	8" flng	2" fpt

TOWER-FLO® Centrifugal Separators are available in three models and shall consist of the following major components:

- Model TFS - separator only
  - Model TFSP - separator, automatic purge controls, pump, motor and motor controls
  - Model TFSR - separator, pump, motor, motor controls and continuous, zero discharge purge to a recovery bag filter.**
- Each centrifugal separator shall be shipped as a complete factory assembled and tested unit.

Project: \_\_\_\_\_ Date: \_\_\_\_\_

The TOWER-FLO® Centrifugal Separator being specified for this project is a Model **TFSR-**\_\_\_\_\_ with a flow rate of \_\_\_\_\_ GPM. \_\_\_\_ unit(s) are specified and each unit shall be equipped with the following components:

**COMPONENT SPECIFICATION**

**SEPARATOR**    \_\_\_ **Standard:** \_\_\_\_\_", \_\_\_\_\_ inlet and outlet connections, Sch 40 steel construction; exterior primer after wire brush cleaning; exterior finish coating of industrial grade enamel; 150 PSI maximum operating pressure; 120°F maximum operating temperature, \_\_\_\_\_ clean out port; inlet/outlet pressure gauges; \_\_\_\_\_" plugged port for air bleed (valve not included); and \_\_\_\_\_" fpt purge connection.

- \_\_\_ **Option:** stainless steel construction.
- \_\_\_ **Option:** ASME Code Stamped for MAWP of \_\_\_\_\_ PSIG @ \_\_\_\_\_°F.
- \_\_\_ **Option:** Maximum operating pressure of \_\_\_\_\_ PSI.
- \_\_\_ **Option:** Maximum operating temperature of \_\_\_\_\_°F.
- \_\_\_ **Option:** 22-1/2° mounting stand.

**BASE**    \_\_\_ **Standard:** 2" drip pan fabricated of structural steel angle and plate, primed and coated (same as separator coatings).

\_\_\_ **Option:** Base fabricated of stainless steel.

**PUMP**    \_\_\_ **Standard:** Non self-priming; standard fitted, horizontal flooded suction, close coupled to a TEFC motor; and capable of \_\_\_\_\_ GPM at \_\_\_\_\_ feet TDH.

\_\_\_ **Option:** Self-priming; close-coupled to motor; specified as follows:  
\_\_\_\_\_ and capable of \_\_\_\_\_ GPM at \_\_\_\_\_ feet TDH.

**MOTOR**    \_\_\_ **Standard:** Three phase; 60 Hz; TEFC; NEMA frame; rated at a service factor of 1.15 at 40°C over ambient; \_\_\_\_\_ HP; UL and CSA listed; at the following VAC, phase and Hz:  
\_\_\_\_\_.

- \_\_\_ **Option:** 575V.
- \_\_\_ **Option:** \_\_\_\_\_ High efficiency \_\_\_\_\_%; \_\_\_\_\_ Premium efficiency \_\_\_\_\_%

**STRAINER**    \_\_\_ **Standard:** \_\_\_\_\_", cast iron body; stainless steel basket; bolted cast iron cover with gasket; with necessary eccentric reducer for pump connection; and gaskets, bolts and nuts necessary for complete factory assembly.



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## COMPONENT SPECIFICATION

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**CONTROLS** \_\_\_ **Standard:** UL® Listed control panel with: NEMA 4X enclosure, IEC motor starter with running light and overload protection; transformer to convert primary supply to 120 and/or 24 VAC control power; fused branch and control circuit protection; through-the-door power disconnect; pump HOA switch with contacts for remote pump on/off from building management system. Purge Recovery adds bag monitor alarm to alert operator and building management system when Purge Recovery filter bag needs changing; including: local "Replace Filter" alarm light and alarm horn with silence button.

\_\_\_ **Standard:** Soft start motor starter for 40 HP and larger pump motors.

\_\_\_ **Option:** CUL® Listed control panel.

\_\_\_ **Option:** CSA® Listed control panel.

**PURGE RECOVERY VESSEL** \_\_\_ **Standard:** Bag filter factory plumbed from separator purge connection to pump suction; stainless steel bag filter vessel with \_\_\_" fpt inlet and outlet connections; 3/4" fpt drain; stainless steel basket; Buna gasket; eye-bolt lid; and one standard #2, 25 micron polyester filter bag; factory installed purge-outlet-to-bag-filter-inlet piping; bag-filter-outlet-to-pump-suction piping;

\_\_\_ **Option:** Quantity of \_\_\_ additional filter bags, \_\_\_ micron rated.

\_\_\_ **Option:** ASME Code Stamped for MAWP of \_\_\_ PSIG @ \_\_\_°F.

### OTHER OPTIONAL COMPONENTS:

**ISOLATION VALVE** \_\_\_ **Option:** Inlet \_\_\_\_\_.

\_\_\_ **Option:** Outlet \_\_\_\_\_.

**PURGE VALVE** \_\_\_ **Option:** \_\_\_" Automatic purge valve assembly factory plumbed and wired to control panel. Includes: a 2-way brass ball valve with 24 VAC fail-safe actuator that closes in the event of power failure; a 2-way manual brass ball valve for isolation; clear PVC pipe for viewing purge liquid clarity; all fittings for complete installation to separator purge connection; add purge control timer in control panel.

**EFFLUENT POLISHING FILTER** \_\_\_ **Option:** Cartridge filter factory plumbed from separator outlet to pump suction; stainless steel cartridge filter vessel, Buna gasket, positive lock cover clamp, with \_\_\_" fpt inlet and outlet connections, quantity of \_\_\_, \_\_\_ micron rated cartridge with Buna gaskets, spiral wound, 100 PSI MAWP and 300° F MAWT.

\_\_\_ **Option:** Quantity of \_\_\_ additional cartridges, \_\_\_ micron rated.

\_\_\_ **Option:** ASME Code Stamped for MAWP of \_\_\_ PSIG @ \_\_\_°F.