

SPARKLER FILTER (EE-7183)

DESCRIPTION:

A Sparkler Filter Apparatus (or sparkler filter press) is a highly efficient, enclosed solid-liquid separation system widely used in pharmaceutical, chemical, and food processing industries. It uses stacked, horizontal filter plates to achieve superior clarity and product recovery

UTILITIES REQUIRED:

- Water supply: Initial fill required
- Electricity Supply: 1 HP, 3 Phase, 415 V required
- Floor drain required.



TECHNICAL DETAILS

- Sparkler Outer Assembly:

Size	:	Minimum 10 inches Diameter x 12 inches Height (with top cover)
Thickness	:	Mini. 2 mm - Capacity: Minimum 10 Liter
Material of Construction (MOC)	:	Stainless Steel (SS)-304
Hinge clamp locking system for top cover of sparkler outer assembly		
Pressure Relief Valve and Pressure Gauge on top cover of sparkler outer assembly		
Pressure Gauge	:	0 to 10 Kg / cm ²
Maximum Work Pressure	:	3 kg/cm ²
Filtrate Outlet provide on bottom of sparkler outer assembly with valve		
Valve	:	0.5inch diameter, ball type
Material of Construction (MOC)	:	Gunmetal
- Sparkler Inner (Filtration) Assembly:

Sparkler Inner (Filtration) Assembly consists three parts:

 - 1) Filter Plate:

Size of Filter Plate	:	Minimum 8 inches Diameter x 1 inch Height
Thickness of Filter Plate	:	Minimum 18 Standard Wire Gauge (SWG)
Number of Filter Plate	:	6 Nos.
Material of Construction (MOC)	:	Stainless Steel (SS)-304
 - 2) Perforated Screen:

Dia. of Perforated Screen	:	200 mm
Thickness of Perforated Screen	:	1.2 mm
Number of Perforated Screen	:	6 Nos.
Diameter of Perforated (Holes)	:	20 mm
Material of Construction (MOC)	:	Stainless Steel (SS)-304
 - 3) Filter Media:

Diameter of Filter Media	:	200 mm
Number of Filter Media	:	12 Nos.
Type of Filter Media	:	Polypropylene
Filter Area of Sparkler Inner	:	0.2 m ²

(Filtration) Assembly

Central Filtrate Outlet Channel for Filtrate collection with interlocking cups

The Assembly is tightened using a Side Tie Rod Locking system

- Pump : Gear Pump with Motor
 - Type of Gear Pump : Internal Gear
 - Gear Pump head : 15meter
 - Gear Pump line size : 0.5inch diameter
 - Motor Power : 1 HP, 3 Phase, 415 V
 - Speed of Motor : 1440 RPM (Revolution Per Minute)
- Gasket:
 - Material of Gasket : Silicon
 - Tri-Clover type Fitting for Sparkler Assembly and Gear Pump line
- Slurry Tank:
 - Size : Mini. 400 mm Diameter x 450 mm Height
 - Capacity : Minimum 55 liters
 - Material of Construction (MOC) : Stainless Steel (SS)-304
 - Valve : 0.5inch diameter, ball type for drain
 - Material of Construction (MOC) : Gunmetal
- of valve
- Collecting Tank for filtrate (Separate Tank):
 - Size : Minimum 300 mm Length x 300 mm Width x 350 mm Height
 - Capacity : Minimum 30 liters
 - Material of Construction (MOC) : Stainless Steel (SS)-304
 - Valve : 0.5inch diameter, ball type for drain
 - Material of Construction (MOC) : Gunmetal
- of valve
- Cake Collection Tray (Separate Tray):
 - Cake Tray Size : Minimum 500 mm Length x 300 mm Width x 35 mm Height
 - Capacity : Minimum 5 liters - Material of Construction (MOC) of Cake Tray: Stainless Steel (SS)-304
- Structure : The entire equipment is rested on Mild Steel (MS) with paint and heavy-duty castor wheels capable of withstanding weight about dimension 700 mm Length x 900 mm Width x 500 mm Height
- An ENGLISH instruction manual consisting of experimental procedures, block Diagram etc. will be provided along with the Apparatus
- The whole set-up is well designed and arranged on a rigid structure painted with good quality paint.