



SELF-CLEANING CONE SCREENS

Customizable Shallow Water Screen Solutions



INTAKE SCREENS, INC.

ISI cone screens are a rugged and reliable self-cleaning screen solution for challenging intake conditions. Designed to provide maximum screen area for any given water depth, we offer cone screens in a wide variety of sizes and drive types to suit the needs of your site.

The mechanical brushing action prevents debris buildup, sedimentation, biofouling, and increased head loss at the screen. ISI cone screens are a proven technology for irrigation, municipal, and industrial water supplies.



HOW IT WORKS

The screen unit consists of a conical-shaped wedgewire screen, an external brush cleaning system, and brush drive assembly with controls. Gravity, siphon, or pumping is used to convey water through the screen.

The screen is sized to achieve low approach and through-screen velocities to meet head loss and fish protection requirements and minimize debris accumulation.

Screen configurations can be customized to include steel or concrete bases, piping, and slide gates as appropriate for the site.

Brush-cleaning frequency and duration is programmed to meet site conditions using the provided control panel (excluding turbine drive screens).



INTAKE SCREENS, INC.

www.isi-screens.com

FEATURES

Flow rates up to 60 cfs (26,930 gpm; 38.8 MGD; 6,116 m³/h) from a single screen with the opportunity to have multiple screens at a site.

Screen slot sizes ranging from 0.5 to 9-mm.

Brush-cleaning drive types to best suit site conditions: electric, hydraulic (can be solar powered), and turbine.

Screen materials including Type 304 and 316 stainless steel with custom materials available (e.g., 2507 super duplex stainless steel).

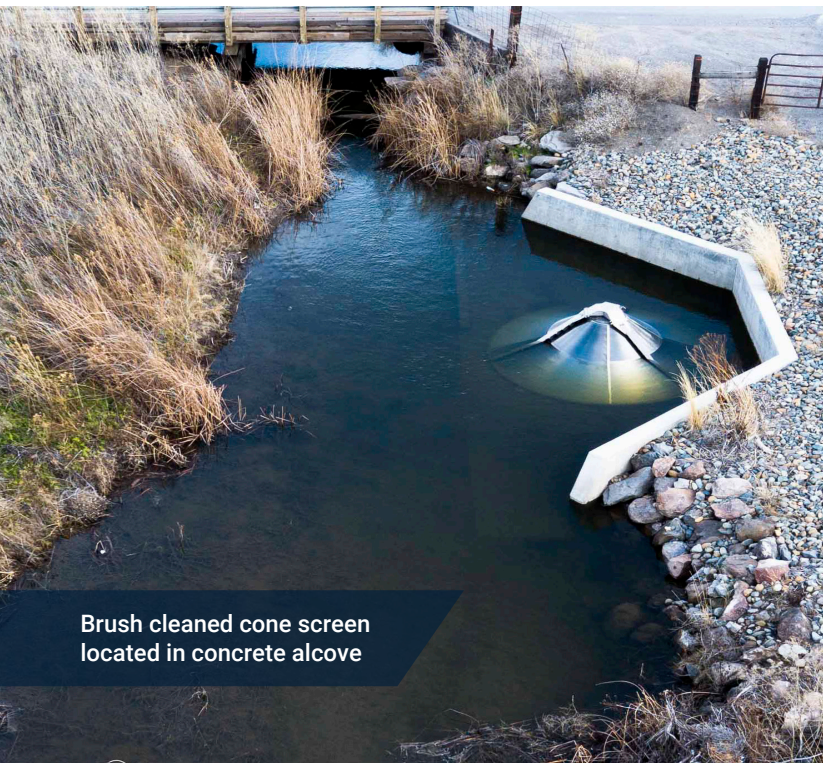
Sized to be compliant with state, federal, and international fish protection requirements.

Optional riverine flow baffle distributes flow evenly across the screen surface.

Control panel to match customer equipment and remote monitoring and control needs.

Sediment jetting systems and screen depth adjustment rings provided as optional equipment.

Solar powered brush cleaned cone screen with knife gate at remote project location

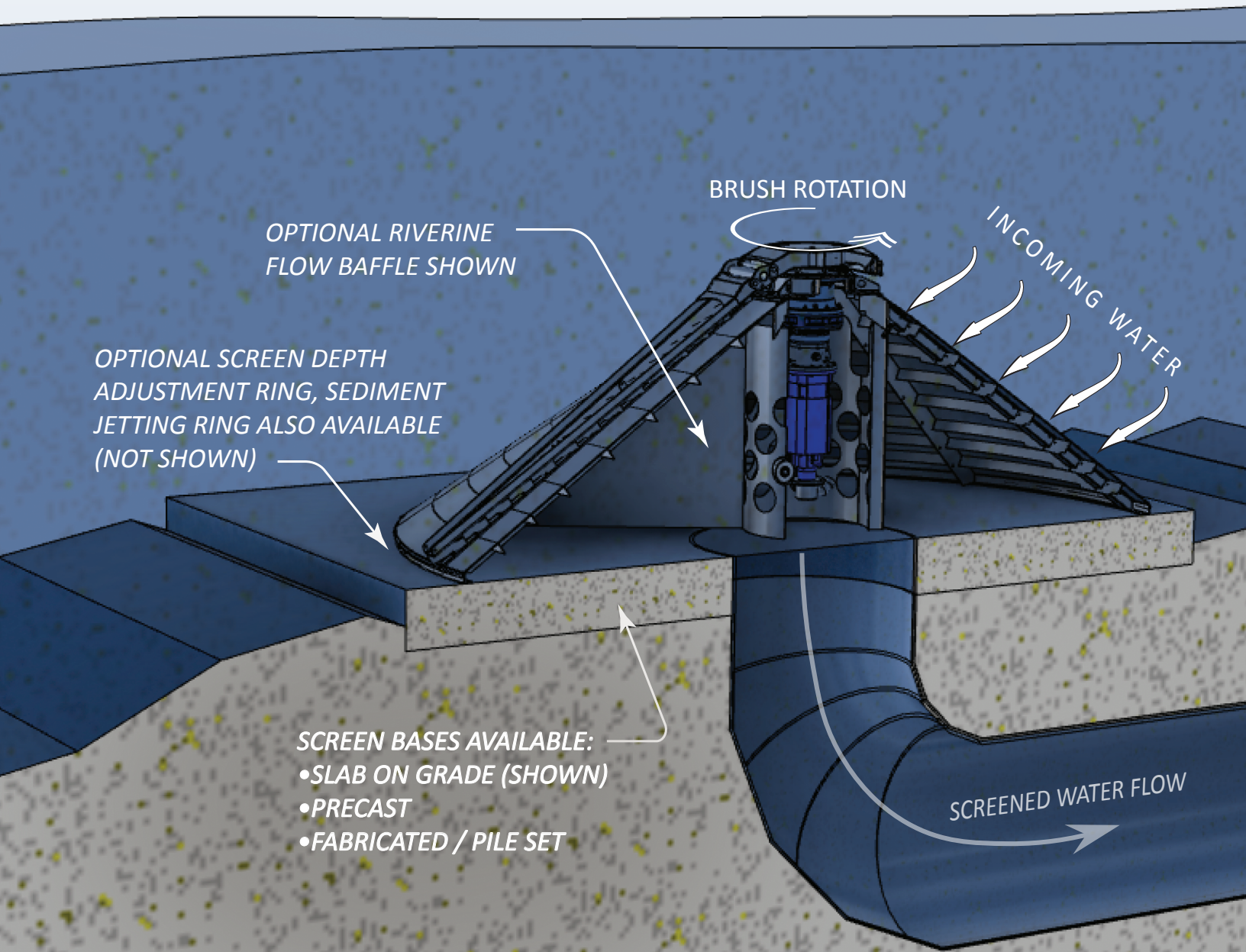


Brush cleaned cone screen located in concrete alcove

BENEFITS

- ✓ **Ideal solution for shallow water** rivers and streams, tidal estuaries, backwater areas, silty conditions, and heavy debris.
- ✓ **Designed to exceed** fish protection requirements
- ✓ **Protects pump** and other downstream equipment from clogging debris
- ✓ **Low head loss**, low maintenance, and minimal power input
- ✓ **Easy installation** and removal

SCREEN DESIGN & OPERATION



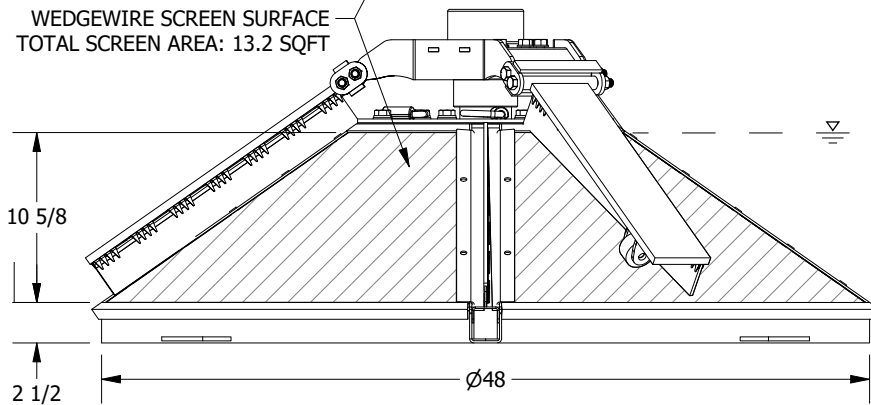
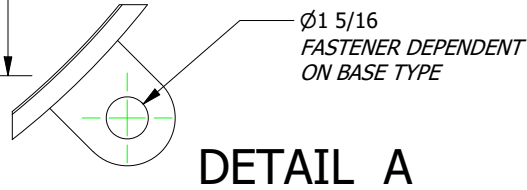
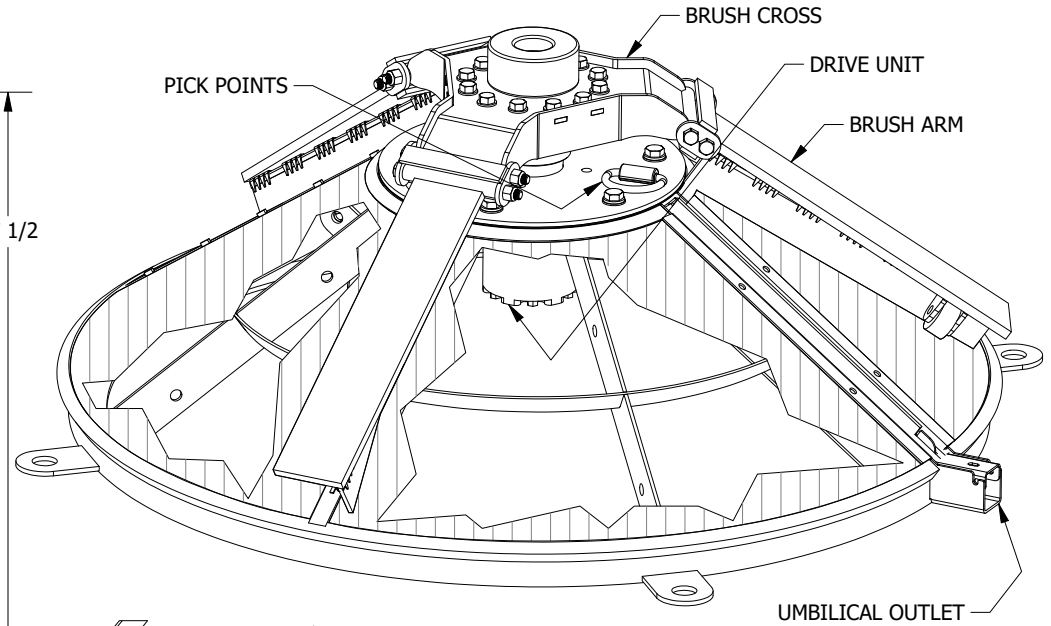
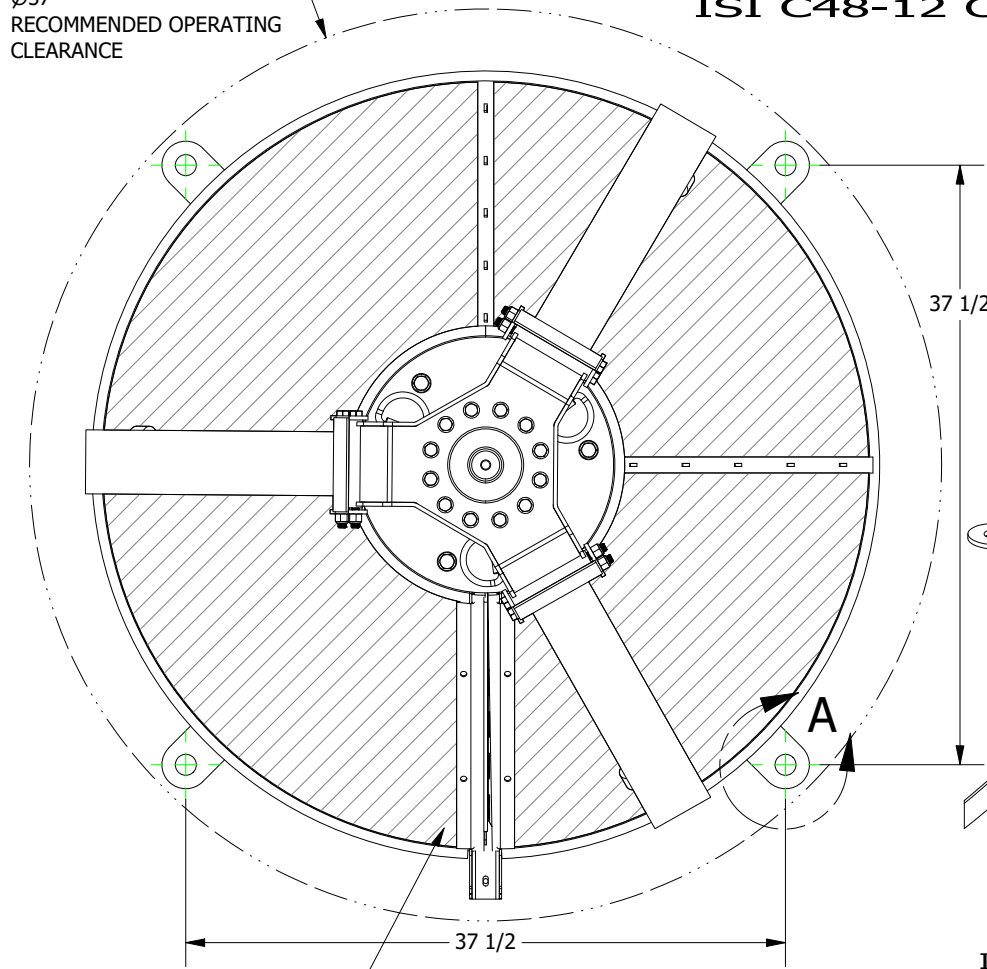
DESIGN AND OPERATION SUPPORT

Working with ISI means access to over 25 years of experience in intake screen design and fabrication including design-build project delivery. Detailed documentation on operation and maintenance provided with all ISI screens.

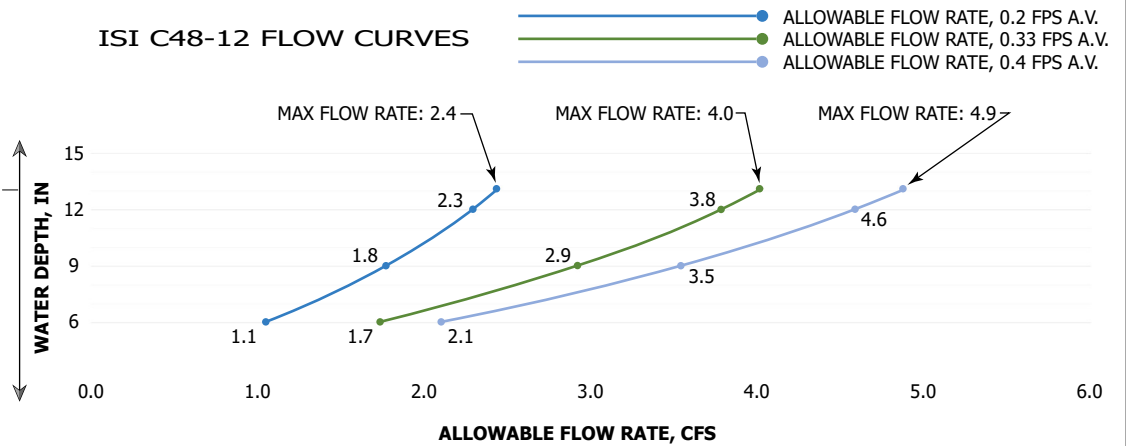
On-site installation guidance and operator training available.

Ø57
RECOMMENDED OPERATING
CLEARANCE

ISI C48-12 CONE SCREEN



ISI C48-12 FLOW CURVES



DATE	3-8-2022
REV	A
BY	MAR

MODEL No.
C48-12

MATERIAL
☐ 304 SS
☐ 316 SS
☐ OTHER

WEDGEWIRE
☐ 69V, 1.75 mm SLOT SIZE, 50% OA
☐ OTHER

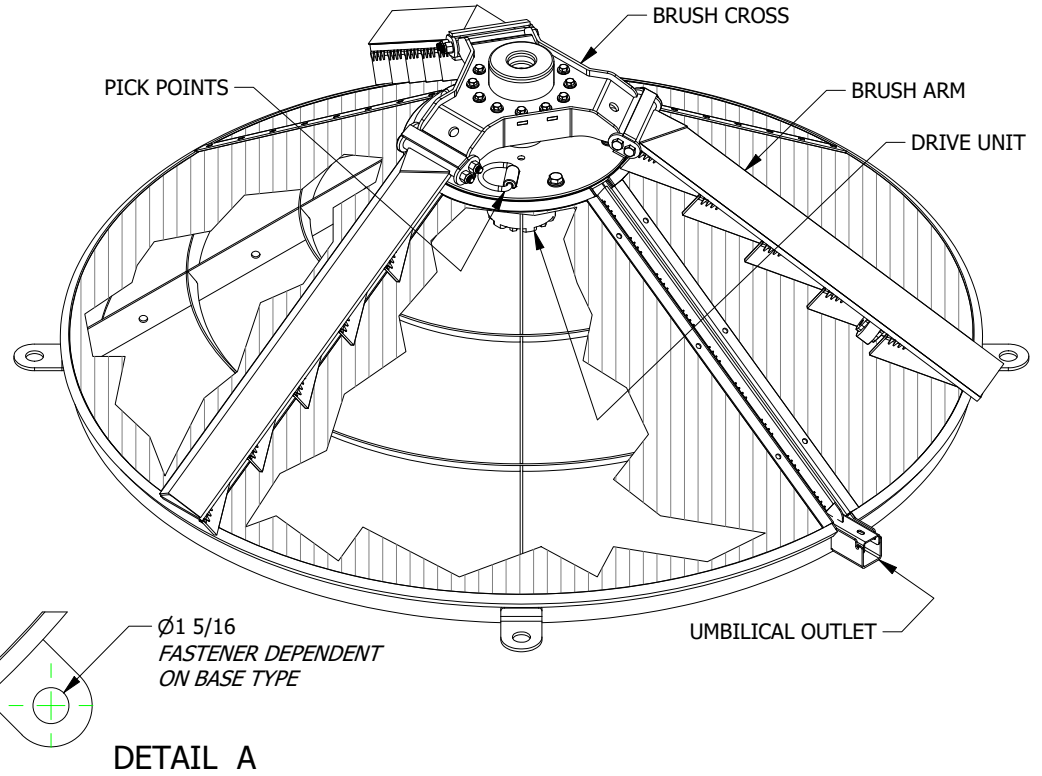
DRIVE TYPE
☐ ELECTRIC
☐ HYDRAULIC
☐ OTHER

WEIGHT
330 - 400 lb

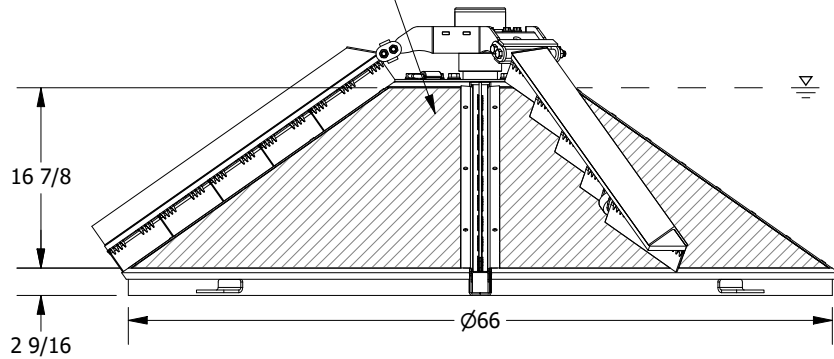
SUPPLY POWER
☐ 460 VAC
☐ 240 VAC
☐ 208 VAC
☐ 120 VAC
☐ 24 VDC
☐ NO POWER

Ø82
RECOMMENDED OPERATING
CLEARANCE

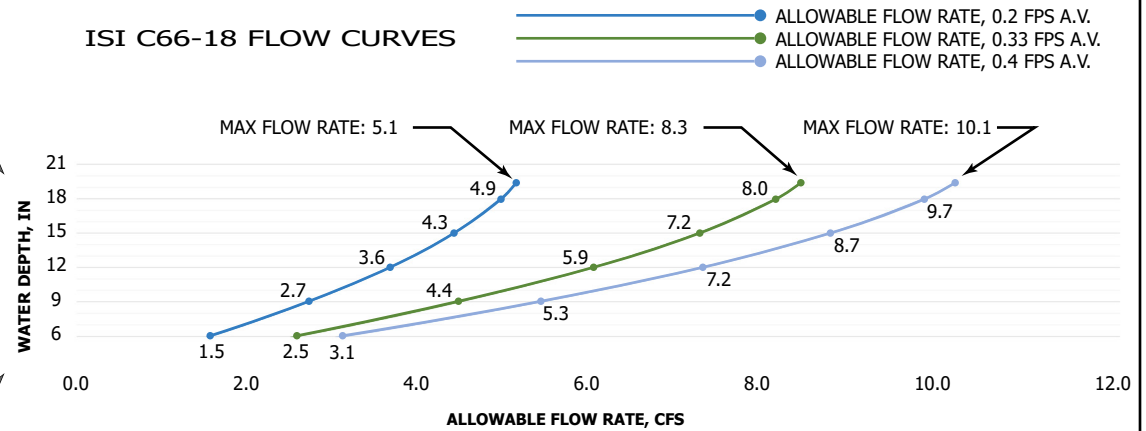
ISI C66-18 CONE SCREEN



WEDGEWIRE SCREEN SURFACE
TOTAL SCREEN AREA: 26.8 SQFT



ISI C66-18 FLOW CURVES



DATE 3-9-2022
REV A
BY MAR

MODEL No.
C66-18

MATERIAL
☐ 304 SS
☐ 316 SS
☐ OTHER

WEDGEWIRE
☐ 69V, 1.75 mm SLOT SIZE, 50% OA
☐ OTHER

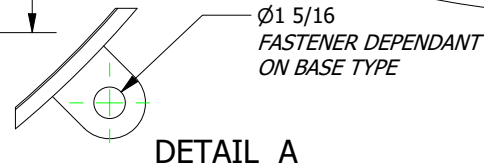
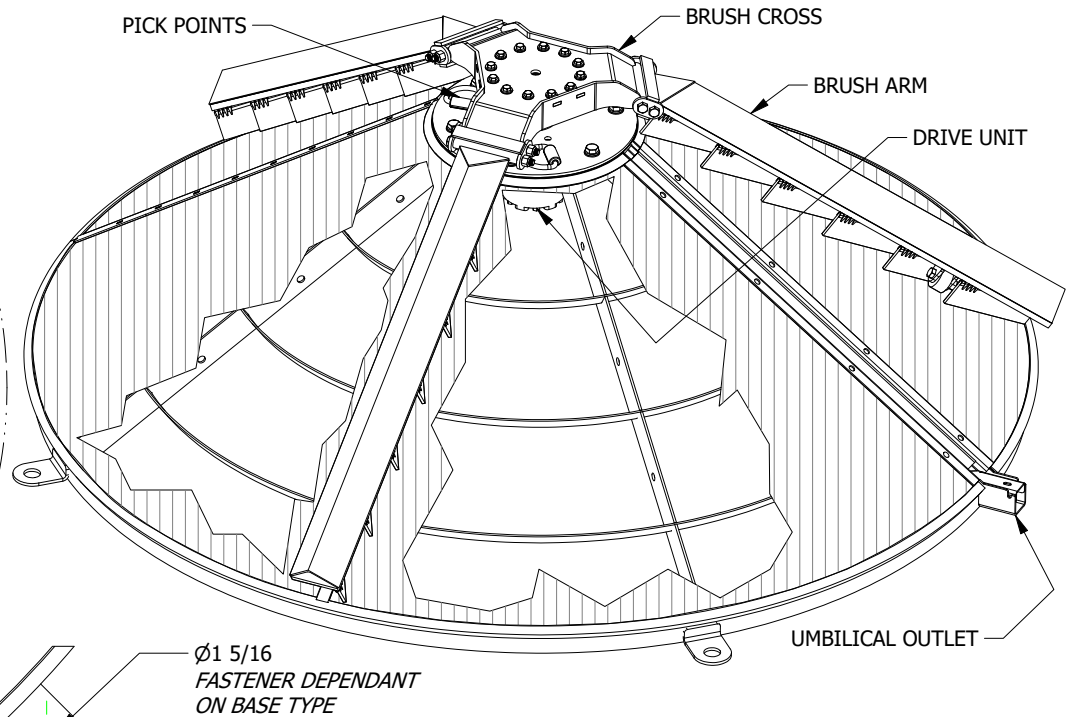
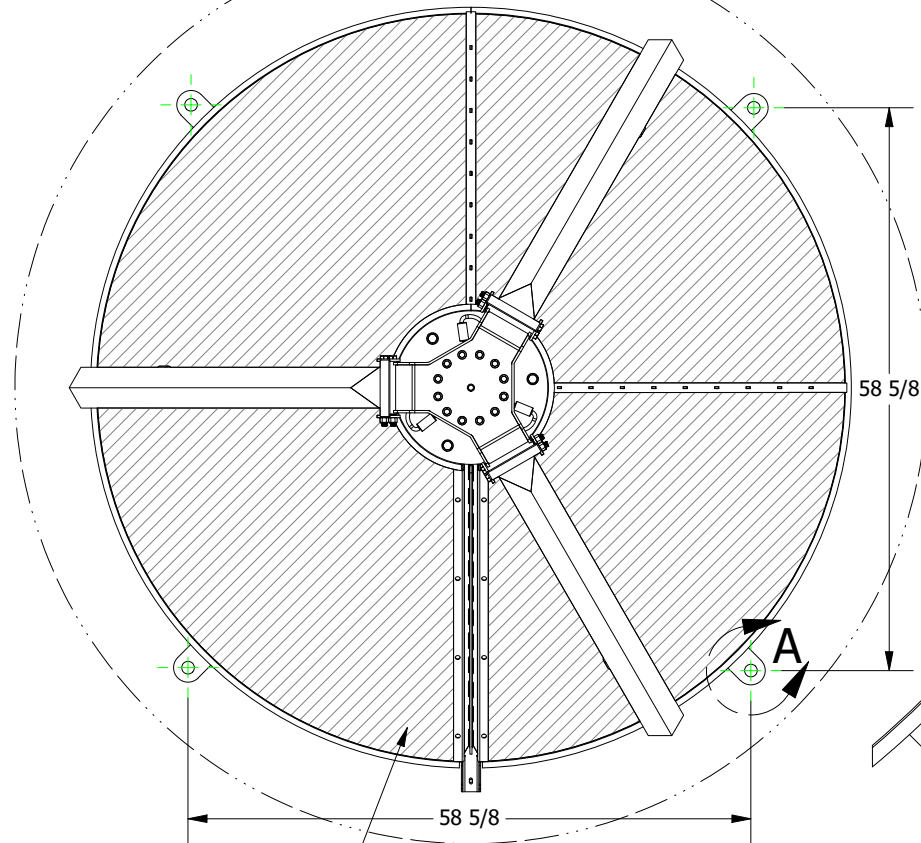
DRIVE TYPE
☐ ELECTRIC
☐ HYDRAULIC
☐ OTHER

WEIGHT
480 - 540 lb

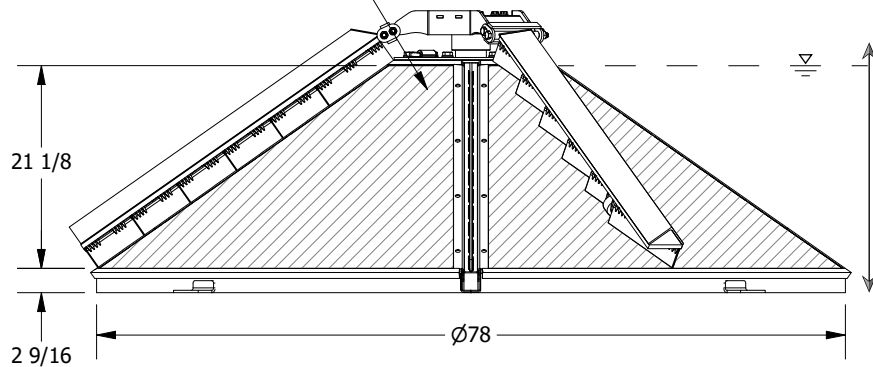
SUPPLY POWER
☐ 460 VAC
☐ 240 VAC
☐ 208 VAC
☐ 120 VAC
☐ 24 VDC
☐ NO POWER

Ø95
RECOMMENDED OPERATING
CLEARANCE

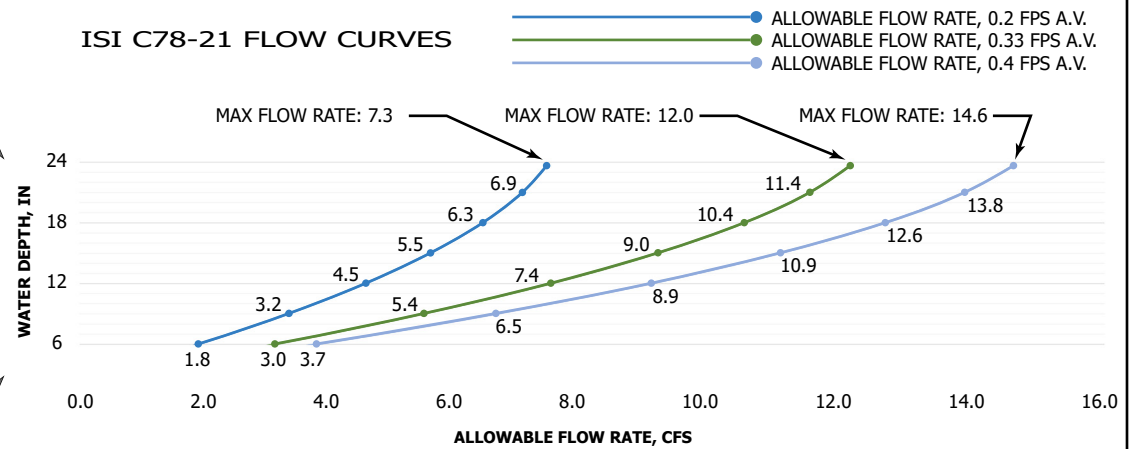
ISI C78-21 CONE SCREEN



WEDGEWIRE SCREEN SURFACE
TOTAL SCREEN AREA: 38.4 SQFT



ISI C78-21 FLOW CURVES



DATE 3-9-2022
REV A
BY MAR

MODEL No.
C78-21

MATERIAL
☐ 304 SS
☐ 316 SS
☐ OTHER

WEDGEWIRE
☐ 69V, 1.75 mm SLOT SIZE, 50% OA
☐ OTHER

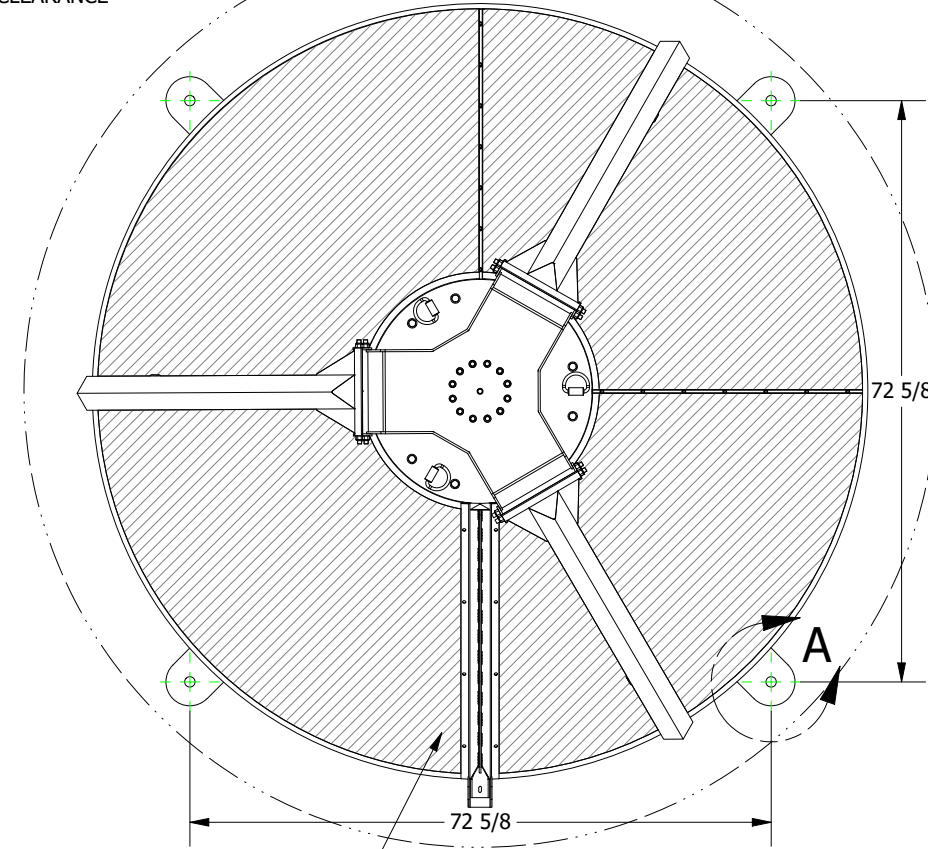
DRIVE TYPE
☐ ELECTRIC
☐ HYDRAULIC
☐ OTHER

WEIGHT
600 - 660 lb

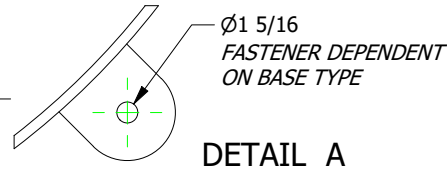
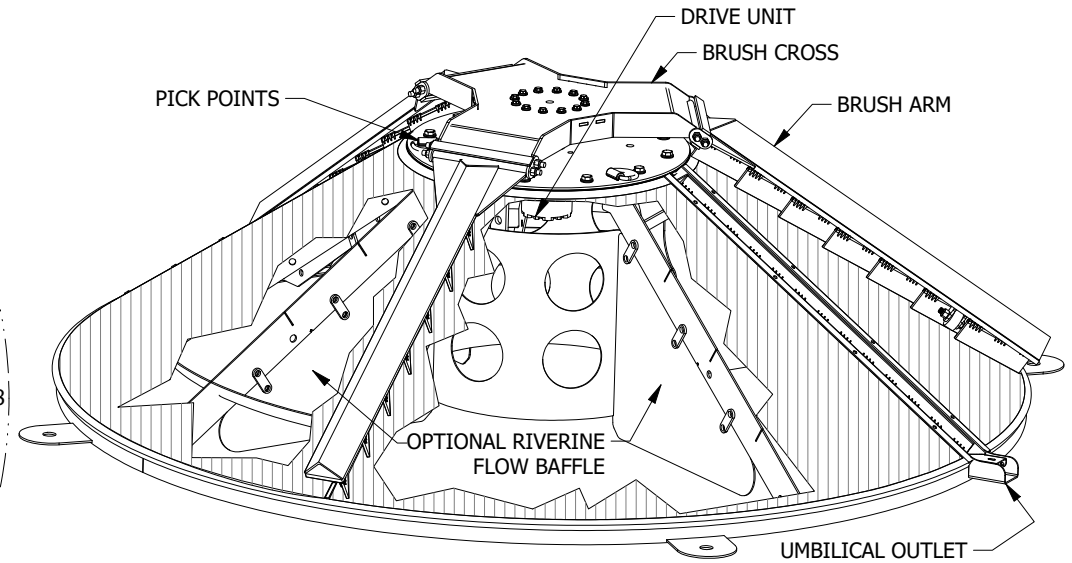
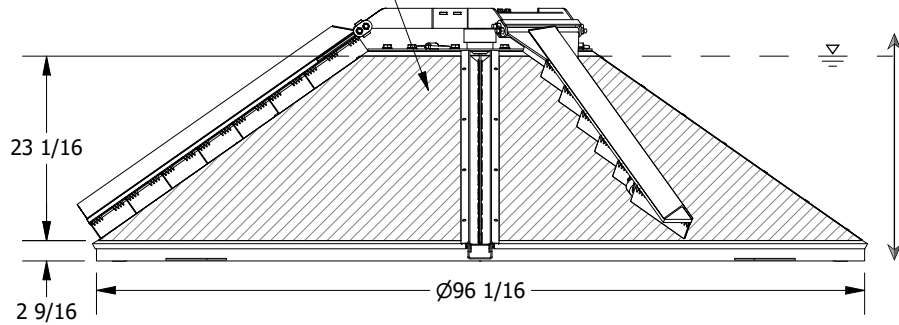
SUPPLY POWER
☐ 460 VAC
☐ 240 VAC
☐ 208 VAC
☐ 120 VAC
☐ 24 VDC
☐ NO POWER

Ø114
RECOMMENDED OPERATING
CLEARANCE

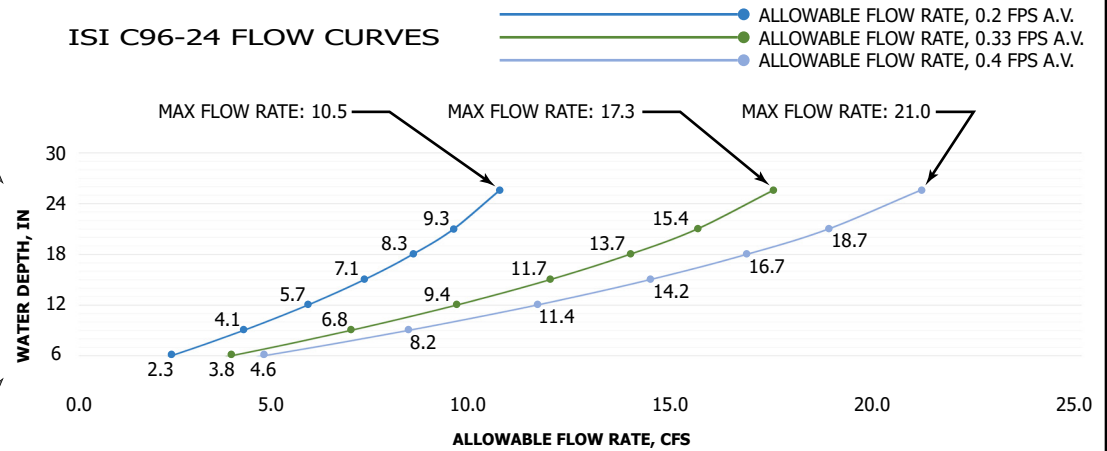
ISI C96-24 CONE SCREEN



WEDGEWIRE SCREEN SURFACE
TOTAL SCREEN AREA: 54.90 SQFT



ISI C96-24 FLOW CURVES



DATE 3-9-2022
REV A
BY MAR

MODEL No.
C96-24

MATERIAL
☐ 304 SS
☐ 316 SS
☐ OTHER

WEDGEWIRE
☐ 69V, 1.75 mm SLOT SIZE, 50% OA
☐ OTHER

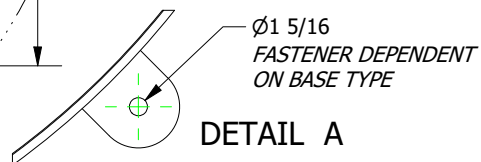
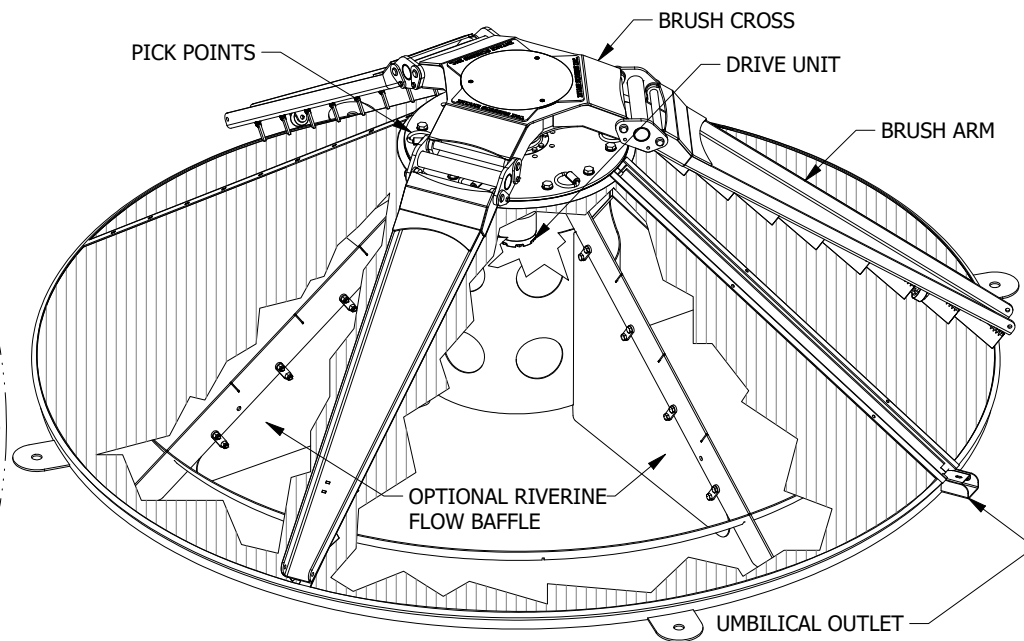
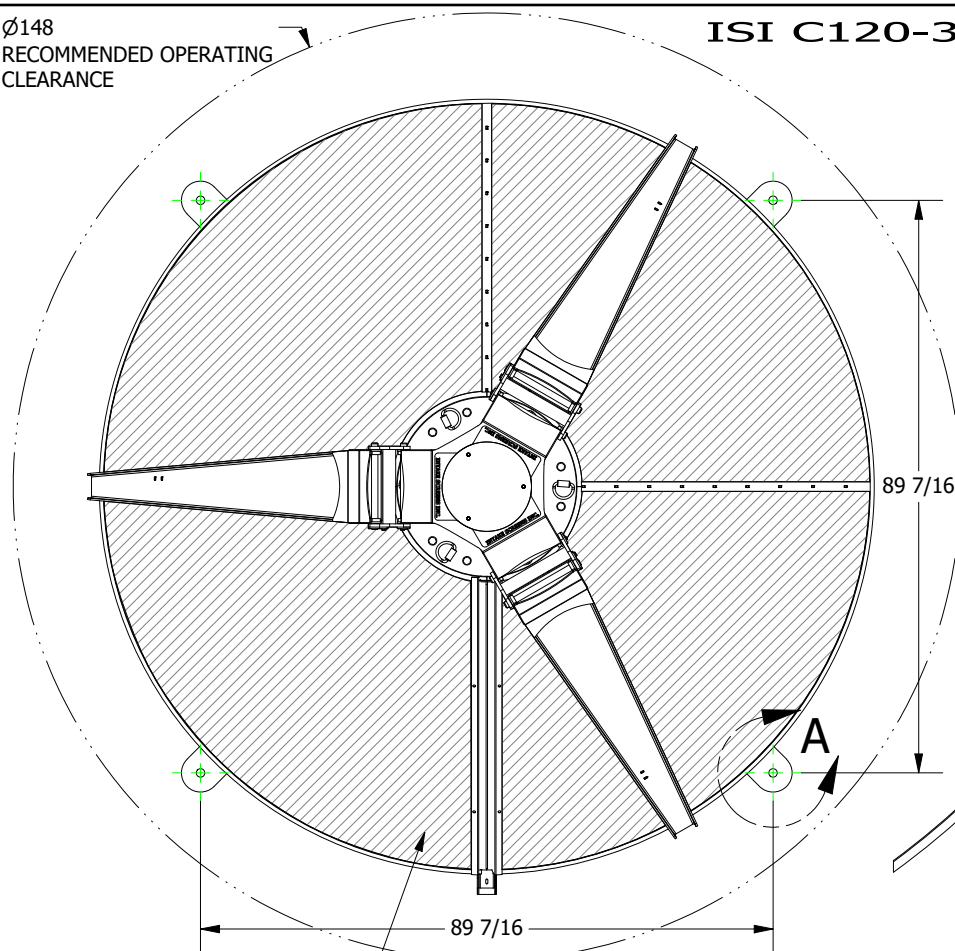
DRIVE TYPE
☐ ELECTRIC
☐ HYDRAULIC
☐ OTHER

WEIGHT
810 - 875 lb

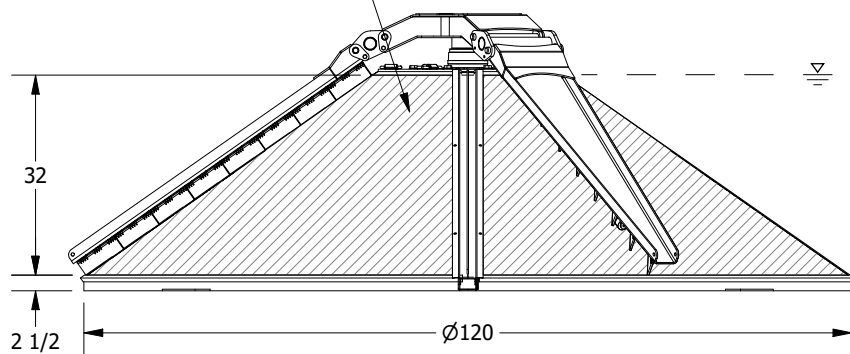
SUPPLY POWER
☐ 460 VAC
☐ 240 VAC
☐ 208 VAC
☐ 120 VAC
☐ 24 VDC
☐ NO POWER

Ø148
RECOMMENDED OPERATING
CLEARANCE

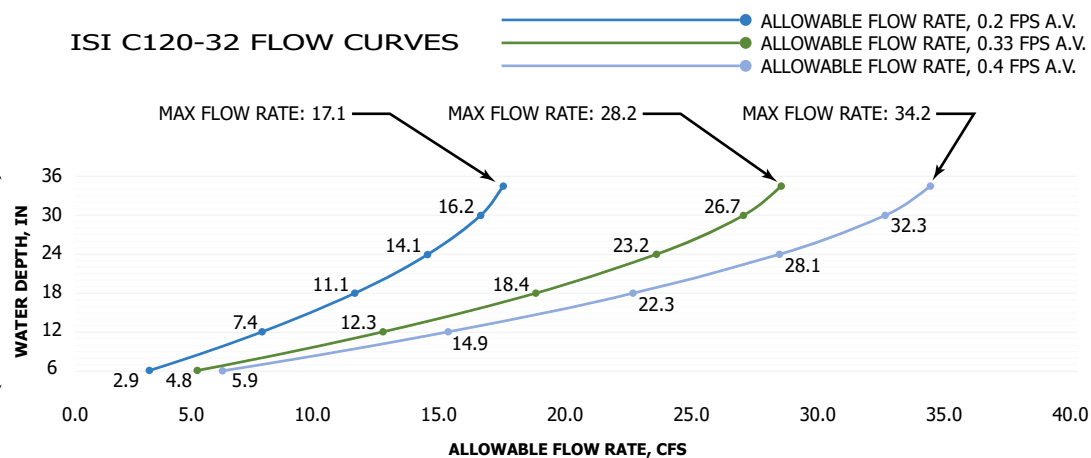
ISI C120-32 CONE SCREEN



WEDGEWIRE SCREEN SURFACE
TOTAL SCREEN AREA: 89.27 SQFT



ISI C120-32 FLOW CURVES



DATE 3-8-2022
REV A
BY MAR

MODEL No.
C120-32

MATERIAL
☐ 304 SS
☐ 316 SS
☐ OTHER

WEDGEWIRE
☐ 69V, 1.75 mm SLOT SIZE, 50% OA
☐ OTHER

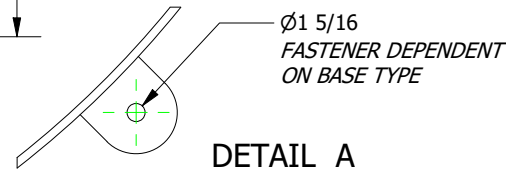
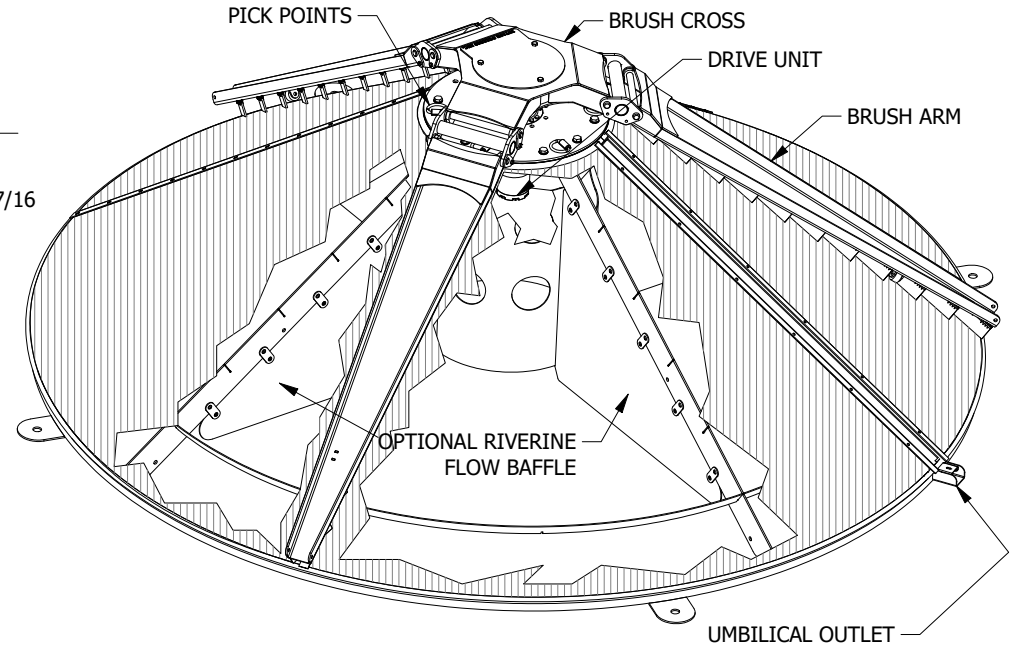
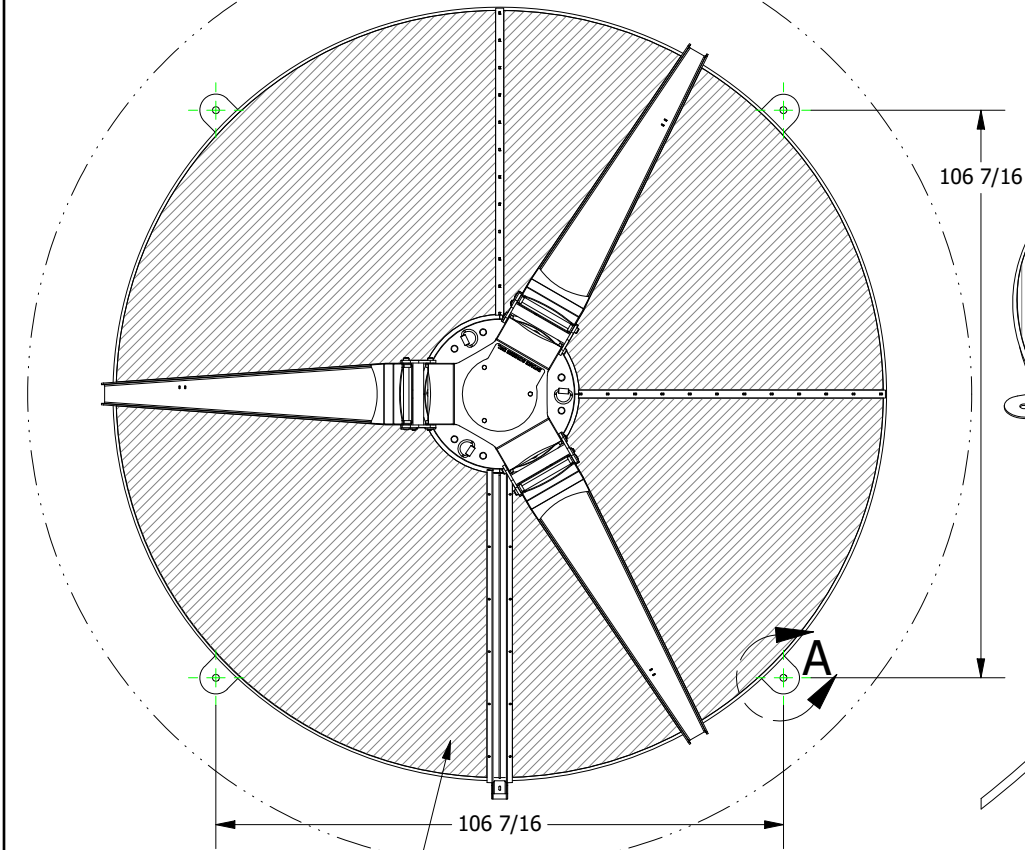
DRIVE TYPE
☐ ELECTRIC
☐ HYDRAULIC
☐ OTHER

WEIGHT
1350 - 1780 lb

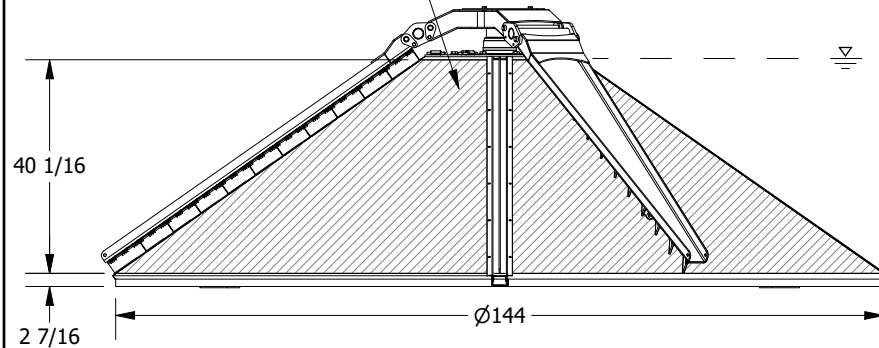
SUPPLY POWER
☐ 460 VAC ☐ 120 VAC
☐ 240 VAC ☐ 24 VDC
☐ 208 VAC ☐ NO POWER

Ø177
RECOMMENDED OPERATING
CLEARANCE

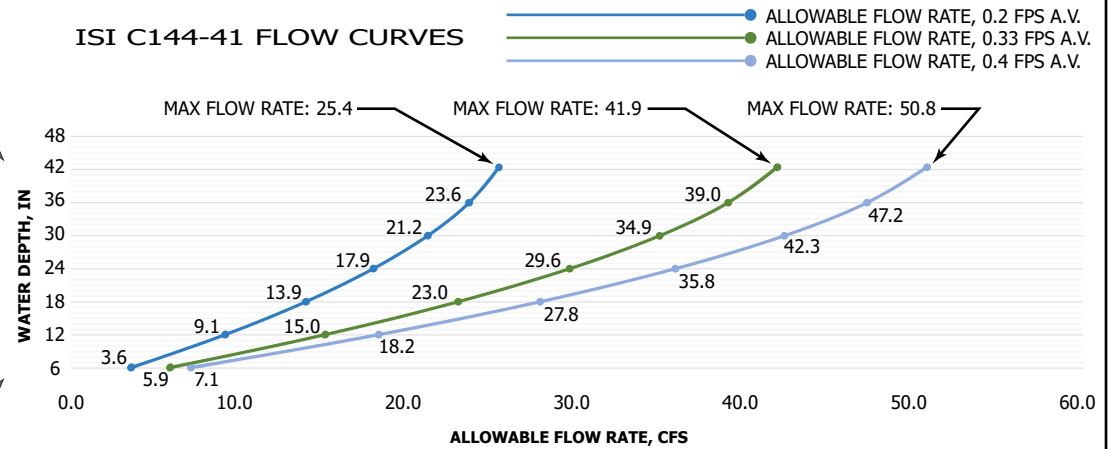
ISI C144-41 CONE SCREEN



WEDGEWIRE SCREEN SURFACE
TOTAL SCREEN AREA: 131.76 SQFT



ISI C144-41 FLOW CURVES



DATE 3-8-2022
REV A
BY MAR

MODEL No.
C144-41

MATERIAL
☐ 304 SS
☐ 316 SS
☐ OTHER

WEDGEWIRE
☐ 69V, 1.75 mm SLOT SIZE, 50% OA
☐ OTHER

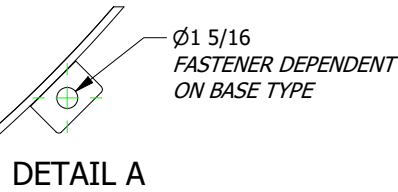
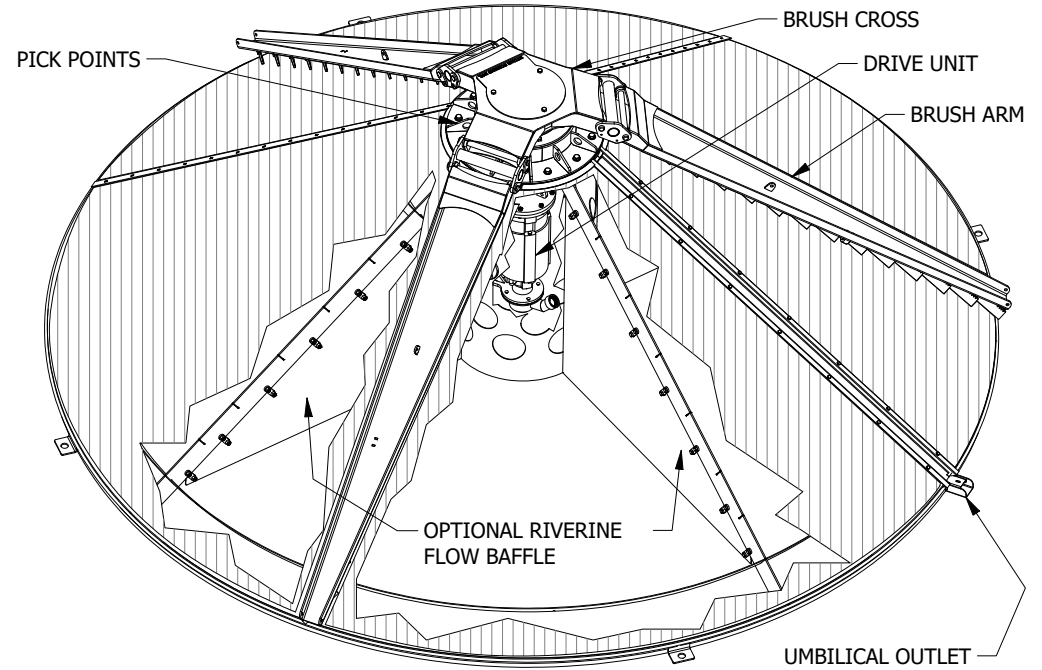
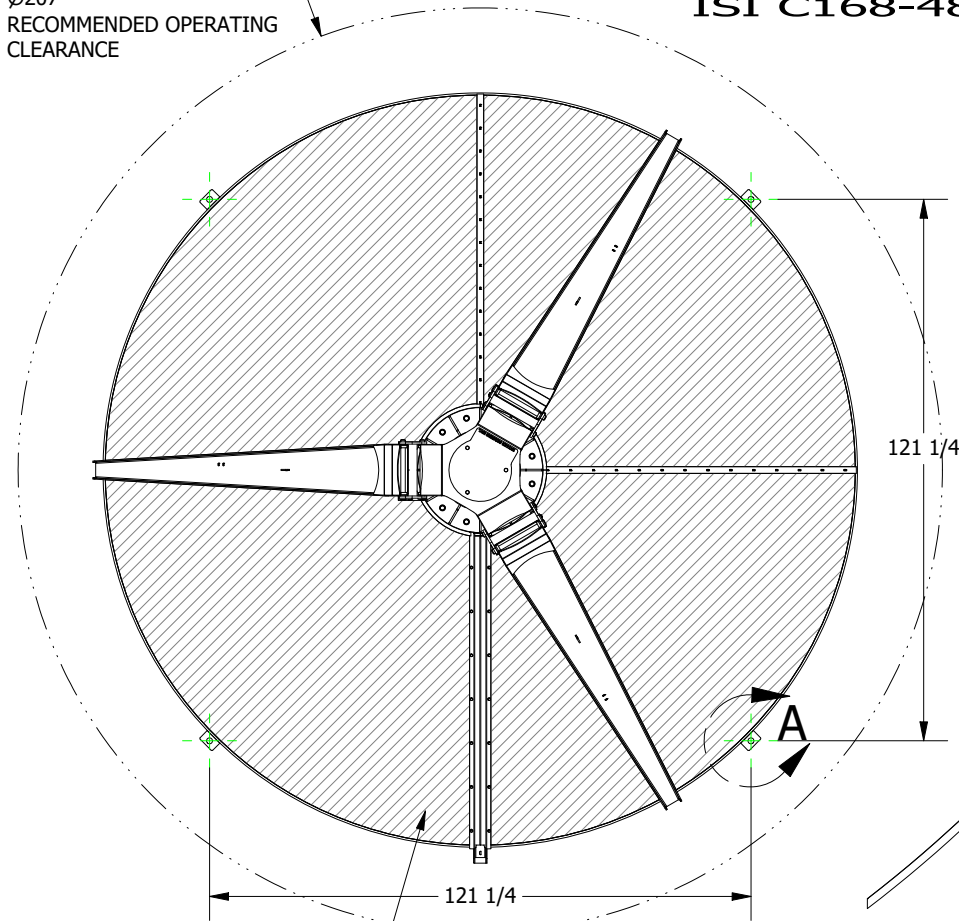
DRIVE TYPE
☐ ELECTRIC
☐ HYDRAULIC
☐ OTHER

WEIGHT
1650 - 2055 lb

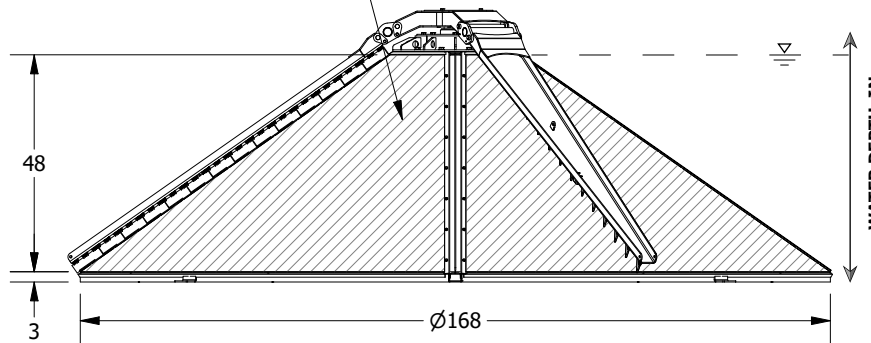
SUPPLY POWER
☐ 460 VAC
☐ 240 VAC
☐ 208 VAC
☐ 120 VAC
☐ 24 VDC
☐ NO POWER

Ø207
RECOMMENDED OPERATING
CLEARANCE

ISI C168-48 CONE SCREEN

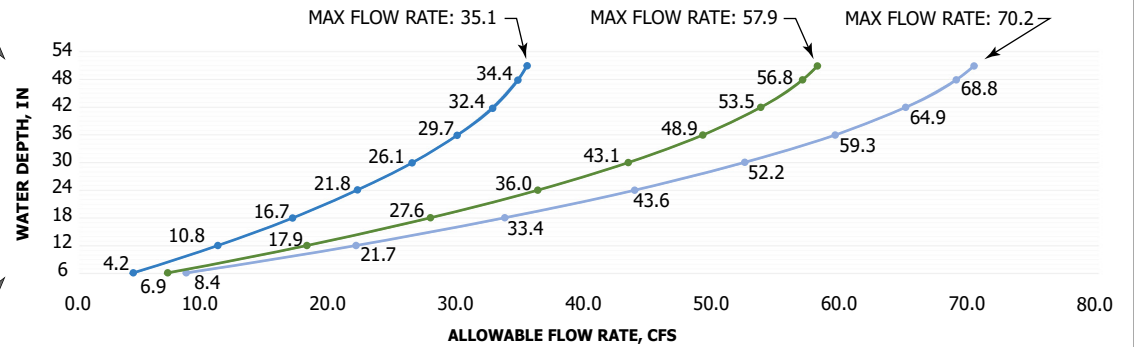


WEDGEWIRE SCREEN SURFACE
TOTAL SCREEN AREA: 181.3 SQFT



ISI C168-48 FLOW CURVES

- ALLOWABLE FLOW RATE, 0.2 FPS A.V.
- ALLOWABLE FLOW RATE, 0.33 FPS A.V.
- ALLOWABLE FLOW RATE, 0.4 FPS A.V.



DATE	3-7-2022
REV	A
BY	MAR

MODEL No.
C168-48

MATERIAL
☐ 304 SS
☐ 316 SS
☐ OTHER

WEDGEWIRE
☐ 69V, 1.75 mm SLOT SIZE, 50% OA
☐ OTHER

DRIVE TYPE
☐ ELECTRIC
☐ HYDRAULIC
☐ OTHER

WEIGHT
2650 - 3200 lb

SUPPLY POWER
☐ 460 VAC
☐ 240 VAC
☐ 208 VAC
☐ 120 VAC
☐ 24 VDC
☐ NO POWER