



BUILT ON THESE PRINCIPLES...

Performance and Durability

EPIC Flight Decks are designed with performance and durability in mind. The EPIC structural components provide strength, enhanced safety, security, and simplicity.

Construction with a Purpose

The unique "U" shaped channel beam construction stiffens the structure and distributes the operating loads while shielding the screw pump from unequal thermal expansion.

Removability

The unique modular design of the EPIC Flight Deck allows quick and easy partial or complete removal with all the components available and assembled for reinstallation.

Serviceability

Ultra-violet inhibitors are blended into the thermoset resin. Additionally, the glass reinforcement is protected by a surfacing veil that inhibits permeation of liquids to the glass fibers.

EPIC FLIGHT DEK FEATURES AND YOUR BENEFITS

Increased safety – creates a safer work environment

Protects screw body from unequal thermal expansion

Extremely cost effective

Modular construction

Easy installation – no special tools or labor required

Stainless steel attachment hardware

High strength-to-weight ratio

Lightweight – 75% less than steel, 30% less than aluminum

Corrosion resistant

Dimensionally stable

Non-conductive

No maintenance

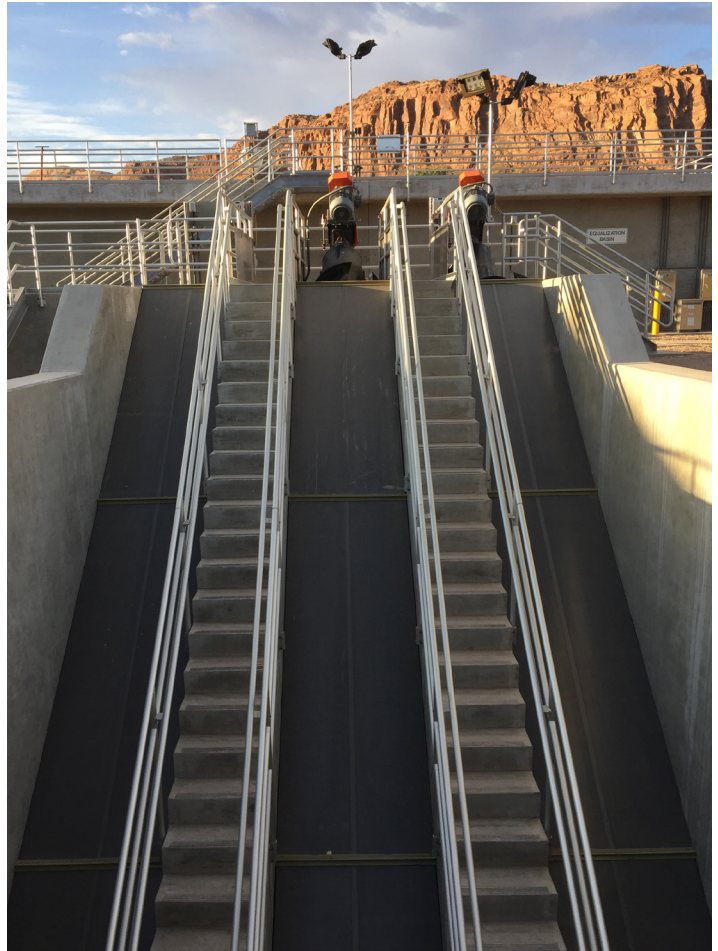
UV Stabilized

OSHA Safety Orange (standard)

Paintable

Reduces misting

Horizontal load bearing of 30 lbs. per sq. ft. (147 kg/m²) minimum



SPECIFICATIONS: "FLIGHT DEK" FRP SCREW PUMP COVERS

Part 1 - General

- 1.1 Related Section – _____ EPIC Open Flight Screw Pumps
- Division-Specifications sections apply to work of this section.
- 1.2 **QUALITY ASSURANCE:**
The named equipment supplier and the detailed specifications, establish the minimum acceptable standards of material and workmanship. In addition to requirements of the Specifications, all work performed shall be in accordance with approved trade practices and manufacturers recommendations. All equipment shall perform as specified and accessories shall be provided as required for satisfactory operation.
- 1.3 **WARRANTY:**
The Equipment Manufacturer shall warrant against failure due to defects in the material and workmanship for a period of one (1) year from the date of installation or fifteen (15) months from shipping date whichever comes first.

Part 2 - Products

- 2.1 **GENERAL:**
- A. FRP screw pump covers shall be designed for durability and to prevent ultraviolet light exposure to the influent screw pumps. The covers shall be of modular construction, be designed to be attached to the concrete walls that form the screw pump trough and shall be removable in sections to gain access to the screw pump. They shall extend the full flight length.
1. Performance criteria:
- Each cover shall protect the screw body from unequal thermal expansion.
 - Each cover shall provide horizontal load bearing of not less than 30 psf.
 - Each cover shall be corrosion resistant.
 - Each cover shall be non-magnetic, nonhygroscopic, non-conductive and UV stabilized.
 - The covers shall have a thermal expansion of 5.2 x 10⁻⁶ inch per inch of length per degree Fahrenheit change.
2. Manufacturer: The covers shall be 'FLIGHT DEKS' supplied by:
EPIC INTERNATIONAL, INC. Ashland, Virginia, 23005 USA, (804)-798-3939
- 2.2 **MATERIALS/EQUIPMENT:**
- A. Safe-Plank Cover Sections
1. The Safe-Plank cover sections shall be constructed of a pultruded fiberglass reinforced composite laminate with a minimum glass loading of 50%. The composite laminate shall be constructed of polyester resin with UV stabilizers, single-strand fiberglass rovings, continuous strand mat, and surfacing veil.
2. The Safe-Plank cover sections shall be standard machinery gray color with pigments that shall be uniform color throughout the laminate. The covers shall be able to be factory or field painted.
3. The Safe-Plank cover sections shall be uniform in shape and dimension. The individual cover pieces shall be a maximum of twelve (12) feet long and each cover section shall consist of standard 12 and 24 inches wide planks with the edge sections abutting a trough wall cut longitudinally as required to fit the screw pump trough inside width as specified. The Safe-Plank gauge shall be a minimum of 0.125-inch and the minimum sectional depth shall be 2.00 inch. The weight of each 12-inch and 24-inch cover piece shall not exceed 2.6 # and 5.1 # per linear foot respectively.
4. Installation procedures and instructions, as supplied by the manufacturer, shall be carefully followed. Installation of the interlocking Safe-Plank pieces which span the entire width of the influent screw pump channel shall form a continuous panel section. No part of the cover or the transverse support beams shall come into contact with either the water surface or the Screw Pump and shall not affect the operation or performance of the screw pump.

Part 2 - Products, Continued

- 2.2
- A. 5. Panel section lengths shall not exceed (12) twelve feet but with the uppermost panel section fabricated as required to cover the specified overall length.
- Transverse Support Beams:
1. The support beams shall be constructed of the same material as the cover sections and shall consist of fabricated composite "I" beam construction.
2. Each ten (12) ft. section of the cover panel which is angled shall be supported at each end by a main beam and at the center by an intermediate beam.
- Horizontal sections of Flight Dek covers shall incorporate additional transverse support beams as required to provide increased load bearing capacity.
3. Each main and intermediate support beam will be anchored to the concrete trough walls with clip angles anchored by stainless steel hardware. Two (2) clip angles shall be supplied for each end of each support beam for a total of four (4) per beam.
- B. Hold-Down Angles:
1. One (1) hold-down angle shall be supplied for each end of each panel section to secure the Safe-Plank cover pieces. Angles shall be bolted to a section that extends above the main support beams as they are assembled. Hold-down angles shall be removable to allow partial or complete access to the screw pump without the removal of the support beams.
- C. Assembly Hardware:
1. Each end of each transverse support beam shall be anchored to the concrete trough by a minimum of two (2) stainless steel bolts. Bolts shall be a minimum of 3/8-inch diameter by 2.75 inches long. Shear load in 4,000 lbs. psi concrete shall not be greater than 3,151 lbs. per anchor.
- 2.3 **SHOP PAINTING/FINISHES:**
- A. All surfaces shall be cleaned of dirt, grease, oil, rust, scale or other injurious substances.
- B. The FRP influent screw pump covers shall be painted by the Contractor if a color other than the standard machinery gray provided is preferred by the Client.

VISIT EPICINTL.COM FOR FULL SPECIFICATIONS



PARTIAL INSTALLATION LIST

St. George, UT

Dothan, AL

Sierra Conservation, CA

Erwin, NC

Dublin, Ireland

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Delaware, OH

Gdansk, Poland

Streetsboro, OH

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Environmental Products for Innovative Conservation

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