Water & Wastewater Products

Precast Concrete

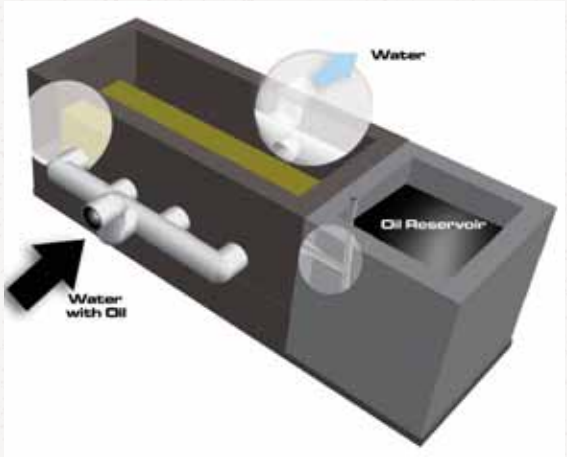
QUALITY

Water & Wastewater Products

Precast Concrete Oil & Grit Interceptors

Due to increasing stormwater and industrial wastewater discharge regulations, more and more industries are installing precast concrete oil and grit interceptors. Utilizing the concepts of Stoke's law and simple physics, these low-maintenance interceptors easily remove free oil and suspended solids from wastewater. With proper design considerations, you can successfully control and regulate the release of pollutants into the environment.

Any industrial facility, manufacturer, parking garage or gas station can utilize an oil and grit interceptor as a Best Management Practice to protect the environment and our valuable freshwater resources. Precast concrete manufacturers offer a variety of stock and custom designs that will meet and exceed the need of any project. With proper design considerations, precast concrete interceptors can be buried in any convenient location easily handling HS-20 loading. The entire system arrives at the job ready for installation offering cost savings to any project. Top access ports make for quick and painless routine maintenance and monitoring.



Why Precast Concrete?

- Superior strength and durability
- Quality control
- Availability and ease of installation
- Reduced weather dependency
- Environmentally friendly
- Monitoring systems
- Resists buoyancy
- Corrosion resistant

Water & Wastewater Products

Oil & Grit Interceptors

QUALITY PERMANENCE VALUE

Precast concrete oil and grit interceptors have several advantages over competing materials.

Superior strength and durability

The strength of precast concrete gradually increases over time. Other materials can deteriorate, experience greater creep and stress relaxation, lose strength and/or deflect over time. The load-carrying capacity of precast concrete is derived from its own structural qualities and does not rely on the strength or quality of the surrounding backfill materials. Precast concrete oil and grit interceptors can easily support vehicular loads from HS-20 loading and are capable of receiving industrial water at elevated temperatures. Competing materials such as fiberglass and high-density polyethylene (HDPE) may lose structural integrity at such elevated temperatures.

Quality control

Because precast concrete products are produced in a controlled environment, they exhibit high quality and uniformity. High-quality sealants and gaskets offer a superior solution to watertightness requirements. Standard watertight sealants are specially formulated to adhere to precast concrete, making watertight multiple-seam precast concrete structures possible.

Availability and ease of installation

Because precast concrete oil and grit interceptors are manufactured well in advance of installation, they are ready for transportation to the job site at a moment's notice and are quickly installed in a matter of minutes using a crane and small crew. Backfilling can begin immediately after pipe connections are made. Also in contrast to other materials, precast concrete is less susceptible to vibratory damage while the surrounding soil is backfilled and compacted.

Reduced weather dependency

Precast concrete increases efficiency because weather will not delay the manufacturing process in the precast plant. In addition, weather conditions at the job site do not significantly affect the construction schedule, as compared to cast-in-place concrete construction.

Environmentally friendly

Precast concrete is non-toxic, environmentally safe and made from all-natural materials, making it an ideal material for use below grade. Concrete has no proven ill effects on groundwater and surface water quality. Utilizing specially designed sealants and rubber gaskets ensure that all pollutants are contained within the interceptor.

Monitoring systems

Unfortunately a majority of interceptors in service are not properly maintained. With the addition of a state of the art monitoring system such information as oil and solid levels, liquid levels, and temperature can be recorded allowing for an optimized maintenance schedule to be developed. Monitoring systems are preinstalled and tested in a controlled plant environment adding to overall project cost savings.

Resists buoyancy

With a specific gravity of 2.40, precast concrete structures resist the buoyant forces associated with below-grade construction. In comparison, fiberglass has a specific gravity of 1.86 and high-density polyethylene (HDPE) has a specific gravity of 0.97 requiring the use of tie downs and ultimately increasing project cost.

Corrosion resistant

Precast concrete is resistant to most substances. While no material is completely immune to chemical attack, the mix designs used to produce precast concrete can be adjusted to help withstand anticipated corrosive agents. Materials such as steel and other metals quickly deteriorate in the presence of corrosive agents, some in the presence of water alone. To better protect reinforcement from corrosion, the precast concrete strength is designed to 4,000 psi or more creating a denser, more resilient concrete.

By incorporating an oil and sediment interceptor into your Best Management Practices, you can do your part to help preserve our freshwater resources. Precast concrete oil and grit interceptors will outlive competing products, serving you and the environment for years to come.

For more information on precast concrete oil and grit interceptors, please contact:

NPCA
National Precast Concrete Association
1-800-366-7731
www.precast.org