



POLYMER MODIFIED ASPHALT BLENDING SKIDS

ECF has over 15 years of extensive design and manufacturing of polymer modified asphalt blending systems.

ECF offers complete turnkey design, fabrication and installation of both standard and fully-customized polymer blending systems.

ECF's polymer modified asphalt blending skids are designed to allow the plant operator to produce any size batch of homogeneous PMAC concentrate using a level-controlled wetting tank. This system can be controlled by a single operator when necessary.

ECF can customize your PMAC Blending Skid to meet your production requirements with either single or dual tank design.

ECF's precision control system ensures quality production for your polymer modified asphalt blending requirements.

KEY FEATURES

- Standard shop-fabricated PMAC Skid comes complete on a 8' X 25' to 40' skid for ease of shipment and installation
- Control of both AC and polymer addition rate ensures a homogeneous blend
- Wetting tank ensures all polymer is milled on a single pass
- High-capacity mill features allow a high-flow blending process from 20-70 T/hr.
- PLC controls the entire process from a single point
- Flexible design offers continuous flow or batch processing
- Custom skid designs are available to meet specific production and location requirements
- Available integration of ECF Molten Sulfur Injection System for cross linking



IN-LINE MULTI STREAM BLENDING SYSTEMS



ECF can design and install your In-Line Blending System.



ECF designs and installs In-Line Multi Stream Blending Systems to allow for precise control of blending up to five streams of base product into a single stream of finished product.

This high level of control allows you to load finished product directly onto the sales truck.

Our In-Line Blending Systems eliminate the need for intermediate blending/sales tanks.





POLYPHOSPHORIC ACID SKIDS

ECF offers customized self-contained and fully automated Polyphosphoric Acid Skids.

ECF can design, fabricate and install customized Polyphosphoric Acid Skids. Our design includes a PPA injection system that comes complete with automated controls and secondary containment.

Key features of the ECF Polyphosphoric Acid Skid:

- Incorporated skid design for ease of shipment and installation.
- Available in horizontal or vertical tank design.
- Independent heat control system.
- Injection control system and integrated control panel.
- Integrated secondary containment system.





AUTOMATED MOLTEN SULFUR INJECTION SKIDS



ECF can design, fabricate and install customized molten sulfur injection skids.

ECF can design, fabricate and install Automated Molten Sulfur Injection Skids. Our design includes a batch meter and sulfur VFD pump that provides precise control of the sulfur quantity and rate of injection.

The sulfur pump and injection valve are controlled for one step operation of the entire process. The injection skid is also designed with an integrated temperature control system to maintain the sulfur at optimal temperature.

The injection system can either be installed as a stand-alone system or integrated into the PMAC PLC for single point control.



KEY FEATURES

- Modular design for ease of shipment, assembly and installation.
- Batch meter and sulfur pump (VFD) provide precise control of sulfur delivery and rate of injection.
- Sulfur pump and injection valve are controlled for one step operation of the entire process.
- Injection skid can utilize hot oil or steam.
- Integrated temperature control system allows the sulfur to remain in the tank and in the injection line.



ASPHALT HOT BOXES (MATERIAL RECLAIM BOXES)

ECF designs and manufactures Material Reclaim Boxes for collecting test samples and drip bucket storage.



Key features of the Material Reclaim Box include:

- A precise counterweight lid assembly provides easy lifting and seal.
- No separate pump is required to move product.
- Heat is supplied from current heating system.
- Double wall construction with insulation between inner and outer wall.
- Custom paint option is available to match your existing infrastructure.

Standard Material Reclaim Box Specifications:

- Dimensions: 48"W X 36"D X 41"H

Customer Connections:

- *Heating: Two 2" ANSI 150# Raised Faced CS Flanges*
- *Product: 2" or 3" ANSI 150# Raised Faced CS Flange*
- *Inner Shell: ASTM A-36 -3/16" Plate Steel*
- *Outer Shell: ASTM A-36 -3/16" Plate Steel*
- *Insulation: 2" Thick Mineral Wool*
- *Physical Volume: Six Standard 5 gal buckets*
- *Liquid Volume: Approx. 50 US gals*
- *Shipping Weight: Approx. 1020 lbs.*



WARM OIL HEATING SKIDS (WARM OIL LOOP)



When consistent temperatures and heat stabilization are critical, count on the ECF Warm Oil Heating Skid.

ECF has developed the Warm Oil Heating Skid (Warm Oil Loop) to mitigate heat loss and to stabilize heated product during production cycles.

ECF designed and engineered the warm oil loop system to assist in maintaining product temperatures by recirculating thermal oil through a closed loop method.

This design reduces thermal fatigue and allows the product to maintain a constant temperature and pressure throughout the system.





REMOVABLE INSULATION COVERINGS



ECF manufactures a specialty line of both standard and customized removable covers for a wide variety of applications.



Any high-temperature piping or equipment should be insulated to improve safety, reduce heat loss and increase system efficiency. ECF's removable covers are designed and manufactured to meet the high demands for equipment and instrumentation subject to high temperatures and harsh environments.

ECF's Removable Insulation Coverings are designed to:

- Improve employee safety and protect personnel.
- Mitigate heat loss.
- Energy savings.
- Freeze Protection.
- Protect valuable equipment limiting exposure to harsh environments.

Removable Insulation Coverings for:

Equipment: *Pumps, valves, flanges, strainers, turbines, exchangers, expansion joints, man ways and automated valves.*

Instrumentation: *Gauge's, level controllers and flow meters.*

Our Insulation Division at ECF can provide insulation technicians who are knowledgeable and well trained to install your coverings to insure the proper fit. Our coverings can be custom made for any application to fit your needs.