Item #1
STANDARD SPECIFICATIONS

MODEL PCP-832-T44
PORTABLE CLASSIFICATION PLANT

GreyStone Model PCP-832-T44 portable classification plant complete as follows:

A. Classification tank
8' x 32' Aggre-Spec sand classifier complete as follows:

1. Fabricated of ASTM A36 certified structural steel
2. Aggre-spec III programmable logic controller (PLC) control system (see attached spec sheet)
3. Urethane discharge valves, seats & directional elbows
4. Built-in three cell ABR lined collecting/blending flume for two controlled products and one waste product
5. Stainless steel hydraulic cylinders, shaft, tubing and fittings
6. Commercial sealed "off-the-shelf" sensing units
7. Commercial "off-the-shelf" 3 HP hydraulic power pad
8. Waste collecting flume
9. Fresh water piping
10. Valve bridge railings with walkway along collecting/blending flume sampling stations with ladders
11. Motor control with all circuits wired, including classifier control circuit with "quick disconnects"

B. GreyStone twin 44" x 32' fine material dewatering screw complete with:

1. (2) 20 HP electric motors, 3 phase, 230/460 volt
2. (2) shaft mounted gear reducers (Dodge or Falk)
3. V-belt drive
4. V-belt guard
5. 12 ¾" heavy duty screw shaft
6. Weld-on type solid spiral flights
7. 1" thick rock grade rubber wear shoes
8. Heavy duty screw tub with rising current belly pan
9. Flared tub wings with adjustable overflow weirs
10. Overflow flume
11. External pillow block bearing on both ends of screw shaft

12. Heavy duty tub shaft seal with stainless steel wear sleeve
13. Adjustable clearance of screw shaft to belly pan
14. Discharge charge

C. Portable trailer assembly complete as follows:

1. Heavy duty "I" beam main frame rigid bracing
2. Gooseneck with fifth wheel and king pin assembly
3. Dual triple axle assembly with (12) 1100 x 22.5 tires & wheels
4. Air brakes
5. (6) 20 ton integral screw jacks with pin height adjustment
6. Brake, tail and directional lights

OPTIONS:

A. Three (3) cells of rising current classifiers (RCC) used to improve the classification
of the particles settling at the first three discharge stations of the classifier. Includes grates, control valves and inlet manifold.

B. One recirculating pump for supplying 900 GPM of water to the above 3RCC. Includes V-belt drive, guard and 10 HP motor with manifold to interconnect the pump to the RCC manifold

GREYSTONE AGGRE-SPEC III©

CLASSIFICATION TANK CONTROL

AGGRE-SPEC III© computer-aided sand re-blending system with programmable logic controller (PLC) control system

- Customer needs only to input specifications desired and station analysis
- Microsoft Windows™ environment
- Multi-tasks with other windows based programs
- Produces two specification products simultaneously
- Computer-calculated percentage settings
- Three method classification routine
- Color graphs showing production curves
- Yield, FM, current tank status with percent utilization for each discharge station
- Production reports to screen or printer
- Station overrides: simulate a stalled paddle
- Maintains history of production
- Control panel lights indicate when valve is actuated
- Alarm history
- Automatic programmable tank cleanout feature

RECOMMENDED OPTION:

A) Control cable interconnects programmable logic Aggre-Spec III controller to hydraulic valve bridge

Note: Price does not include PC, Printer or Monitor.

Item #2
SPECIFICATION FOR MODEL SESP-20

PORTABLE SELF-ERECTING SCREENING PLANT

GreyStone Model SESP-20 portable self-erecting screening plant complete as follows:

The following screen and items provided by others will be F.O.B. GreyStone, Inc. Columbus, NE

- 6 ft x 20 ft low profile horizontal vibrating screen
- 5 spray bars on each deck
- Steel screen wire
- V-belt drive and guard
- 40 HP motor

PORTABLE SCREEN PLANT STRUCTURE BY GREYSTONE

Structure complete as follows:

- Structure constructed of ASTM A36 certified structural steel
- Walkway on one side of screen
- Safety cage ladder to ground
- Motor control center with wiring for 40 HP screen motor and 40 HP self-erecting motor
- 40 HP self-erecting motor
- 12 heavy duty sheaves and 2 – 3/4" cables for screen erection
- Undercarriage assembly of heavy duty "I" beam construction with 5th wheel gooseneck and king pin
- Triple axle assembly with twelve (12) 11.0 x 225 tires and wheels, brakes, turn and tail lights and mud flaps
- 4 – 20 ton screw jack assemblies with pin height adjustment
- Structure primed and painted in GreyStone gray
- Underflume with chute
- Manifold with globe valves
- 3 – discharge chutes

NOTE: The screen will be delivered F.O.B. GreyStone, Inc., Columbus, Nebraska for mounting.

SIMPLICITY

LOW PROFILE HORIZONTAL SCREEN

6' x 20' Model "LP140A" Triple Deck

DRIVE MECHANISM

Twin shafted mechanism with four 140MM 23 series bearings having self contained oil lubrication. Location is between the center and bottom decks.

Designed for 3/4" stroke at 760 RPM. Adjustable by adding or removing counterweights.

GYRATING FRAME (side plates)

3/8" thick hot rolled steel plate with stiffening trim angles on top and discharge end.

DECK CONSTRUCTION

Straight line, replaceable, one piece decks for optimum structural integrity and resistance to racking. Decks are designed to accommodate wire cloth deck covering, which is to be supplied by others.

DECK COVERING

Less deck covering.

FEED BOX

14" long with a 3/8" Hardox AR400 steel liner. Feed box helps distribute material to screen and reduces wear on first section of screen cloth. Feed box is bolted to screen for ease of replacement.

BACK PLATE

Included on all decks and fabricated from hot rolled steel plate. Bolted on for easy removal. Back plates provide additional screen rigidity and contain material at feed end of screen.

DISCHARGE LIPS

6" projection beyond side plates bolted to screen for easy replacement.

CORNER SUPPORTS

Vertical coil springs and base plates at each corner for horizontal installation. Full height corner support brackets bolted to decks and side plates to effectively transfer load from decks to support springs with minimal load on side plate.

V-BELT DRIVE

Deep groove machine and motor sheaves to decrease possibility of V-belts jumping out of grooves during operation. Machine sheave also has offset hub to minimize varying tension on V-belts normally caused by action of eccentric shaft. Motor sheave has bushing suitable for a T-frame motor. Drive also complete with Section C V-belts, belt guard, and independently mounted pivoted-type motor base including the required 40 HP, 1800 RPM, TEFC, NEMA C, T-frame motor.

Item #3

SPECIFICATION FOR MODEL P-T44-20

PORTABLE WASHING AND SCREENING PLANT

GreyStone Model P-T44-20 portable washing/screening plant complete as follows:

1. GreyStone twin 44" x 32' fine material dewatering screw complete with:
   A. Two 20 HP electric motors, 3 phase, 230/460 volt
   B. Two shaft mounted gear reducers (Dodge or Falk)
   C. V-belt drive
   D. V-belt guard
   E. 12 ¾" heavy duty screw shaft
   F. Weld-on type solid spiral flights
   G. 1" thick rock grade rubber wear shoes
   H. Heavy duty screw tub with rising current bellypan
   I. Flared tub wings with adjustable overflow weirs
   J. Overflow flume
   K. External pillow block bearing on both ends of screw shaft
   L. Heavy duty tub shaft seal with wear sleeve
   M. Adjustable clearance of screw shaft to bellypan
   N. Discharge chute

NOTE:
The following screen and Item A-E must be furnished by customer and delivery F.O.B. GreyStone, Inc., Columbus, Nebraska for mounting.

2. 6' x 20' horizontal triple-deck vibrating screen with center mounted vibrating unit and complete with:

   A. Electric motor, 3 phase, 230/460 volt
   B. Pivoted motor base
   C. V-belt drive
   D. V-belt guard
   E. Spray bar system for each deck complete with spray deflectors
   F. Screen receiving hopper
   G. Water manifold complete with ball valves for each spray bar and screen receiving hopper spray bar

3. Undercarriage assembly complete with:

   A. Heavy duty "I"-beam main frame members with rigid bracing
   B. Gooseneck with fifth wheel and kin pin assembly
   C. Dual triple axle assembly
   D. Timken bearing hubs
   E. Air brakes
   F. Twelve 1100 x 22.5 tires and wheels
   G. Budd or Dayton wheels available
   H. Brake, turn and tail lights
   I. Mud flaps
   J. Four 20 ton screw jack assemblies with pin height adjustment
   K. Additional cribbing points for proper leveling and stability

4. Screen mounting complete with:

   A. Heavy duty screen mounting assembly
   B. Walkway on both sides and feed end of screen
   C. Large work platform for screen replacement and service
   D. Safety handrailing with toe boards
   E. Access ladder from ground to work platform
   F. Water manifold mounting
   G. Three product discharge chutes with AR chute liners
   H. Top deck to discharge straight off end of screen; second & third deck discharge left and right
   I. Underscreen collecting hopper to discharge into dewatering screw

5. Electrical switch equipment mounted on NEMA 12 panel and complete with the following 460 volt, 3-phase, 4-wire components:

   A. 300 amp IEC main control panel with disconnect and starter fuses
   B. Two 20 HP starters for the dewatering screw
   C. One starter for screen motor
   D. Stop-start control switch, resets, interlocks with manual/auto controller mounted in door
   E. Five additional No. 2 starters and controls provided in panel for off-plant conveyors. Each of these additional starters will have a pin and sleeve female plug receptacle mounted in the outside of the control panel. (Male ends not included).
   F. Screw and screen motors to be hard wired with conduit and fittings
   G. Panel mounted on undercarriage assembly
   H. Screen motor to have female plug receptacle in panel and a power cord with male plug end.

6. Plant to be finished in standard GreyStone gray color.

   NOTE: Screen and safety walkways would need to be removed to obtain a legal travel height and weight. Over width permits would be required for highway travel.

   Throughput capacities are theoretical and approximately and will vary depending on the type of material, moisture content, amount of fines in feed and operator's ability to feed plant efficiently and maintain equipment. GreyStone does not guarantee plant capacity projections, due to variables itemized above.

   No foundations, reinforcing steel, foundation bolts, piping, conduit, supporting structures, chutes or walkways, unless specified in quotation.

   Federal and local safety codes may require the use of special guards, safety shutdown devices, etc. which, unless otherwise specified, are not a part of the proposal. Compliance with such laws is the owner's responsibility. And, as manufacturers, we will supply these items to meet such codes, if required, at extra cost.

   The standard manufacturer's warranty is a part of this offer.