



350 SMC DRIVE
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April 10, 2015

Stockton WWTP
2500 Navy Drive
Stockton, CA 95206

Attention: Mr. Ali Gharegozloo
Reference: Biosolids Pump – Stockton CA
Schwing Bioset, Inc. Quotation No. 2015091

Dear Mr. Gharegozloo,

Schwing Bioset, Inc. is pleased to propose the following as our scope of supply for the project referenced above to replace your existing equipment.

BIOSOLIDS PUMP

Quantity:	One (1)
Model:	KSP 25V(HD)L
Diameter of Pumping Cylinder:	180 mm [7 inches]
Hydraulic Cylinder Diameter:	125 mm [4.9 inches]
Cylinder Ratio:	2.07
Suction Poppet Opening:	180 mm [7 inches]
Discharge Pressure Poppet Opening:	150 mm [5.9 inches]
Cylinder Stroke Length:	1000 mm [39.4 inches]

Scope includes:

1. Pump is designed as replacement to SBI project 1013, completed March 2015.
2. The Sludge Pump shall be equipped with a discharge connection adapter to 8” 600# ANSI flange and 2” bleed valve.
3. The pump water box shall have 25 mm connections for water supply and 38 mm connections for overflow and drain lines. Water lines and valves shall be reused by SBI field install team.
4. Local maintenance panel shall be furnished, mounted on the Sludge Pump, wiring and installation by SBI. The panel includes MAINTENANCE MODE ON / OFF switch, FORWARD / OFF / REVERSE switch, PUMP JOG pushbutton, and E-STOP pushbutton. Per the below Schwing Bioset shall be responsible for field wiring between the between the Local Maintenance Panel and the Pump Control Panel.

TWIN AUGER SCREW FEEDER

Quantity:	One (1)
Model:	SD 250

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Inlet Dimensions:	17" x 72"
Flights:	9" diameter
Material of construction:	A36 Steel

Clarifications:

1. The twin-screw auger assembly is equipped with a three position actuating lever to control the auger (FORWARD/STOP/REVERSE), this lever is located on the hydraulic power unit.
2. The twin-screw feed auger transition shall be furnished with a pressure transducer to automatically control the screw feeder speed. A local LED pressure display shall be included at the screw feeder.
3. Does not include any hopper or chute above screw feeder inlet flange.

HYDRAULIC POWER UNIT

Quantity:	One (1)
Model:	800-125HP
Motor size:	125 HP
Reservoir size:	210 gallons
Hydraulic pump for KSP 25:	Rexroth A11VO130EP
Hydraulic pump for SD250:	Rexroth A11VO40EP

Clarifications:

1. Power pack shall drive one KSP pump and twin screw feeder.
2. Recirculating hydraulic oil conditioning loop shall include the following.
 - A constant volume hydraulic pump.
 - A water-cooled heat exchanger with water supply and drain connections.
 - Shutoff valves (water piping and drain piping beyond the shutoff valves shall be reused by SBI installation team).
 - Thermostatically controlled valve to regulate water flow.
 - 6 micron oil filter.
3. Premium efficient, 460V/3Ø/60Hz TEFC motor.
4. Power unit includes initial fill of oil (HPP shipped with full hydraulic reservoir), pressure gauges, pressure switch, relief valves, clean-out covers, and combination temperature and sight gauges.
5. Power unit shall include sound attenuation panels to limit noise.
6. Rigid hydraulic tubing provided to connect equipment to the power unit. 1.35 m long hose connections provided at equipment to isolate vibration.
 - Schwing Bioiset Inc. shall replace hoses and fittings as needed.
 - Schwing Bioiset shall supply all hydraulic valves and fittings required for installation.
 - Piping, valves and fittings shall be installed and painted by SBI install team.
 - Hydraulic pipe and fittings shall be carbon steel rated for 300 bar.

CONTROL PANEL

Quantity:	One (1)
Electrical Service:	460 V / 3-phase / 60 Hz

Scope includes:

1. Panel shall be NEMA 4X, 304 SS, mounted to HPU
2. Includes Soft Start for 125 HP motor.
3. Includes Power factor correction capacitor.
4. Control panel shall include A-B Compactlogix PLC with HMI touchscreen to control all panel functions.
5. Panel includes controls for the following equipment:
 - Biosolids Piston Pump
 - Twin-Screw Feeder.
 - Hydraulic Power Unit.
6. Schwing Bioiset standard input and output devices shall be supplied.

SPARE PARTS

During commissioning, Schwing Bioiset recommends changing out the hydraulic oil filter after the first 50 hours of Hydraulic Power Unit operation. The following spare parts shall be furnished for this purpose.

- One (1) set of hydraulic oil filters for each power unit.

PAINTING

Schwing Bioiset standard primer and finish coatings shall be factory applied as follows, **unless otherwise noted above**. Stainless steel surfaces shall not be painted.

- Surface Preparation – Sandblast SSPC-SP6.
- 1st Coat – Tnemec 135 Chembuild, 3-5 mils DFT
- 2nd Coat – Tnemec N69 Hi-Build Epoxoline II, 3-5 mils DFT.

All field touch-up painting of equipment shall be performed by Schwing Bioiset install team.

TOOLS

One (1) set of Schwing Bioiset standard tools is included.

INSTALLATION FIELD SERVICE

Schwing Bioiset shall provide trained service technicians for a COMPLETE TURN-KEY SOLUTION. The SBI team will be fully responsible for removal of existing equipment and installation of the new system. Installation of the new equipment will include; setting equipment in place, connecting equipment mechanically/electrically, and starting-up equipment. See the following details of this service:

- Demolition of Old Equipment
- Installation of New Equipment
- Start and Commissioning of New Equipment
- Disposal of Old Equipment is by Schwing Bioiset

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- Electrical disconnection of old equipment and connection of new equipment is included.
- Existing hydraulic lines to be re-used, where viable
- Schwing Bioiset reserves the right to use non-Union labor
- Permits and licenses, if needed, are responsibility of Owner

SCHWING BIOSET “CAST IRON” GUARANTEE

Schwing Bioiset offers its 5 Year Extended “CAST IRON” Guarantee for the equipment supplied by Schwing Bioiset. Schwing Bioiset shall repair or replace all parts, inclusive of wear parts such as rams and poppet discs and seats, for a period of five years, to begin on beneficial use or 90 days after delivery to site.

SCOPE OF SUPPLY SUMMARY

Biosolids Pump KSP 25V(HD)L	One (1)
Twin Auger Screw Feeder (SD 250)	One (1)
Hydraulic Power Unit (800-125 HP)	One (1)
Control Panel	One (1)
Spare Parts	One (1) Lot
Service	One (1) Lot
Schwing Bioiset “CAST IRON” Guarantee	5 Years – Parts & Service
Complete Turn-Key Installation	One (1) Lot

Total firm price for the complete listed scope of supply:..... **\$ 437,200.00**

All prices are quoted:
 F.O.B. Somerset WI
 Full Freight Allowed
 Prices are valid for sixty (60) days.
 Prices are in US dollars

TAXES

No taxes are included in this quote. The amount of any applicable present or future state/local sales/use tax or other government charge upon the production, sale, shipment, and/or use of the goods covered by this quotation shall be paid directly to the taxing authorities by purchaser, and paid tax receipts will be furnished to Schwing Bioiset upon request, unless purchaser provides us with an exemption certificate acceptable to the taxing authorities.

TERMS

- 10% with order
- 10% with submittal approval
- 75% when equipment is ready to ship
- 5% with acceptance not to exceed 90 days from shipment.

Payment terms offered are subject to final credit approval.

SUBMITTALS

Six (6) to ten (10) weeks after receipt of approved order or detailed review of scope letter for release to fabricate. Four (4) copies shall be provided.

O&M MANUALS

Two (2) final hard copies and two (2) electronic copies on CD-ROM shall be furnished with the equipment. O&M Manuals will be delivered four (4) weeks after equipment delivery.

DELIVERY

Equipment shall be delivered fourteen (14) to twenty (20) weeks after submittals or equipment is released for fabrication are approved.

WARRANTY

Schwing Bioiset, Inc. warrants its new equipment against defects in material and workmanship under normal use and service, and which shall not have been subject to misuse, negligence, or accident, for a period of ~~one (1) year~~ **5 YEARS** that shall commence upon startup or ninety (90) days from delivery, whichever occurs first.

Schwing Bioiset, Inc. will replace or repair free of charge, F.O.B. jobsite, such part or parts thereof as in its sole judgment shall be deemed defective.

Due to the specialized nature of Schwing Bioiset material handling equipment, Schwing Bioiset field service technicians shall not be restricted in adjusting or repairing Schwing Bioiset furnished equipment, regardless of collective bargaining agreements entered into by other parties.

This warranty shall not apply to any equipment manufactured by us which shall have been loaded or operated beyond its rated capacity as specified by Schwing Bioiset, Inc. Damage resulting from improper installations or alterations outside our plant will be considered as misuse and not as a defect. Certain parts of the equipment provided by Schwing Bioiset such as the pumping cylinders, valves, pumping rams, screw flights, sliding frame components, trough liners for screws etc. in contact with material, are subject to normal wear. ~~This normal wear is not covered under this warranty.~~ Schwing Bioiset, Inc. shall not be liable for consequential damages or injuries of any kind, or for expenses, losses, or delays incidental to any failure. Schwing Bioiset, Inc. reserves the right to make changes and improvements in its product without incurring any obligation to install any such changes or improvements in its products previously manufactured.

Schwing Bioiset, Inc.

This warranty is in lieu of any other warranty expressed or implied or any other obligation or liability on the part of Schwing Bioiset, Inc., and no other person is authorized to make any representations or warranties beyond those herein expressed.

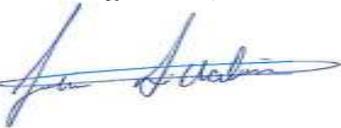
Without limiting the generalities of the foregoing, THERE IS NO IMPLIED WARRANTY OF MARKETABILITY AND NO IMPLIED WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE.

EQUIPMENT AND SERVICES TO BE PROVIDED BY OTHERS

1. Storage of equipment and/or costs for long-term storage (longer than 3 months).
2. Racks, trays or supports for hydraulic lines, sludge lines, or control wiring on ancillary equipment.
3. Miscellaneous metal.
4. It is the contractor's responsibility to field verify building dimensions, equipment access, and that equipment layout/dimensions are suitable to accommodate the SBI supplied equipment. For any equipment not specifically mentioned in this proposal.
5. Water and drain piping of any kind.
6. Spare parts not specifically mentioned in this scope.
7. Disposal of oil, fluids, or any other items during equipment startup.
8. Anchor bolts, nuts, and washers for the SBI supplied equipment. For any equipment not specifically mentioned in this proposal.
9. Cost for Engineer, Owner, or Contractor to witness any shop test.
10. Additional costs to supply alternate products other than specifically mentioned in this scope.
11. Networking, hardware, communication modules, or power supplies not specifically mentioned in this scope.
12. PLC programming software or software licenses not specifically mentioned in this scope.
13. Field service technicians or special tools not specifically mentioned in this scope.
14. Motor starters or variable frequency drives not specifically mentioned in this scope.

If you have any questions, please don't hesitate to contact me at 612-867-4429, or email jdivalentino@schwingbioiset.com.

Yours very truly,
Schwing Bioiset, Inc.



Joshua R. Di Valentino
 Western Regional Sales Manager

cc: Scott Springer – Schwing Bioiset Inc.
 Simon Morris – JBI Water Inc.