



Date: February 7, 2014
Ref.: S-13-064 Rev B
To: Mr. Jon Walker – Andola Fibers
Project: Nylon Fiber Screening
Equipment: Two (2) RotoSieve® Model 24 Perforated Rotary Drum Screens (304SS)
One (1) RotoSieve® Model 48 Perforated Rotary Drum Screen (304SS)

We are pleased to provide this proposal for the equipment and project noted above.

Price Schedule

RotoSieve® Model 24 Internally Fed Rotary Drum Screen

For the design and supply ex-works to customer facility of two (2) RotoSieve® Model 24 Rotary Drum Screens with a 2mm perforated drum. Equipment details are the following:

- Drum Cylinder complete with 2mm diameter perforated openings and internal diverter flights – 304 stainless steel
- Screen drum cylinder equipped with continuous stainless steel diverter flights arranged in a helical pattern throughout length of the screen – 304 stainless steel, 80mm height, and 200mm pitch
- Influent distribution headbox/feed pipe 10 gauge 304 stainless steel. Inlet pipe ~10” diameter – plain ended. Provided with neoprene flexible connector with 304 stainless steel band clamps. Non-Clogging, pressure-reducing design providing positive laminar flow discharging parallel to the drum axis.
- Spray Wash System – One external spray bar mounted parallel to the longitudinal screen axis – 304 stainless steel spray pipe and spray nozzles. Spray wash system to also include one (1) 1” manual brass ball valve, one (1) 1” normally closed bronze body solenoid valve, and one (1) 1” bronze body strainer. Solenoid valve rated NEMA 4/7, 120 volt. Spray wash is intermittent and not continuous. Intermittent spray wash is 32 gpm with cycle timing dependent on the application and adjustable in the field.
- Cleaner Brush – Each screen to include one (1) counter rotating, friction driven, horizontal nylon cleaner roller brush for cleaning the drum perforations. Brush is mounted on 304 stainless steel shaft supported by life lubricated stainless steel bearings and stainless steel mounted hardware. The brush provides a more efficient cleaning of the drum as opposed to a constant spray wash and results in significant water savings (up to 90% savings over constant dual spray wash bar systems).

- Drive Assembly with Gear Reducer unit complete with NORD 0.5hp, 575 volt, 3-phase, 60 Hz, TEFC, CSA certified, inverter duty electric motor with 1.15 sf (suitable for Class 1 Div 2 environment). Gear reducer drives screen via innovative and proprietary carbon fiber polychain drive system. Screen does not use trunnion wheels for drum rotation. This minimizes wear part replacement and catastrophic failure the result of trunnion wheel failure.
- Drum Housing – Lower housing welded unit incorporating side splash guards, drain pan and ~12” diameter plain ended effluent drain pipe. Screen elevated to ensure liquids run downhill back toward the influent end to ensure maximum drainage - 304 stainless steel
- Drum Housing – Upper cover housing shall be 304SS and bolt to the lower housing. Individual 14 gauge, 304SS inspection hatches shall be provided to allow inspection of the drum without removing the entire upper cover housing . Two (2) inspection hatches will be provided for each side of the housing. Each hatch secured by keyed lock.
- Discharge Chute end of the drum screen shall be fully enclosed and fitted with an integral discharge chute assembly. Inspection end of the drum screen shall also include a removable inspection cover to allow full access to discharge end of drum. Discharge chute – 304 stainless steel and end inspection cover of UV resistant reinforced fiberglass cast and form molded into one piece.
- Overflow/High Level System – Separate overflow divert system. Detects and separates overflow from filtered effluent to prevent untreated flow from reaching sensitive downstream processes during an overflow event. Overflow pipe ~8” plain end piping. Complete with high level probe to detect overflow condition of the screen and alert the control panel.
- Each screen shall be provided with fabricated 304 stainless steel support legs
- Each screen shall be provided with a ~6” plain ended vent connection on top of the upper cover housing.
- Fasteners – 304 stainless steel
- Factory Test
- O&M Manual
- Freight to customer facility in Canada included

RotoSieve® Model 24 Rotary Drum Screen Design Requirements:

No. of screens:	Two (2)
Material of Construction:	304SS
Screened Material:	Nylon Fiber Slurry
Influent Solids:	Up to 0.5%
Screen Opening:	2 mm
Peak Flow:	300 gpm
Horsepower:	0.5 HP
Operating Load:	1150 lb (to overflow level)
Wash Water:	32 gpm at 60 psi (intermittent water flow controlled by timers on control panel – NOT CONTINUOUS)

RotoSieve® Model 48 Internally Fed Rotary Drum Screen

For the design and supply ex-works freight allowed to customer facility of one (1) RotoSieve® Model 48 Internally Fed Rotary Drum Screen with a 2mm perforated opening drum. Design details for the screen to include the following:

- Drum cylinder complete with 2mm diameter perforated openings and internal diverter flights – 304 stainless steel
- Screen drum cylinder equipped with continuous 304 stainless steel diverter flights arranged in a helical pattern throughout length of the screen – 100mm height and 200mm pitch
- Influent distribution headbox/feed pipe 10 gauge 304 stainless steel. Inlet pipe ~16” diameter – plain ended. Flexible connection or restraint coupling is recommended for the inlet. Non-Clogging, pressure-reducing design providing positive laminar flow discharging parallel to the drum axis.
- Spray Wash System – One external spray bar mounted parallel to the longitudinal screen axis – 304 stainless steel spray pipe. Spray wash system to also include one (1) 1” manual brass ball valve, one (1) 1” normally closed bronze body solenoid valve, and one (1) 1” bronze body strainer. Solenoid valve rated NEMA 4/7, 120 volt. Spray wash is intermittent and not continuous. Intermittent spray wash is 32 gpm with cycle timing dependent on the application and adjustable in the field.
- Cleaner Brush – Each screen to include one (1) counter rotating, friction driven, horizontal nylon cleaner roller brush for cleaning the drum perforations. Brush is mounted on 304 stainless steel shaft supported by life lubricated stainless steel bearings and stainless steel mounted hardware. The brush provides a more efficient cleaning of the drum as opposed to a constant spray wash and results in significant water savings (up to 90% savings over constant dual spray wash bar systems).

- Drive Assembly with Gear Reducer unit complete with NORD 0.75hp, 575 volt, 3-phase, 60 Hz, TEFC, CSA certified, inverter duty electric motor with 1.15 sf (suitable for Class 1 Div 2 environment). Gear reducer drives screen via innovative and proprietary carbon fiber belt drive system. Screen does not use trunnion wheels for drum rotation. This minimizes wear part replacement and catastrophic failure the result of trunnion wheel failure.
- Drum Housing – Lower housing welded unit incorporating side splash guards, drain pan and ~20” diameter plain ended effluent drain pipe. Screen drain pan sloped to insure liquids run downhill back toward the influent end to ensure maximum drainage - 304 stainless steel
- Drum Housing – Upper cover housing shall be 304SS and bolt to the lower housing. Individual 14 gauge, 304SS inspection hatches shall be provided to allow inspection of the drum without removing the entire upper cover housing . Two (2) inspection hatches will be provided for each side of the housing. Each hatch secured by a keyed lock.
- Discharge Chute end of the drum screen shall be fully enclosed and fitted with an integral discharge chute assembly. Inspection end of the drum screen shall also include a removable inspection cover to allow full access to discharge end of drum. Discharge chute is 304 stainless steel with end inspection cover of UV resistant reinforced fiberglass cast and form molded into one piece.
- Overflow/High Level System – Separate overflow divert system. Detects and separates overflow from screened effluent to prevent unscreened flow from reaching sensitive downstream processes during an overflow event. Overflow pipe ~10” plain end piping. Complete with high level probe to detect overflow condition of the screen and alert the control panel.
- Screen shall be provided with fabricated 304 stainless steel support legs
- Screen shall be provided with a ~6” plain ended vent connection on top of the upper cover housing.
- Fasteners – 304 stainless steel.
- Factory Test
- O&M Manual
- Freight to customer facility in Canada included.



RotoSieve® Model 48 Rotary Drum Screen Design Requirements:

No. of Screens: One (1)
 Material of Construction: 304 SS
 Screened Material: Nylon Fiber Slurry
 Influent Solids: Up to 2%
 Screen Opening: 2mm Diameter Perforations
 Horsepower: 0.75 HP
 Operating Weight: 2150 lb (to overflow level)
 Wash Water: 32 gpm at 60 psi (intermittent water flow controlled by timers on control panel – NOT CONTINUOUS)

Pricing:

Price for equipment and services as described above including spray wash valves and freight to customer facility:

Description	Price (Each)	Quantity	Extended Price
RotoSieve Model 24 Screen	\$32,000.00 USD	2	\$64,000.00 USD
RotoSieve Model 48 Screen	\$71,900.00 USD	1	\$71,900.00 USD
Totals		3	\$135,900.00 USD

- Adder per RS-24 unit for 100mm high drum flights: \$ 750.00 USD

Note: Above pricing assumes all units are ordered and shipped together.

Exclusions:

- Taxes, VAT, or customs duties
- Canada customs clearance
- Offloading
- Installation
- Pumps
- Sensors, valves, switches, or gauges beyond those noted
- Air Vent Piping
- Stairs and Grating
- Any piping not integral to the equipment proposed above
- Oil or grease
- Field painting
- Disconnect switches and junction boxes
- Electrical connections
- Piping connections



- Electrical installation and wiring
- Dumpster, bin, or bagging unit
- Discharge extension chute
- Concrete work
- Civil design
- Buildings
- Control Panel or E-stop stations (available upon request)
- Spare parts (available upon request)
- Site/Start-up Services (available upon request)

Terms:

- 100% due Net 30 Upon Delivery.

Approvals:

- 1 to 2 weeks from date of purchase order.

Delivery:

- 12 to 14 weeks from date of purchase order and receipt of signed approvals.

Warranty:

- Standard 12 months from date of installation or 18 months from date of delivery (which ever occurs first).

Validity:

- This proposal is firm for acceptance and valid for 60 days from the date noted on the first page.

For further details or questions regarding this pricing, please feel free to contact me at 866-929-7773 ext. 2 or via email at cory.kopp@cleantekwater.com.

Best Regards,

Cory Kopp
CleanTek Water Solutions