



Project Summary No. PS-4210-AU-S&G

Application:
**WWTP screenings & grit collection
 and outloading system**

The Site:

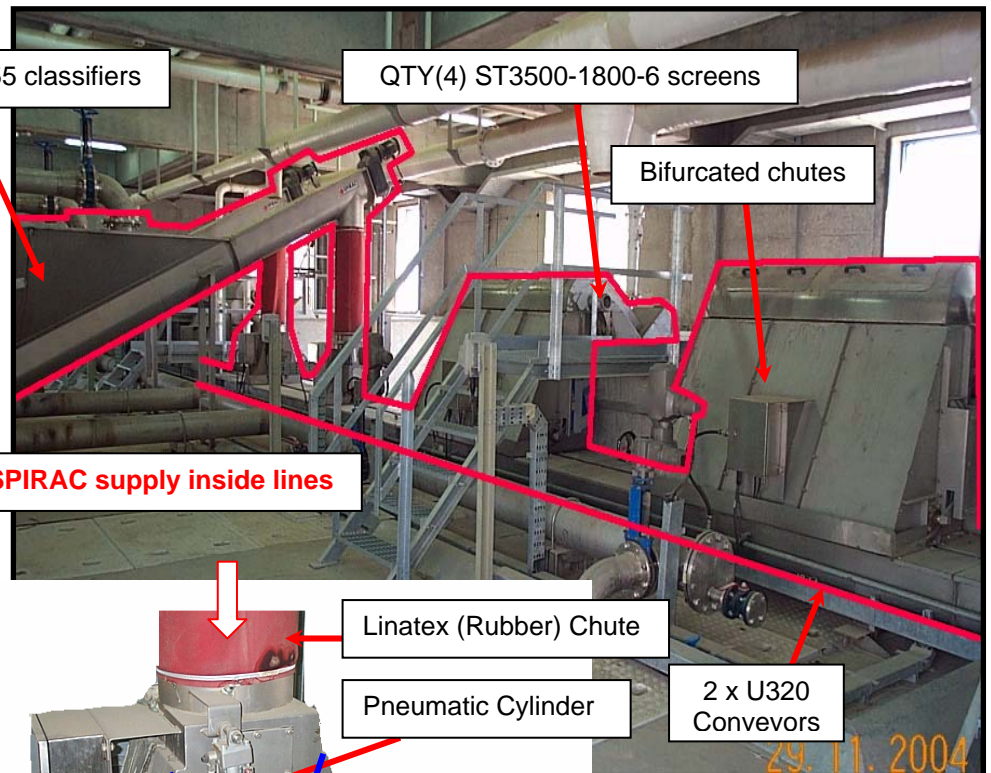
The Sulaiibiya Wastewater treatment plant is located in Kuwait and processes up to 375,000 m³/day of waste water. The plant was constructed in 2002- 04 and SPIRAC played an integral part in supplying a screenings/grit capture and outloading conveying system. The SPIRAC systems were commissioned in July 2004 and have been operating continuously thereafter.



The Step Screens:

Five SPIRAC Model ST Fine Screens were specified and supplied:

- 4 x ST3500-1800- 6 each with 2,350 lps capacity
- discharging to two U320 shaftless spiral conveyors via bifurcated diverter chutes



The Classifiers:

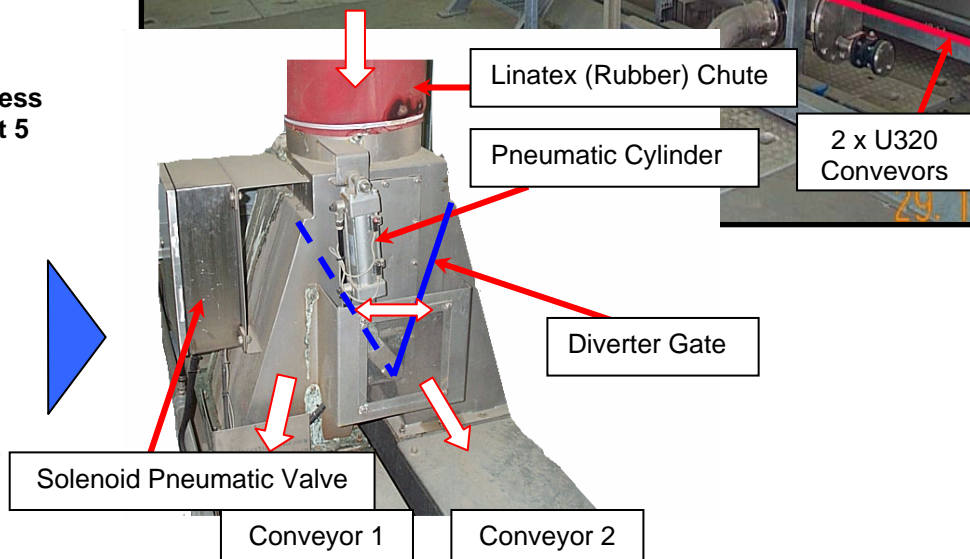
Two SPIRAC Model SA355 grit classifiers:

- Two SA355 grit classifiers handling up to 5 m³/hr of grit discharging to conveyors also via bifurcated chutes
- Grit extraction via shaftless spiral screws, rotating at 5 RPM

The Bifurcated Chutes:

Seven SPIRAC bifurcated chutes (2 x grit, 5 x screenings):

- automated operation via electric solenoid driven pneumatic valve
- no product hangups
- for changeover of bins



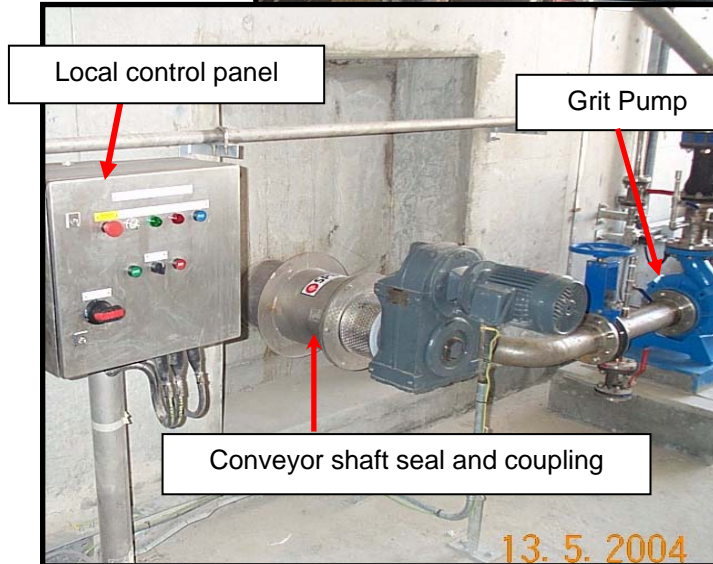


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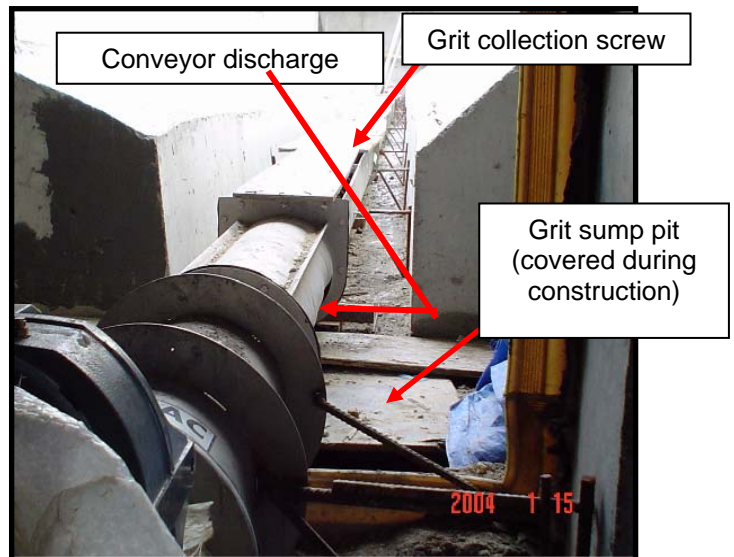
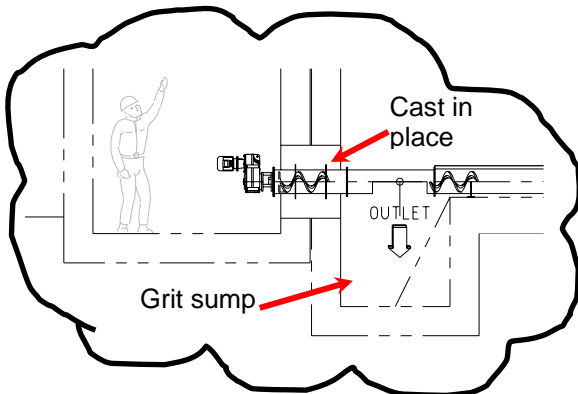
The Grit Collection System:

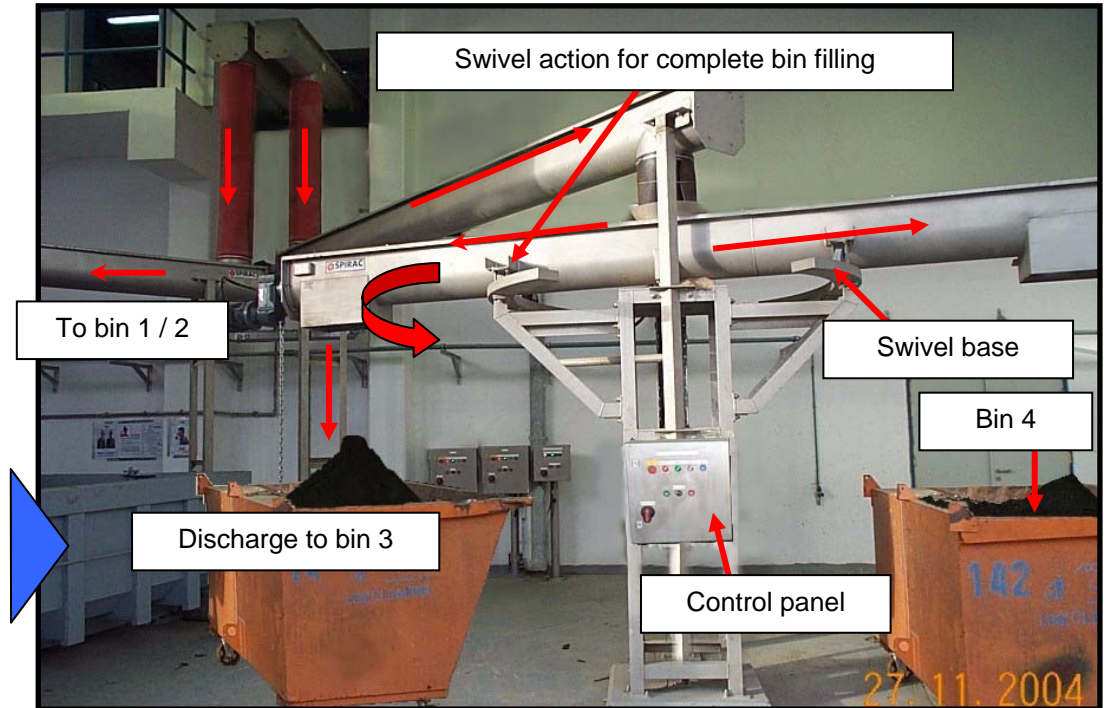
Four (4) U320 shaftless screw conveyors:

- 35m long each with 1.5m³/hr capacity
- discharging into sump pit for intermittent pumping to classifier
- Low speed (5 RPM) and power (1.5 kW) for minimal turbulence in chamber
- Cast in place trough with removable SPX Duraflo liners



The grit chamber conveyor in place prior to final concrete pour. Conveyor trough will be cast in place. Grit chamber depth = 4m.





The outloading System:

Four (4) U320 shaftless screw conveyors:

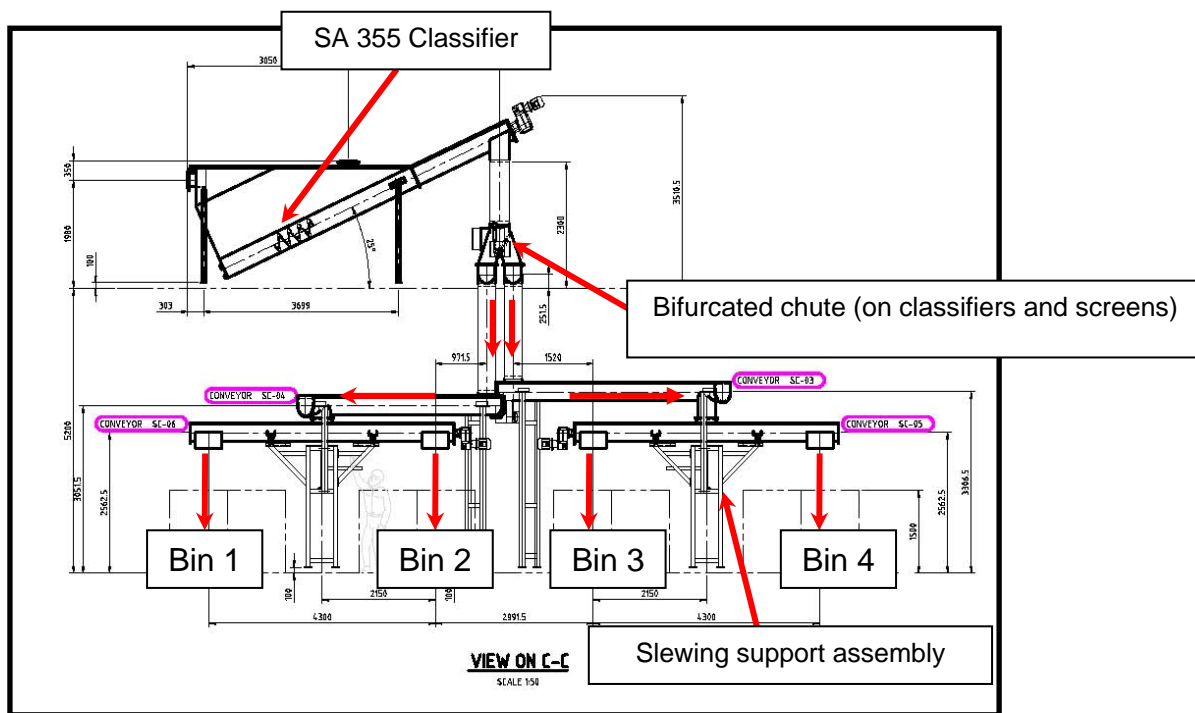
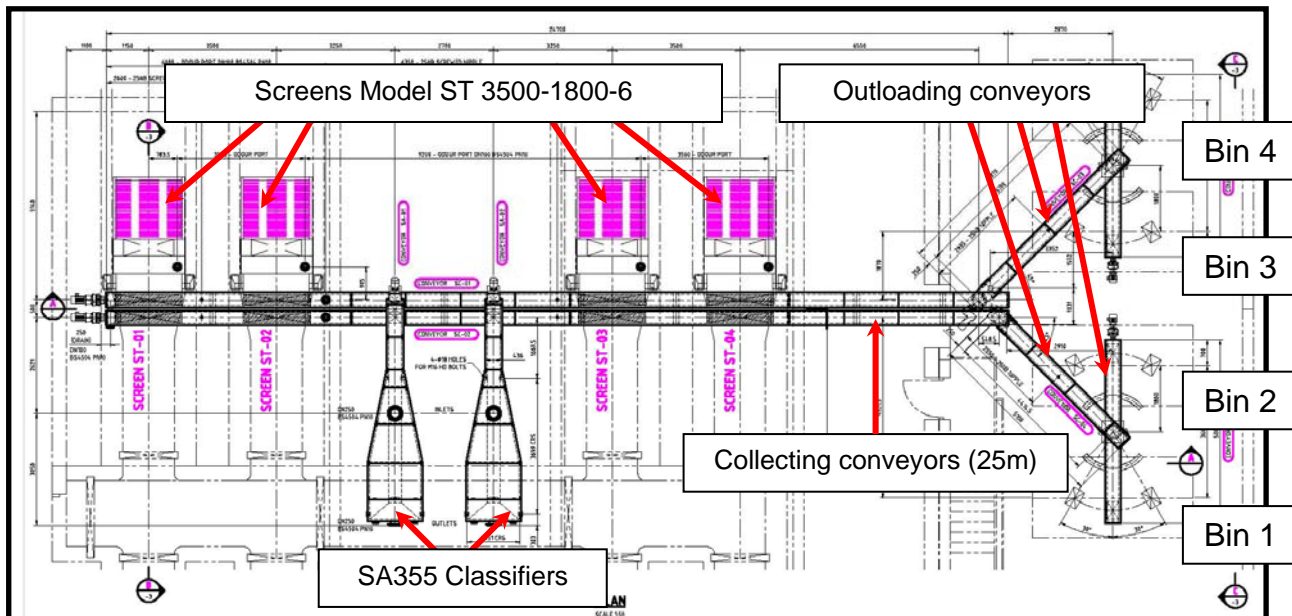
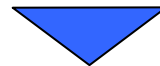
- two conveyors on manual slewing base to allow complete container filling
- slewing conveyors are forward/reverse to fill alternate bins
- operation is fully integrated through PLC network for automated changeover of bin selection





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Excerpts from the drawings:



Contact:

For additional information or contact details for this project or your local SPIRAC office, check our Website at www.spirac.com