# Project Report: ProAcom

## Project Details

Name: ProAcom

Client Name: qqq12

Capacity: qqq12

### 1. Manual Screen

### Sec01: General Data

|  |  |
| --- | --- |
| Field | Value |
| Manufacturer | Ietos Factory |
| Service | Inlet Area |
| Fluid | Sewage |
| Operation | Manual |
| Quantity of Units | 123 |
| Country of Origin | Egypt |

### Sec02: Design Data

|  |  |
| --- | --- |
| Field | Value |
| Type | Bar Coarse Screen |
| Channel Depth | 1500 |
| Channel Width | 400 |
| Water Level | 600 |
| Bar Thickness | 12 |
| Bar Width | 50 |
| Bar Spacing | 25 |
| Inclination Degree | 60° |
| Hand Rack Qty | 2 |

### Sec03: Material Data

|  |  |
| --- | --- |
| Field | Value |
| Frame | Stainless Steel 316 |
| Bars | Stainless Steel 316 |
| Rake Tube | Stainless Steel 316 |
| Rake Plate | Stainless Steel 316 |
| Bolts & Nuts | A4 |

### 2. Manual Screen

### Sec01: General Data

|  |  |
| --- | --- |
| Field | Value |
| Manufacturer | Ietos Factory |
| Service | Inlet Area |
| Fluid | Sewage |
| Operation | Manual |
| Quantity of Units | 1 |
| Country of Origin | Egypt |

### Sec02: Design Data

|  |  |
| --- | --- |
| Field | Value |
| Type | Bar Coarse Screen |
| Channel Depth | 1500 |
| Channel Width | 400 |
| Water Level | 600 |
| Bar Thickness | 12 |
| Bar Width | 50 |
| Bar Spacing | 25 |
| Inclination Degree | 60° |
| Hand Rack Qty | 2 |

### Sec03: Material Data

|  |  |
| --- | --- |
| Field | Value |
| Frame | Stainless Steel 316 |
| Bars | Stainless Steel 316 |
| Rake Tube | Stainless Steel 316 |
| Rake Plate | Stainless Steel 316 |
| Bolts & Nuts | A4 |

### 3. Mechanical Screen

### Sec01: General Data

|  |  |
| --- | --- |
| Field | Value |
| Manufacturer | Ietos Factory |
| Service | Inlet Area |
| Fluid | Sewage |
| Operation | Automatic & Manual |
| Quantity of Units | 1 |
| Country of Origin | Egypt |

### Sec02: Design Data

|  |  |
| --- | --- |
| Field | Value |
| Type | Mechanical Coarse Screen-Multi rack |
| Channel Depth | 1500 |
| Channel Width | 400 |
| Water Depth | 600 |
| Bar Thickness | 10 |
| Bar Width | 50 |
| Bar Spacing | 25 |
| Inclination Degree | 60 |

### Sec03: Gearmotor Data

|  |  |
| --- | --- |
| Field | Value |
| Power | 0.37 |
| Power Supply | 380/3/50 |
| Driving Unit Service Factor | 2 |
| Motor Insulation Protection | IP 65 |
| Isolation / Temp. Class | Class F/B |
| Motor Brakes | Included |
| Torque limiter | Included |
| Gear Motor | Rossi/Bonfiglioli |

### Sec04: Control panel Data

|  |  |
| --- | --- |
| Field | Value |
| Voltage | 380 |
| Phase | 3 |
| Frequency | 50 |
| Insulation Protection | IP 65 |
| Panel Thickness | 2 |
| Panel Material | Coated Steel |
| Components Type | Schneider |

### Sec05: Material Data

|  |  |
| --- | --- |
| Field | Value |
| Screen Bars | Stainless Steel 316 |
| Frame | Stainless Steel 316 |
| Rack | Stainless Steel 316 |
| Rack (Teeth) | Artelon |
| Sprockets | Stainless Steel 316 |
| Dead Plate | Stainless Steel 316 |
| Chain | Stainless Steel 316 |
| Bolts & Nuts | A4 |

### Sec06: Other Data

|  |  |
| --- | --- |
| Field | Value |
| One Rack | Yes |
| Two sets of bearings | Yes |

### 4. Belt Conveyor

### Sec01: General Data

|  |  |
| --- | --- |
| Field | Value |
| Manufacturer | Ietos Factory |
| Service | Screening Area |
| Fluid | Screening Disposals |
| Operation | Automatic & Manual |
| Quantity of Units | 1 |
| Country of Origin | Egypt |

### Sec02: Design Data

|  |  |
| --- | --- |
| Field | Value |
| Width | 600 |
| Length | 3200 approx. |
| Belt Thickness | 10 |
| Mounting | Horizontal |
| Chute | Included |

### Sec03: Gearbox Data

|  |  |
| --- | --- |
| Field | Value |
| Type of drive | Gear Motor |
| Power | 0.25 |
| Power Supply | 380/3/50 |
| Driving Unit Service Factor | ≥ 2 |
| Motor Insulation Protection | IP 66 |
| Isolation / Temp. Class | Class F/B |
| Gear Motor | Rossi/Bonfiglioli |

### Sec04: Motor Data

|  |  |
| --- | --- |
| Field | Value |
| Frame | Hot Dip Galvanized Steel |
| Idlers | Coated Steel Unit |
| Belt | Triple-Ply Nylon Layer |
| Driving & Driven Drum Set | Coated Steel Unit |
| Belt Scrapper | Rubber |
| Bolts & Nuts | A4 |

### Sec05: Material Data

|  |  |
| --- | --- |
| Field | Value |
| 1. One set of bearing | Yes |
| 2. Five rollers with accessories | Yes |
| 3. One set of bearing for motor | Yes |

### 5. Belt Conveyor

### Sec01: General Data

|  |  |
| --- | --- |
| Field | Value |
| Manufacturer | Ietos Factory |
| Service | Screening Area |
| Fluid | Screening Disposals |
| Operation | Automatic & Manual |
| Quantity of Units | 1 |
| Country of Origin | Egypt |

### Sec02: Design Data

|  |  |
| --- | --- |
| Field | Value |
| Width | 600 |
| Length | 3200 approx. |
| Belt Thickness | 10 |
| Mounting | Horizontal |
| Chute | Included |

### Sec03: Gearbox Data

|  |  |
| --- | --- |
| Field | Value |
| Type of drive | Gear Motor |
| Power | 0.25 |
| Power Supply | 380/3/50 |
| Driving Unit Service Factor | ≥ 2 |
| Motor Insulation Protection | IP 66 |
| Isolation / Temp. Class | Class F/B |
| Gear Motor | Rossi/Bonfiglioli |

### Sec04: Motor Data

|  |  |
| --- | --- |
| Field | Value |
| Frame | Hot Dip Galvanized Steel |
| Idlers | Coated Steel Unit |
| Belt | Triple-Ply Nylon Layer |
| Driving & Driven Drum Set | Coated Steel Unit |
| Belt Scrapper | Rubber |
| Bolts & Nuts | A4 |

### Sec05: Material Data

|  |  |
| --- | --- |
| Field | Value |
| 1. One set of bearing | Yes |
| 2. Five rollers with accessories | Yes |
| 3. One set of bearing for motor | Yes |

### 6. Gritremoval

### Sec01: General Data

|  |  |
| --- | --- |
| Field | Value |
| Manufacturer | Ietos Factory |
| Service | Grit & Grease Removal Tank |
| No of Channels per Bridge | One Channel |
| Fluid | Sewage |
| Operation | Automatic & Manual |
| Quantity of Units | 1 |
| Country of Origin | Egypt |

### Sec02: Design Data

|  |  |
| --- | --- |
| Field | Value |
| Type | Longitudinal Scraper Bridge |
| Channel Length | 7500 |
| Channel Depth | 3190 |
| Channel Width | 2500 |
| Water Depth | 2000 |
| Bridge Length | 2900 approx. |
| Walkway Width | 750 |
| Handrail Height | 1000 |
| Side Plate (Safety) | 100 |
| Scraper Height | ≥ 300 |

### Sec03: Walkway, Handrail, Wheel Data

|  |  |
| --- | --- |
| Field | Value |
| Drive Wheel Quantity | 4 |
| Drive Wheel Diameter | Acc. To Design |
| Drive Wheel Material | Polyurethane Coated Carbon Steel 37 |

### Sec04: Scrapper Data

|  |  |
| --- | --- |
| Field | Value |
| Power | 0.37 |
| Power Supply | 380 /3 /50 |
| Driving Unit Service Factor | ≥ 2 |
| Motor Insulation Protection | IP66 |
| Isolation / Temp. Class | Class F/B |
| Gear Motor | Rossi/Bonfiglioli |

### Sec05: Gearmotor Data

|  |  |
| --- | --- |
| Field | Value |
| Power | 0.18 |
| Power Supply | 380 /3 /50 |
| Driving Unit Service Factor | ≥ 2 |
| Motor Insulation Protection | IP65 |
| Isolation / Temp. Class | Class F/B |
| Motor Brakes | Included |
| Gear Motor | Rossi/Bonfiglioli |

### Sec06: Scrapper Data

|  |  |
| --- | --- |
| Field | Value |
| Voltage | 380 |
| Phase | 3 |
| Frequency | 50 |
| Insulation Protection | IP 54 |
| Panel Thickness | 2 |
| Panel Material | Coated Steel |
| Components Type | Schneider |

### Sec07: Drive unit

|  |  |
| --- | --- |
| Field | Value |
| Bridge structure | Hot dip galvanized steel 37 |
| Grating | Hot dip galvanized steel 37 |
| Hand railing | Hot dip galvanized steel 37 |
| End carriage | Hot dip galvanized steel 37 |
| Surface scraper | Stainless Steel 316 |
| Bottom scraper | Stainless Steel 316 |
| Scraper Support | Stainless Steel 316 |
| Wearing Strips for Scraper | Rubber |
| Bolts & Nuts | A4 |

### Sec08: Control panel Data

|  |  |
| --- | --- |
| Field | Value |
| 1. Two complete bottom scrapers for grit | Yes |
| 2. Two complete scrapers for oil | Yes |
| 3. Four wheels with Rubber tires | Yes |
| 4. Two sets of bearings | Yes |

### 7. Sand Silo

### Sec01: Section 1

|  |  |
| --- | --- |
| Field | Value |
| Manufacturer | Ietos Factory |
| Service | Collecting & removing sand from grit removal tank |
| Fluid | Sand & water |
| Operation | Manual |
| Quantity of Units | 2 |

### Sec02: Section 2

|  |  |
| --- | --- |
| Field | Value |
| Capacity | 3 |
| Tank Diameter | 1750 |
| Cylindrical Shell Vertical Height | 1500 |
| Thickness | 6 |
| Quick Shutoff Gate Valve | Included |

### Sec03: Section 3

|  |  |
| --- | --- |
| Field | Value |
| Silo Tank | Epoxy Coated Steel |
| Discharge Hopper | Epoxy Coated Steel |
| Silo Legs | Epoxy Coated Steel |
| Hand rail | Epoxy Coated Steel |
| Ladder | Epoxy Coated Steel |
| Anchor Bolts | Epoxy Coated Steel |

### 8. Primary Sedimentation

### Sec01: Section 1

|  |  |
| --- | --- |
| Field | Value |
| Manufacturer | Ietos Factory |
| Service | Final Settling Tank |
| Fluid | Sewage |
| Operation | Automatic & Manual |
| Quantity of Units | 1 |
| Country of Origin | Egypt |

### Sec02: Section 2

|  |  |
| --- | --- |
| Field | Value |
| Type | Rotatory Half Scraper Bridge |
| Tank Diameter | 24 |
| Side Wall Depth | 4320 |
| Water depth | 3500 |
| Bridge length | 14.5 approx. |
| Handrail Height | 1000 |
| Walkway Width | 750 |
| Side Plate | 100 |
| Sludge Scraper Height | ≥ 300 |
| Scraper Thickness | ≥ 4 |

### Sec03: Section 3

|  |  |
| --- | --- |
| Field | Value |
| Drive Wheel Quantity | 2 |
| Drive Wheel Diameter | 400 |
| Drive Wheel Material | Cast mild steel covered by polyurethane layer |

### Sec04: Section 4

|  |  |
| --- | --- |
| Field | Value |
| Weir Type | V-Notch |
| Weir Length | 75.4 Approx. |
| Weir Height | 300 |
| Weir Thickness | 4 |
| Weir Adjustable Height | 100 |
| Rubber Sealing Thickness | ≥ 4 |
| Baffle Height | 250 |
| Baffle Thickness | 4 |

### Sec05: Section 5

|  |  |
| --- | --- |
| Field | Value |
| Power | 1.1 |
| Power Supply | 380 /3/50 |
| Driving Unit Service Factor | ≥ 2 |
| Motor Insulation Protection | IP66 |
| Isolation / Temp. Class | Class F/B |
| Torque Limiter | Included |
| Gear Motor | Rossi/Bonfiglioli |

### Sec06: Section 6

|  |  |
| --- | --- |
| Field | Value |
| No. of Rings | 14 |
| Origin | Europe |

### Sec07: Section 7

|  |  |
| --- | --- |
| Field | Value |
| Voltage | 380 |
| Phase | 3 |
| Frequency | 50 |
| Insulation Protection | IP 54 |
| Panel Thickness | 2 |
| Panel Material | Coated Steel |
| Components Type | Schneider |

### Sec08: Section 8

|  |  |
| --- | --- |
| Field | Value |
| Bridge structure | Hot dip galvanized steel.37 |
| Hand rail | Hot dip galvanized steel.37 |
| End carriage | Hot dip galvanized steel.37 |
| Bottom scraper | Stainless Steel 304 |
| Surface scraper | Stainless Steel 304 |
| Scum Box | Stainless Steel 304 |
| Weir | Stainless Steel 304 |
| Wearing Strips for Scraper | Rubber |
| Bolts & Nuts | A2 |

### 9. Quick Valve

### 10. Telescopic Valve

### Sec01: Section 1

|  |  |
| --- | --- |
| Field | Value |
| Manufacturer | Ietos Factory |
| Fluid | Sewage |
| Service | Final Settling Tank |
| Operation | Actuated (Modulated) |
| Qty | 1 |
| Country of Origin | Egypt |

### Sec02: Section 2

|  |  |
| --- | --- |
| Field | Value |
| Valve Diameter | DN 400 |
| Sliding Tube Diameter | DN 350 |
| Adjustable Height | 1000 |

### Sec03: Section 3

|  |  |
| --- | --- |
| Field | Value |
| Body | Stainless steel 304 |
| Sliding tube | Stainless steel 304 |
| Stem | Stainless steel 304 |
| Sealing | Rubber |
| Hand wheel | Cast iron |
| Bolts | A2 |

### 11. Sludge Thickener

### Sec01: Section 1

|  |  |
| --- | --- |
| Field | Value |
| Manufacturer | Ietos Factory |
| Service | Sludge Thickener Tank |
| Fluid | Sewage |
| Operation | Automatic & Manual |
| Quantity of Units | 1 |

### Sec02: Section 2

|  |  |
| --- | --- |
| Field | Value |
| Type | Fixed Concrete Bridge |
| Tank Inner Diameter | 9500 |
| Side Wall Depth | 3500 |
| Water Level | 3000 |
| Number of Arms | 3 arms |
| Scraper Height | ≥ 250 |
| Scraper Thickness | ≥ 4 |
| Cleaning Brushes | Included |

### Sec03: Section 3

|  |  |
| --- | --- |
| Field | Value |
| Weir Type | V-Notch |
| Weir Length | 29.9 approx. |
| Weir Height | 300 |
| Weir Thickness | 4 |
| Rubber Sealing Thickness | ≥ 4 |

### Sec04: Section 4

|  |  |
| --- | --- |
| Field | Value |
| Power | 0.37 |
| Power Supply | 380 /3/50 |
| Driving Unit Service Factor | ≥ 2 |
| Motor Insulation Protection | IP66 |
| Isolation / Temp. Class | Class F/B |
| Torque Limiter | Included |
| Gear Motor | Rossi/Bonfiglioli |

### Sec05: Section 5

|  |  |
| --- | --- |
| Field | Value |
| Voltage | 380 |
| Phase | 3 |
| Frequency | 50 |
| Insulation Protection | IP 54 |
| Panel Thickness | 2 |
| Panel Material | Coated Steel |
| Components Type | Schneider |

### Sec06: Section 6

|  |  |
| --- | --- |
| Field | Value |
| Bridge structure | Concrete |
| Rotating shaft | Stainless Steel 304 |
| Picket fence | Stainless Steel 304 |
| Supporting arms | Stainless Steel 304 |
| Weir | Stainless Steel 304 |
| Bottom scraper | Stainless Steel 304 |
| Scraper Strips | Rubber |
| Diffusion Drum | Stainless Steel 304 |
| Drive Unit | Hot dip galvanized steel 37 |
| Bolts & Nuts | A2 |