

# شركة الزهراء للمقاولات الهندسية والتوريدات

## **EIZAHRAA FOR ENGINEERING CONTRACTING AND Supplying**

Project Name:

ProjQQQQQQQ

Client Name:

qq

Capacity:

qq



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#### **EIZAHRAA FOR ENGINEERING CONTRACTING AND Supplying**

# 1. Belt Conveyor

## Sec01: Inputs

Field	Value
Belt Length	7000
Belt Width	800
Drum Diameter	250
Friction	0.3
Velocity	0.4
Factor of Safety	1.5
Belt weight per meter	15

Field	Value	
Weight	396.33	
Power	539.14	
Speed	0	



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# 2. Gritremoval

### Sec01: Inputs

Field	Value
N of Channels	2
Channel Width	2.5
Civil Width	0.4
Bridge Length	6
Wheel Diameter	0.25
Friction	0.3
Velocity	0.05
Safety Factor	1.5

Field	Value
Weight Total (kg)	1956.00
Driving Power (kW)	628.71
Driving Motor Speed (rpm)	3.82
Weight steel	1256.00
Weight St.St	700.00
Lifting Power (kW)	282.60



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# 3. Primary Sedimentation

## Sec01: Inputs

Field	Value
Walkway Length	10
Friction Coefficient	0.3
Velocity (m/s)	0.05
FOS	1.5

Field	Value
Total Weight (kg)	2580.0
Power Required (kW)	725.625
Motor Speed (rpm)	0
Steel Weight (kg)	1800.0
St.St. Weight (kg)	780.0



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# 4. Screw Conveyor

## Sec01: Inputs

Field	Value
Density (Kg/m3)	1600
Length (mm)	5000
Diameter (mm)	300
RequiredFlow (m3/h)	5
FillingRatio	0.4
SafetyFactor	1.5
MotorEff	0.7
ShaftDiameter (mm)	50

Field	Value	
Pitch (mm)	240.0	
Speed (RPM)	12.64	
Motor Power (Wat)	238.1	
ScrewWeight (Kg)	121.51	
FrameWeight (Kg)	337.25	



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# **5. Channel Penstocks**

### Sec01: Inputs

Field	Value
Channel Height	1700
Frame Height Over Channel	900
Channel Width	650
Gate Margin Width	150
Water Level	475
Gate Margin Over Water Lv	200
Gate Th	6
Gate Other PLs	10
HeadStock	15
Frame Weight Per M	12.5

Field	Value
Frame Perimeter	7150.0
Frame Weight (KG)	89.375
Gate PL Weight	25.92
Gate Stiffener N	3.0
Gate Stiffener Weight	7.776
Gate Weight (KG)	43.696
Total Weight (KG)	162.88