



شركة الزهراء  
للمقاولات الهندسية  
والتوريدات

**Z.C.E**

*EIZAHRAA FOR ENGINEERING CONTRACTING AND Supplying*

Project Name:

Testing

Client Name:

T

Capacity:

T



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No description provided.



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## 1. Belt Conveyor



### Sec01: General Data

Field	Value
Manufacturer	Winkel
Quantity	1

### Sec02: Design Data

Field	Value
Width	800
Length	2000

### Sec03: Gearbox Data

Field	Value
Trade Mark	SEW
Model	SA57T

### Sec04: Motor Data

Field	Value
Trade Mark	SEW
Rated Power	0.37 kW
Supply Voltage	380 V, 3 Phases, 50 Hz
Insulation	Class F
Temp Rise	Class B
Ingress Protection	IP65

### Sec05: Material Data

Field	Value
Frame	Hot deep galvanized steel



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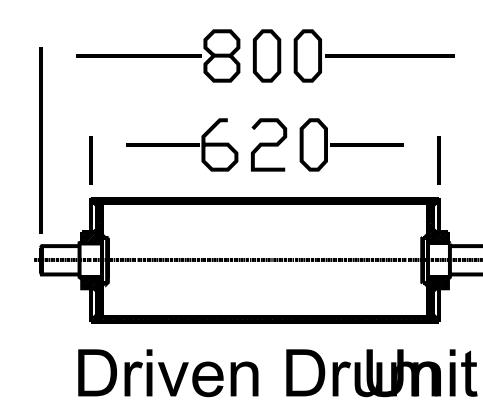
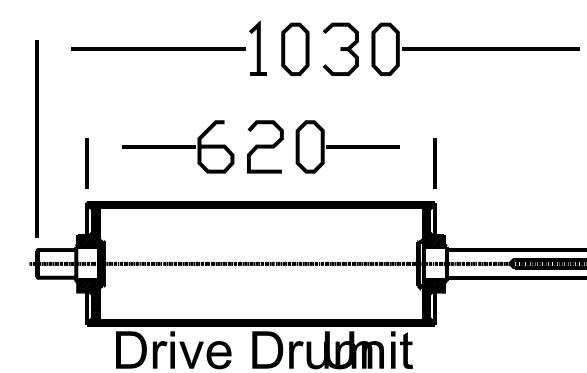
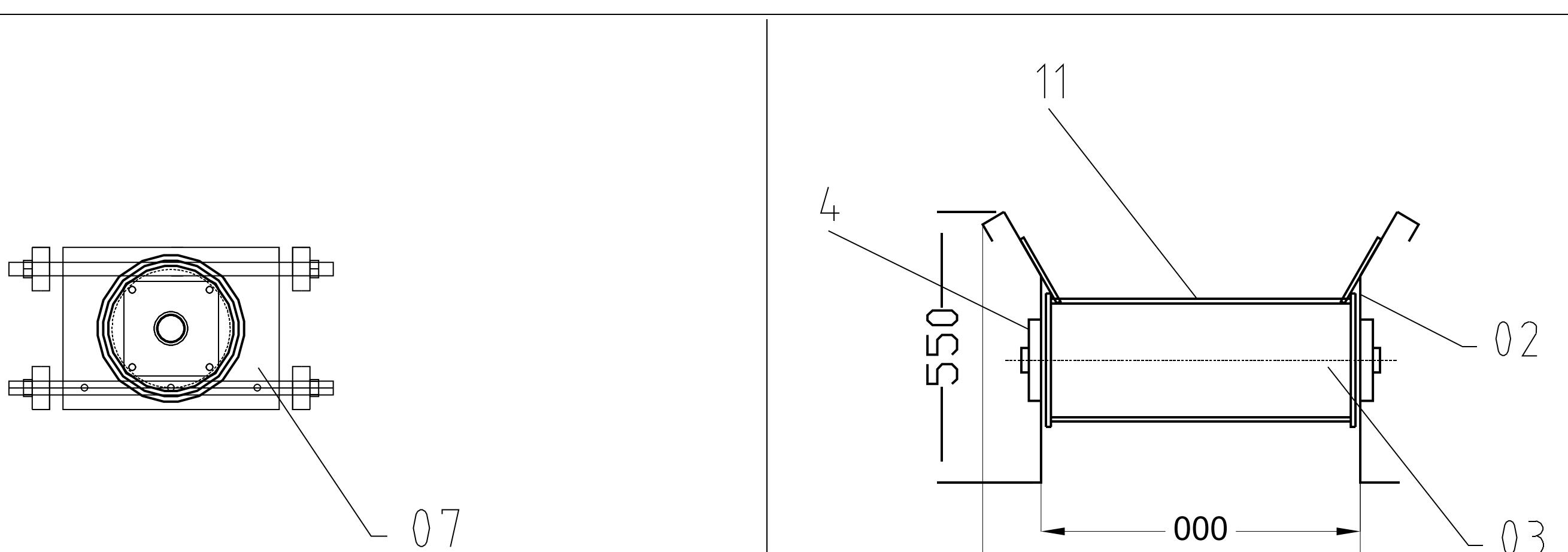
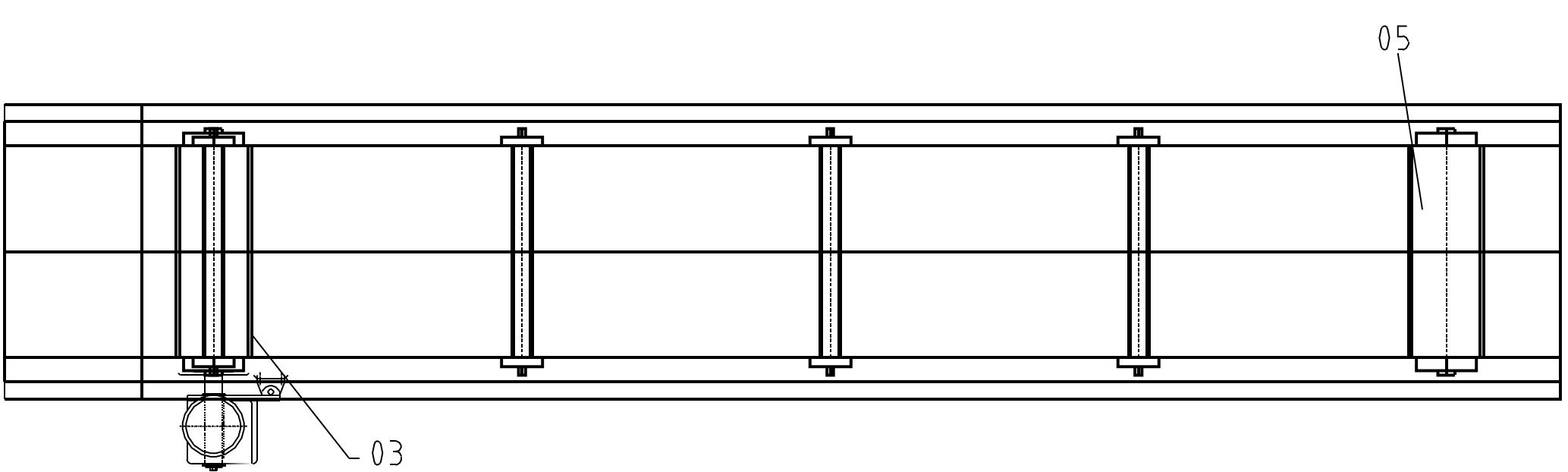
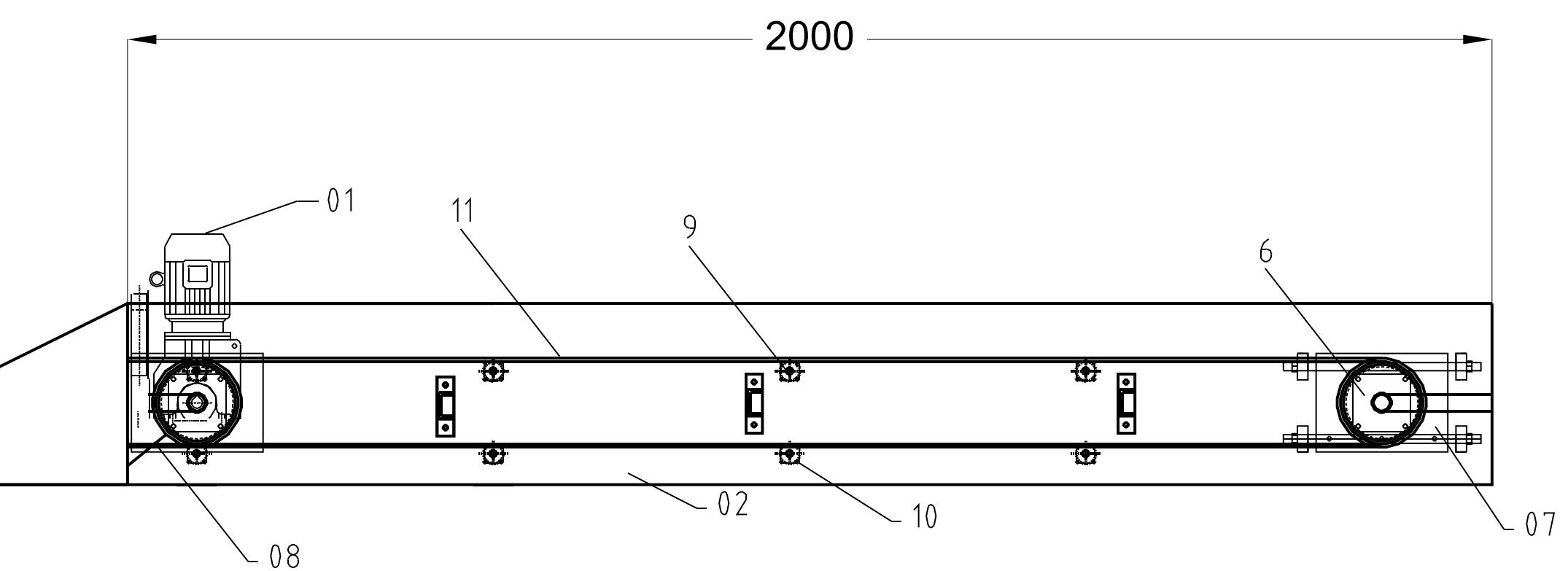
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Roller Hot deep galvanized steel

Bolts & Nuts AISI 304 (A2)

Conveyor Rubber 10 mm (3Ply cotton/nylon)



**TURN KEY CONTRACTORS:**  
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AUTOSATRAD ROAD \_ ARAB ABOSAAD \_ CAIRO \_ EGYPT  
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**TITLE:**  
Belt conveyor

SCALE	REF. DWG. NO.	SIZE	REV.
K.T	A.S	A.S	S.MICHAEL



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## 2. Basket screens



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### **3. Quick Valve**



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**Sec01:**

Field	Value
Manufacturer	Factory
Quantity	1
Operation	Manual

**Sec02:**

Field	Value
Diameter	DN 200 mm
Main Shaft	Stem
Stem nut	Bronze
Material of Body	DCI



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#### **4. Thickener**



### Sec01:

Field	Value
Manufacturer	Factory
Quantity	2
Installation location	Circle tank
Installation country	Egypt
Installation (indoor, outdoor)	outdoor
Continuous operation	yes
No. Of hours a day	24/24 h

### Sec02:

Field	Value
Total Tank Diameter	6000 mm
Water Depth	3500 mm
Bridge Type	Concrete

### Sec03:

Field	Value
Sludge Scraper Thickness	6 mm
Height of the Scraper	270 mm
Rubber wearing strips cross section	8x100mm
Back up plate	AISI 316 (4mm)

### Sec04:

Field	Value
No. Of Central shaft	1
Central shaft	Pipe schedule 40



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Feeding cylinder	4 mm
Cutting arms	Fabrication Angle 50x50
Bottom bearing type	Fixing pipe with artlon
Overflow weir Type	V-Notch (adjustable slot)
Slots	12(W) x 50 (H) mm
Thickness	4 mm
Height	200 mm

## Sec05:

Field	Value
Local control panel	Electrostatic painting
Panel Thickness	2 mm
Component	Schneider
Operation	Manual / Automatic timer switch

## Sec06:

Field	Value
Gearbox Trade Mark	SEW
Model	SA77/T
Electric Motor Trade Mark	SEW
Rated Power	0.37 kW
Supply Voltage	380 V, 3 Phases, 50 Hz
Insulation	Class F
Temp Rise	Class B
Ingress Protection	IP66

## Sec07:

Field	Value
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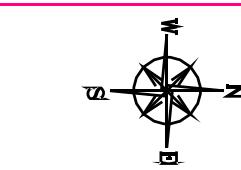
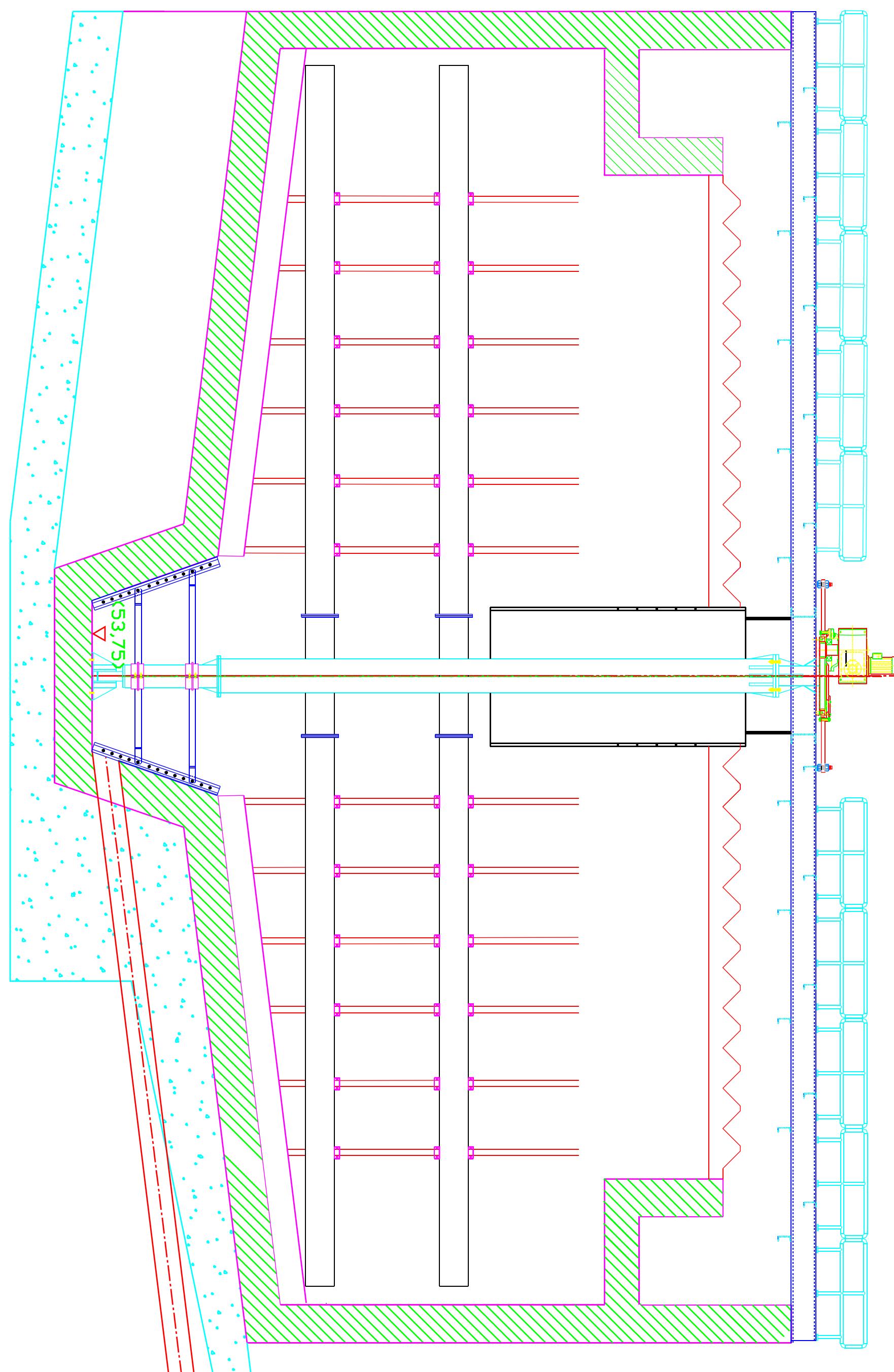
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Material of Bridge	Concrete
Material of Central shaft	AISI 316
Material of Feeding cylinder	AISI 316
Material of Sludge scraper	AISI 316
Material of Overflow Weir	AISI 316
Material of Bolts and nuts	AISI 316 (A4)

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## Section Side View



NOTES  
1. ALL LEVELS ARE IN FEET, METERS UNLESS OTHERWISE NOTED  
2. ALL PIPES ARE HDG ST 30

PIPELINE CONNECTIONS									
Z.C.R									
AUTOCAD AND CADDO 2000									
sludge thickener tank									
TITLE:									
SCALE:	REF. NO.:	SIZE:	REV.:						
1:100	1	1	1						
NAME:	DATE:	APPROVED:	DATE:						
REMOVED:	REMOVED:	REMOVED:	REMOVED:						

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## 5. Telescopic Valve



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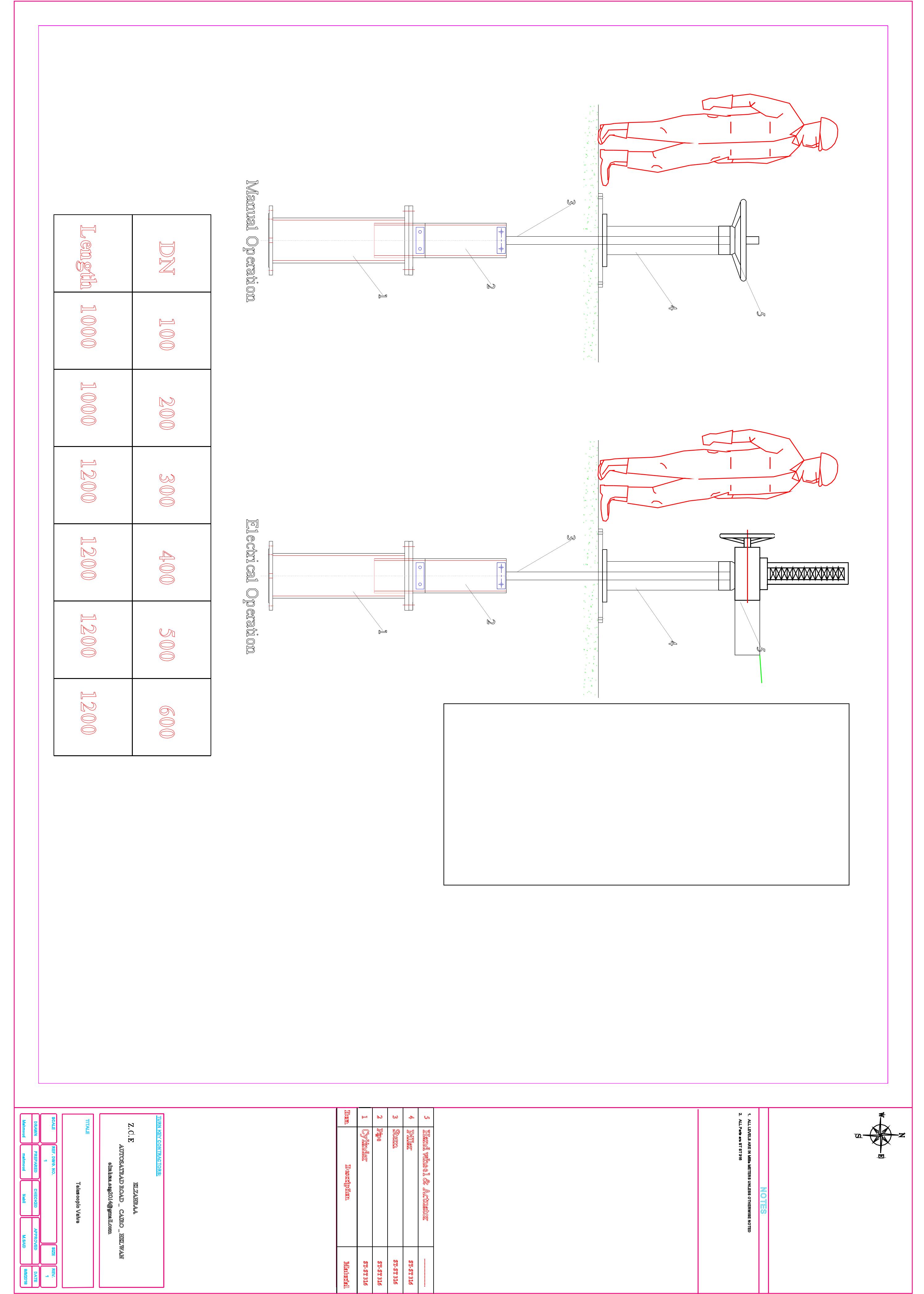
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### Sec01:

Field	Value
Manufacturer	Factory
Quantity	1
Operation	Manual rising stem

### Sec02:

Field	Value
Diameter	DN 200 mm
Material of Body	AISI 316
Material of Main shaft	AISI 316
Material of Stem nut	Bronze
Gasket	EPDM
Pillar	ST-37





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## 6. Channel Penstocks



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## 7. Container



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### Sec01: General Data

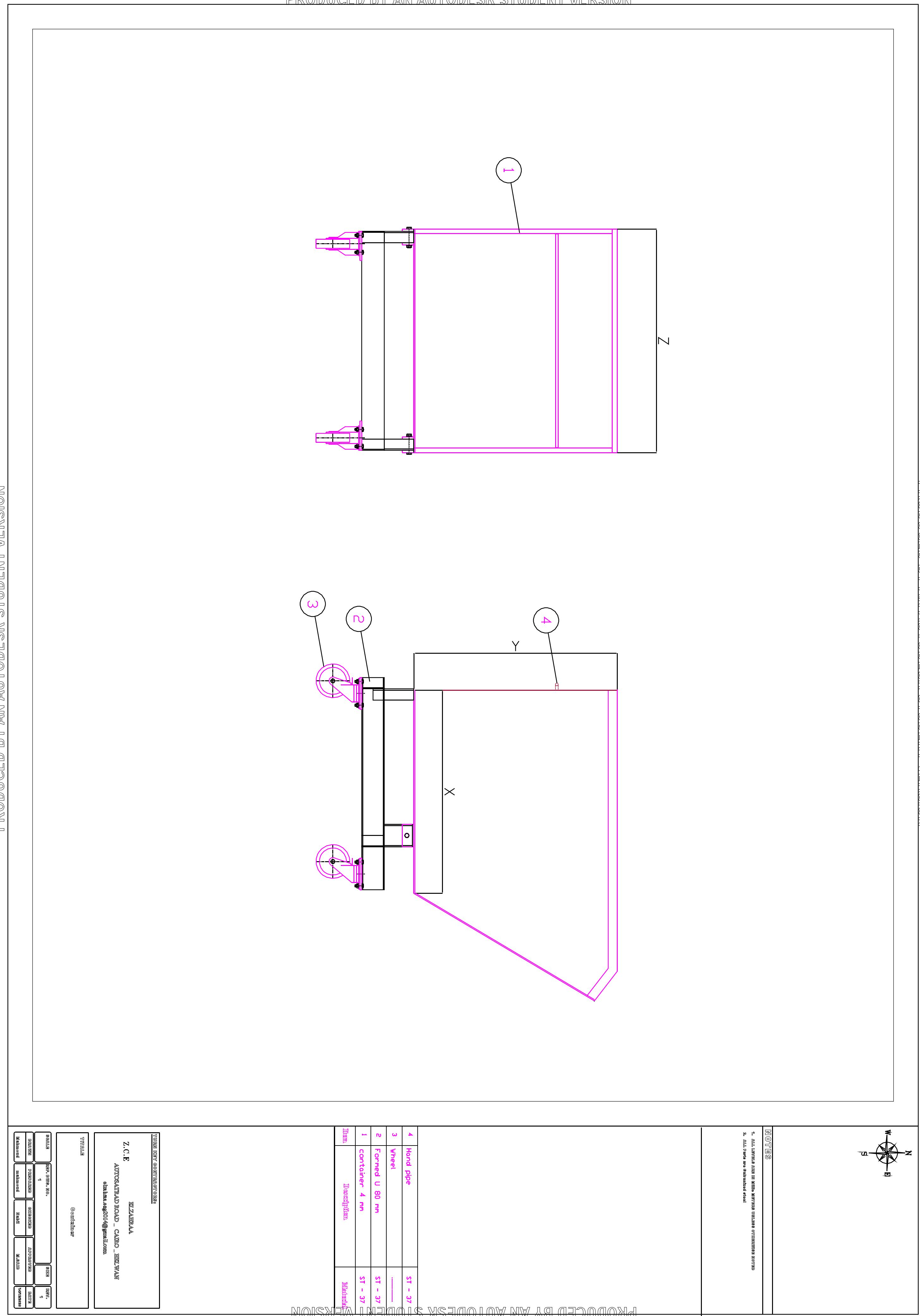
Field	Value
Manufacturer	Factory
Quantity	1

### Sec02: Design Data

Field	Value
Capacity	2 m3
Thicknesses	6mm
No. of Wheel	4
Automatic safety lock	Yes

### Sec03: Material Data

Field	Value
Frame	Epoxy Coated
Bolts & Nuts	Galvanized steel
Wheel	Steel with rubber





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## 8. Circular Tanks



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## **9. Gritremoval**



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## Sec01: General Data

Field	Value
Manufacturer	Factory
Quantity	One bridge serve two channel
Function	Waste water
Installation location	Rectangle tank
Installation country	Egypt
Installation (indoor, outdoor)	outdoor
Continuous operation	yes
No. Of hours a day	24/24 h

## Sec02: Design Data

Field	Value
Total tank width	600 mm
Total tank length	7500 mm
Water depth	600 mm
Length of the bridge	2000 mm
Width of bridge	1000 mm
Qty of driving wheels / bridge	2
Qty of free wheels / bridge	2
Qty of drive gearbox / bridge	1
Admissible load on bridge / tank	500 kg / m <sup>2</sup>
Max. Allowable deflection / tank	1/500

## Sec03: Walkway, Handrail, Wheel Data

Field	Value
Walkway type	Grating



Handrail Type	tubular
Handrail Height	1000 mm
Wheel Diameter	300 mm
Wheel Width	90 mm
Wheel rail	square bar 40x40mm

#### Sec04: Scrapper Data

Field	Value
Grease scrapper Thickness	6 mm
Height of the scrapper	300 mm
Fixation of sludge scrapper	by pipe suspenders
Rubber wearing strips cross section	12x100 mm
Scum ramp thickness	6mm

#### Sec05: Gearmotor Data

Field	Value
Gearbox Qty	1
Gearbox Trade mark	SEW
Model	SA57/T
Electric Motor Trade Mark	SEW
Rated Power	0.37 kW
Supply Voltage	380 V, 3 Phases, 50 Hz
Insulation	Class F
Temp Rise	Class B
Ingress Protection	IP65

#### Sec06: Scrapper Data

Field	Value
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Sand Scrapper Thickness	6 mm
Height of the scrapper	300 mm
Fixation of sludge scrapper	by pipe suspenders
Rubber wearing strips cross section	12x100 mm

## Sec07: Drive unit

Field	Value
Drive Unit Gearbox Qty	1
Drive Unit Trade Mark	SEW
Drive Unit Model	SA77/T
Electric Motor Trade Mark	SEW
Electric Motor Rated Power	0.18 kW
Insulation	Class F
Temp Rise	Class B
Ingress Protection	IP65

## Sec08: Control panel Data

Field	Value
Local control panel	Electrostatic painting
Panel thicknesses	2 mm
Component	Schneider
Operation	Manual / Automatic timer switch

## Sec09: Material Data

Field	Value
Material of Bridge	Hot deep galvanized steel
Scum ramp	AISI 304
Grease Scraper	AISI 304



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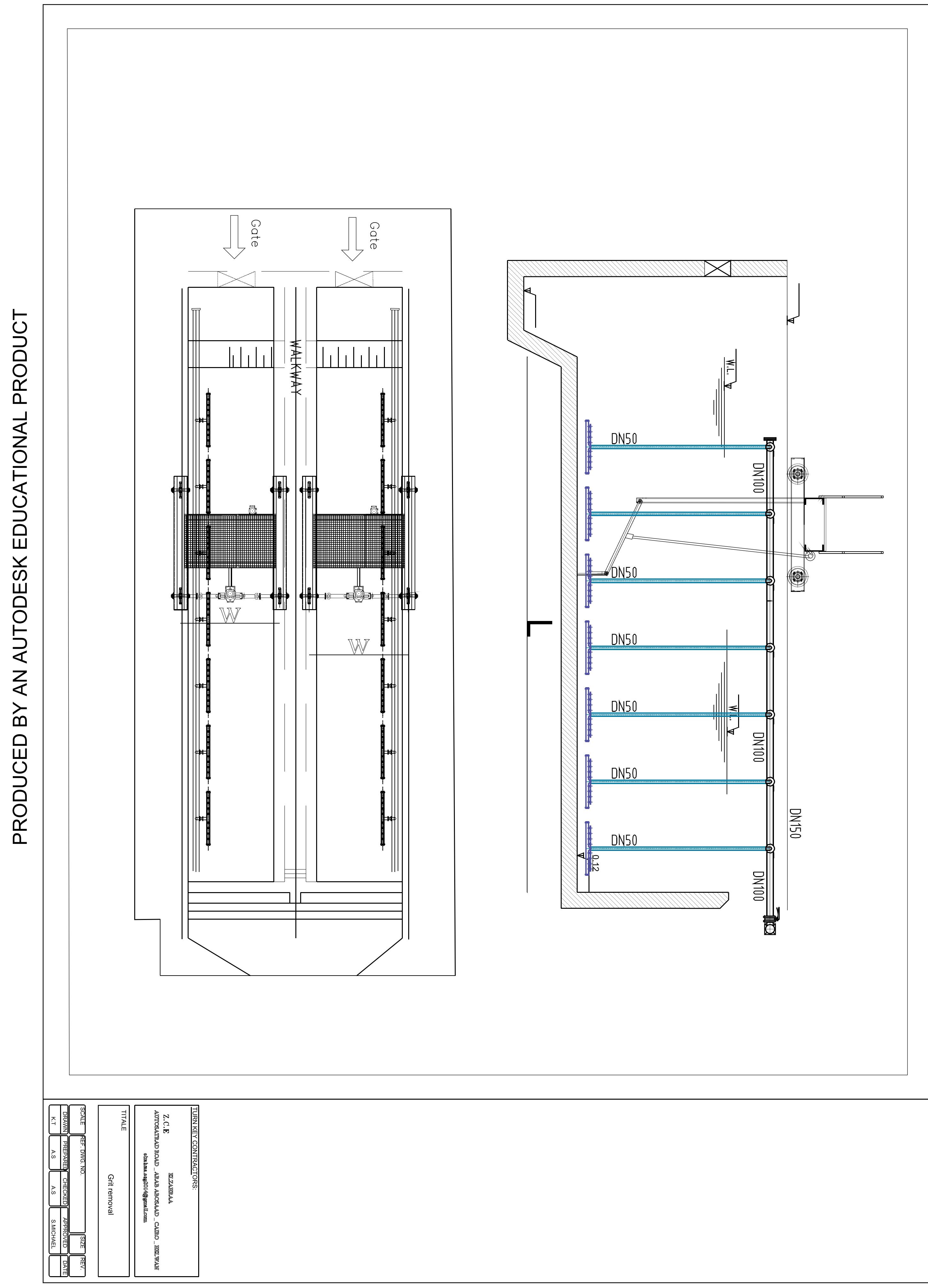
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Sludge Scraper	AISI 304
Bolts and nuts	AISI 304 (A2)
Open mesh floor	GRP or Hot deep galvanized steel
Wheel	Carbon steel
Wheel Shaft	Carbon steel

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## **10. Wall Penstocks**



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## 11. Rectangular Tanks



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## **12. Screw Conveyor**



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### **13. Sand Silo**



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### Sec01:

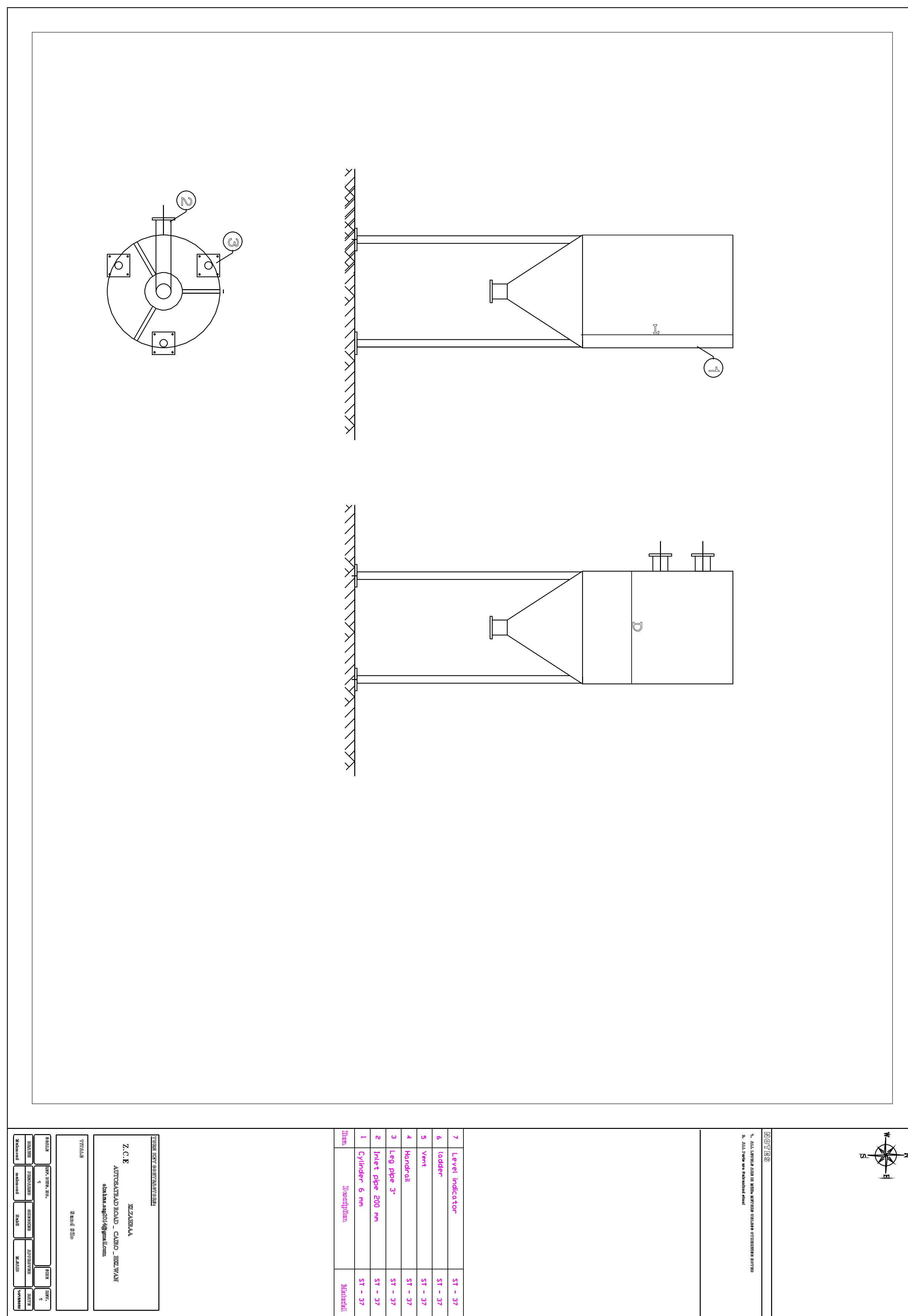
Field	Value
Manufacturer	Factory
Quantity	1

### Sec02:

Field	Value
Capacity	5 m3
Inlet	Pipe 150 mm PN10
Outlet	Pipe 150 mm PN10

### Sec03:

Field	Value
Shell	Epoxy coated steel 37
Cone	Epoxy coated steel 37
Nozzle	Epoxy coated steel 37





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## 14. Rectangular Mixers

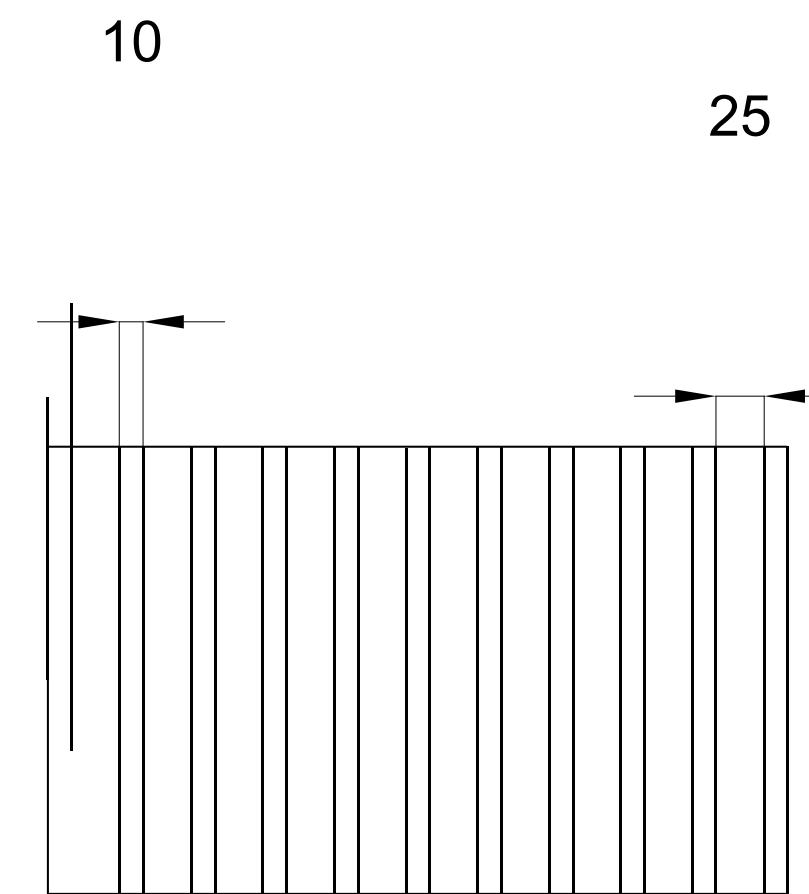
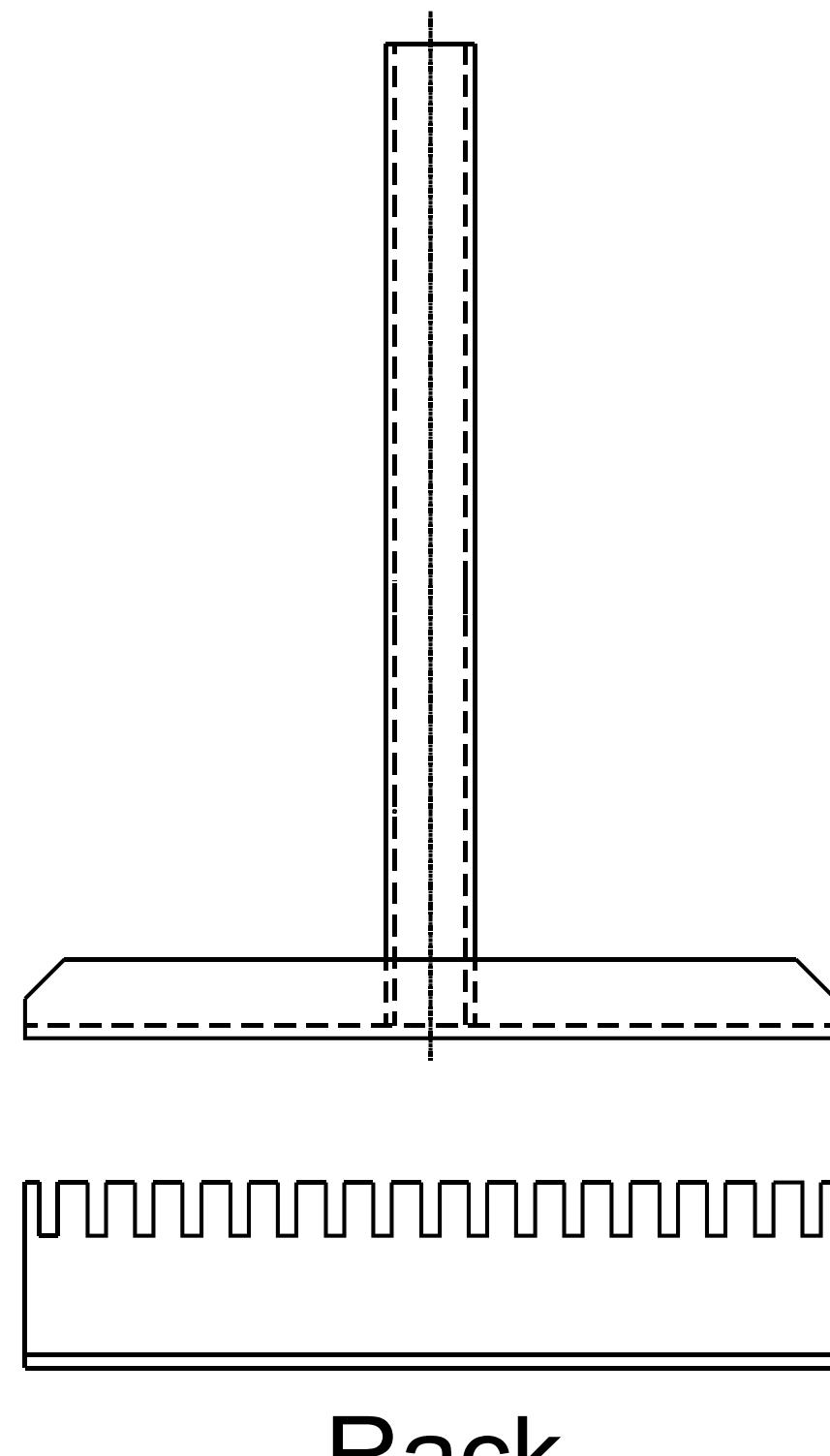
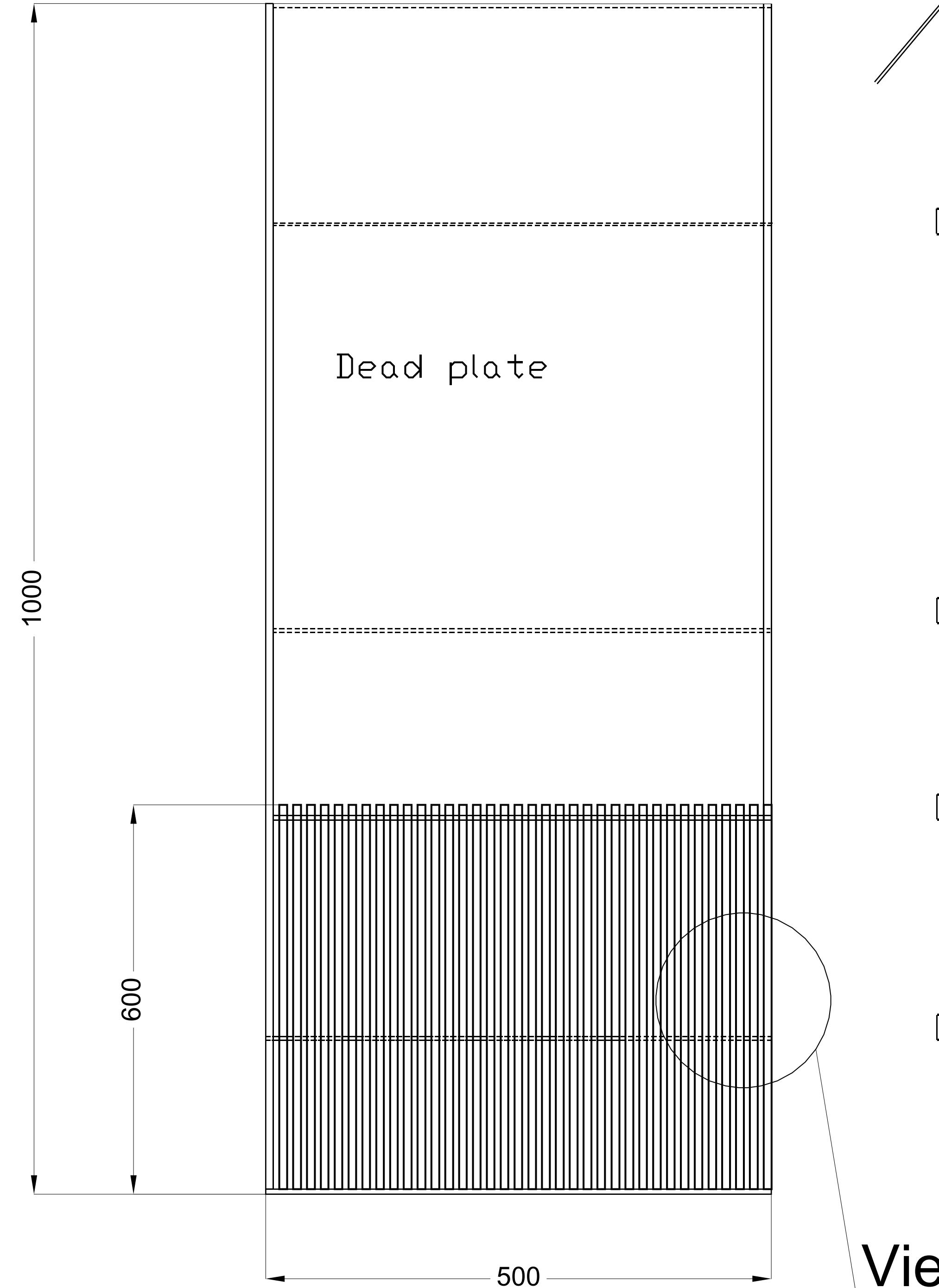


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## **15. Test Machine**



View - A

TURN KEY CONTRACTORS:			
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elbaiza.eg2014@gmail.com			

TITLE			
Manual screen			

SCALE	REF. DWG. NO.	SIZE	REV.
DRAWN	PREPARED	CHECKED	APPROVED
K.T	A.S	A.S	S.MICHAEL



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## **16. Manual Screen**



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## Sec01: General Data

Field	Value
Manufacturer	Factory
Quantity	1
Operation	Manual

## Sec02: Design Data

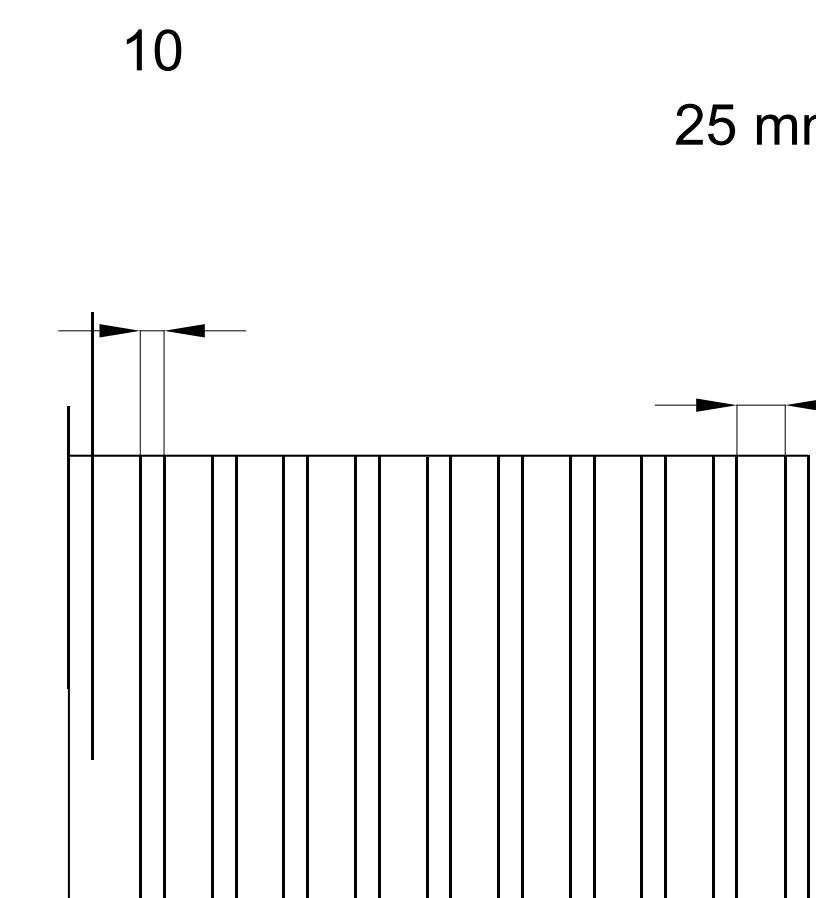
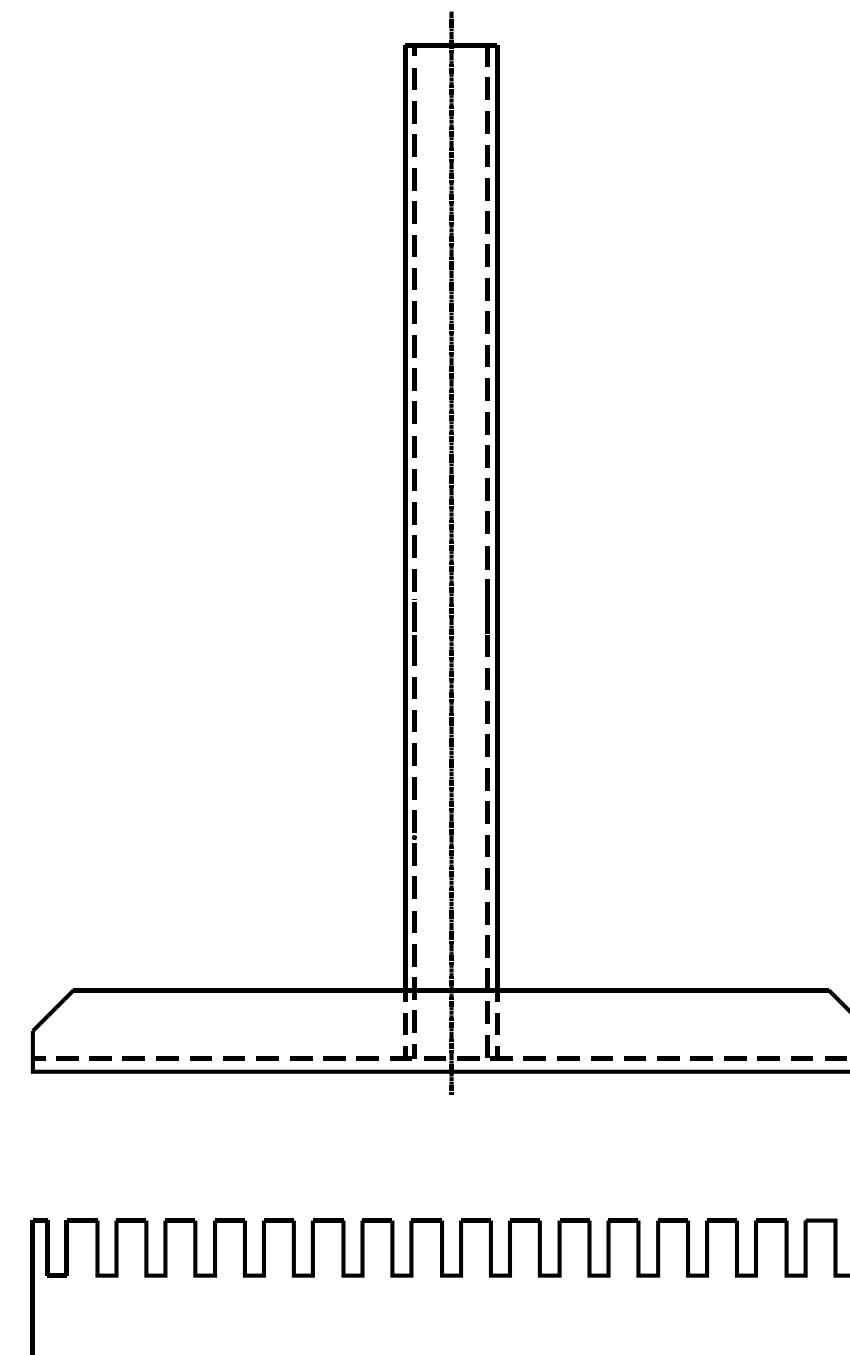
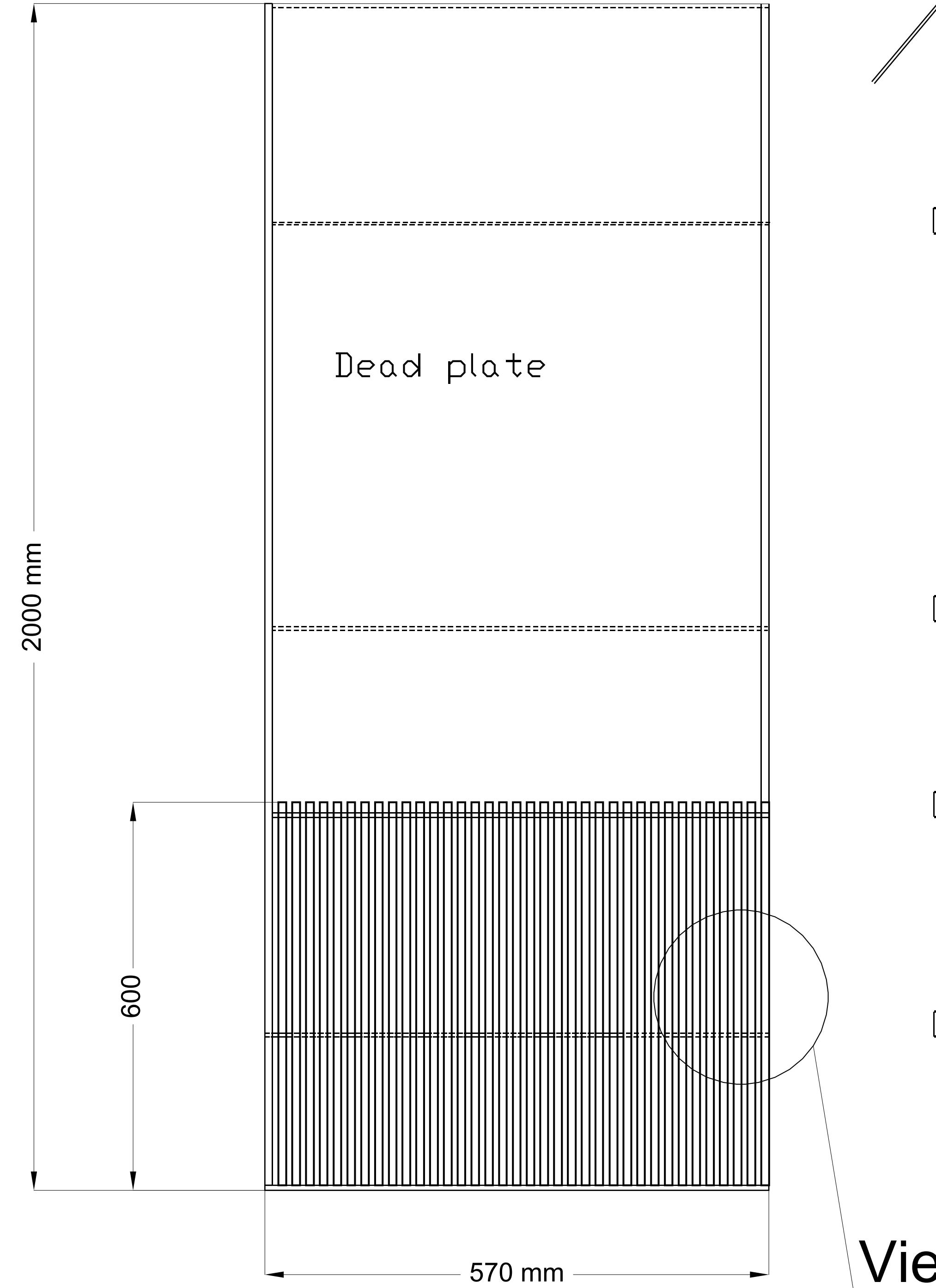
Field	Value
Flow	0.11 m <sup>3</sup> /s
Width	570 mm
Length	2000 mm
Hand rake	No. 2
Space between bar	25 mm
Bar Type	Rectangular
Bar section	10x30 mm
Inclination	45 Deg

## Sec03: Material Data

Field	Value
Frame	AISI 316
Rake	AISI 316
Bar screen	AISI 316

## Sec04: Channel Data

Field	Value
Channel Width	600 mm
Depth	1180 mm



View - A

TURN KEY CONTRACTORS:			
Z.C.E	XIZARAA		
AUTOSATRAD ROAD _ ARAB ABOSAAD _ CAIRO _ EGYPT			
elbaiza.eg2014@gmail.com			

TITLE			
Manual screen			

SCALE	REF. DWG. NO.	SIZE	REV.
DRAWN	PREPARED	CHECKED	APPROVED
K.T	A.S	A.S	S.MICHAEL



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## 17. Primary Sedimentation Tank



### Sec01:

Field	Value
Manufacturer	Factory
Quantity	2
Installation location	Circle tank
Installation country	Egypt
Installation (indoor, outdoor)	outdoor
Continuous operation	yes
No. Of hours a day	24/24 h

### Sec02:

Field	Value
Total Tank Diameter	11700 mm
Water Depth	3500 mm
Type	Half Bridge
Length of the bridge	7000 mm
Width of the bridge	1000 mm
Qty of driving wheels / bridge	2
Qty of free wheels / bridge	2
Qty of drive gearbox / bridge	1
Admissible load on bridge / tank	500 kg / m <sup>2</sup>
Max. Allowable deflection / tank	1/500

### Sec03:

Field	Value
Slip ring Trafal Mark	Ravioli or equal
Slip ring No. of ring	Minimum 6 ring



Slip ring Ingress Protection

IP 55

#### Sec04:

Field	Value
Hand rail type	tubular
Height	1000 mm
Walkway type	Grating
Width	800 mm
Scum box Qty	1
Scum box Width	900 mm
Scum box thickness	4 mm
Diameter of exit pipe	DN 150 mm

#### Sec05:

Field	Value
Scum box Scraper Thickness	6 mm
Height of the Scraper	300 mm
Fixation of scum scraper	by pipe suspenders
Sludge Scraper Thickness	6 mm
Height of the Scraper	300 mm
Fixation of scum scraper	by pipe suspenders
Rubber wearing strips cross section	13x100mm

#### Sec06:

Field	Value
Overflow weir Type	V-Notch (adjustable slot)
Slots	12(W) x 50 (H) mm
Thickness	4 mm



Height	200 mm
Type	Baffle plate
Thickness	4mm
Height	300 mm

### Sec07:

Field	Value
Local control panel	Electrostatic painting
Panel Thickness	2 mm
Component	Schneider
Operation	Manual / Automatic timer switch

### Sec08:

Field	Value
Gearbox Trade Mark	SEW
Model	SA77/T
Electric Motor Trade Mark	SEW
Rated Power	0.18 kW
Supply Voltage	380 V, 3 Phases, 50 Hz
Insulation	Class F
Temp Rise	Class B
Ingress Protection	IP66

### Sec09:

Field	Value
Material of Bridge	Hot deep galvanized steel
Material of Scum scraper	AISI 316
Material of Sludge scraper	AISI 316



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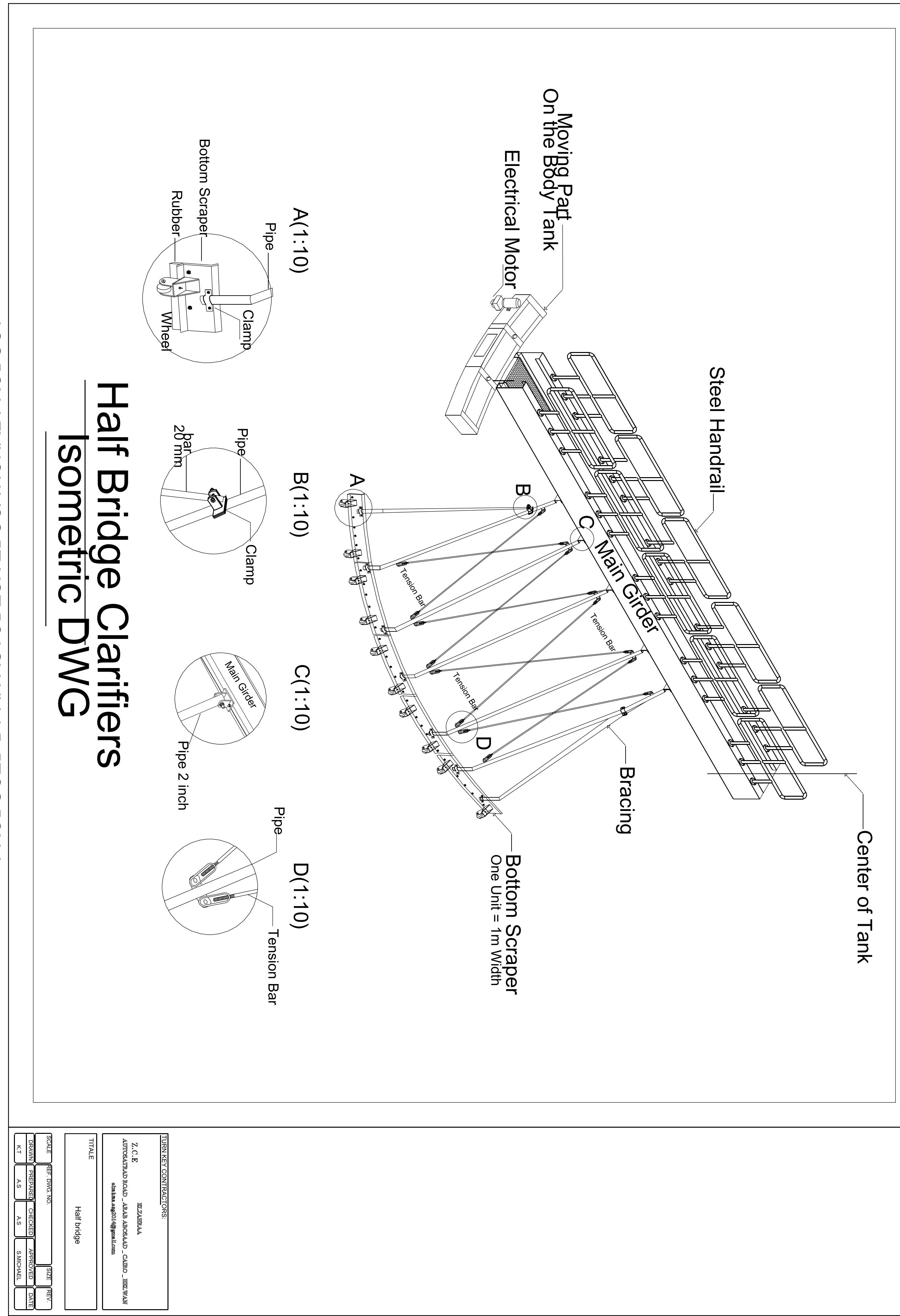
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Material of Overflow weir	AISI 316
Material of Bolts and nuts	AISI 316 (A4)
Material of Open mesh floor	GRP or Hot deep galvanized steel
Wheel	Polyurethane
Wheel shaft	Carbon steel

# Half Bridge Clarifiers

## Isometric DWG





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## 18. Mechanical Screen



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## Sec01: General Data

Field	Value
Manufacturer	Factory
Quantity	1

## Sec02: Design Data

Field	Value
Type	Multi tack
Flow	0.11 m <sup>3</sup> /sec
No. of Rake	3
Width	580 mm
Length	3000 mm
Dead plate	4 mm
Space between bars	25 mm
Bar Type	Rectangular
Bar section	10x20 mm
Inclination	75 Deg

## Sec03: Gearmotor Data

Field	Value
Gearbox Trade mark	SEW
Model	SA77/T
Electric Motor Trade Mark	SEW
Rated Power	0.18 kW
Supply Voltage	380 V, 3 Phases, 50 Hz
Insulation	Class F
Temp Rise	Class B



Ingress Protection IP65

#### Sec04: Control panel Data

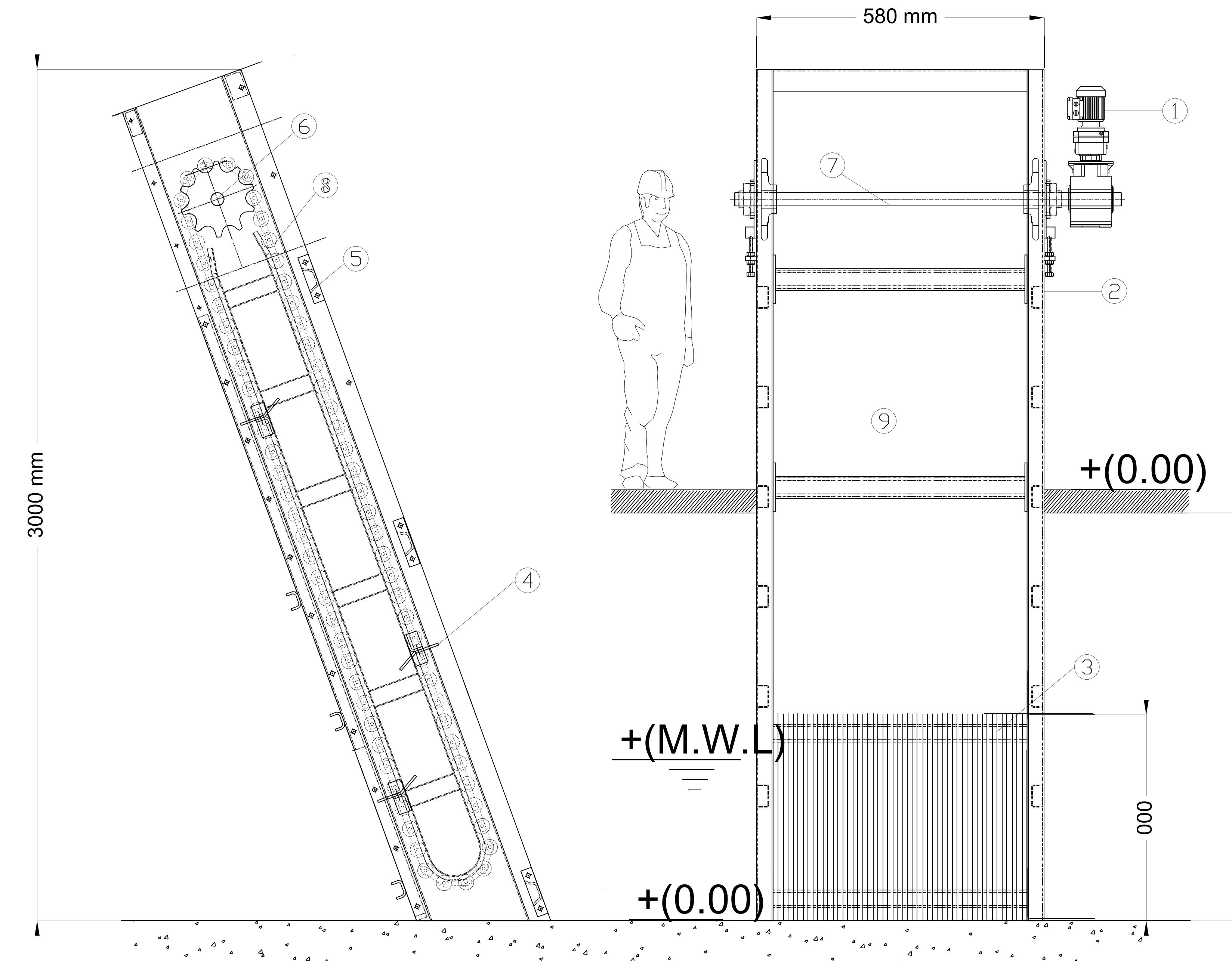
Field	Value
Local control panel	Electrostatic painting
Panel thicknesses	2 mm
Protection	IP 54
Component	Schneider
Operation	Manual / Automatic timer switch

#### Sec05: Material Data

Field	Value
Material of Frame & Guide	AISI 316
Dead plate	AISI 316
Rake	AISI 316
Bar screen	AISI 316
Sprocket	AISI 316
Motorize shaft	AISI 316
Bolts & Nuts	AISI 316 (A4)

#### Sec06: Other Data

Field	Value
Channel Width	600 mm
Channel Depth	1180 mm



TURN KEY CONTRACTORS:  
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AUTOSATRAD ROAD - ARAB ABOSAAD - CAIRO - EGYPT  
zizaraa.eg2014@gmail.com

TITLE: Mechanical screen

SCALE	REF. DWG. NO.	SIZE	REV.
DRAWN	PREPARED	CHECKED	APPROVED
K.T	A.S	A.S	S.MICHAEL