



# QUESTIONNAIRE SEWAGE TREATMENT FACILITIES

## EKOTON Industrial group

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### CUSTOMER'S INFORMATION:

Company name: .....  
Address of the company: .....  
Contact person: ..... Position: .....  
(First name, Family name)  
Tel.: ..... Fax: ..... E-mail: .....

## SEWAGE TREATMENT FACILITIES

### 1. GENERAL INFORMATION:

#### 1.1 Influent wastewater characteristics:

household, m<sup>3</sup>/day ..... stormwater, m<sup>3</sup>/day ..... industrial, m<sup>3</sup>/day.....

#### 1.2 Influent flow:

average daily..... m<sup>3</sup>/day maximum ..... m<sup>3</sup>/day  
project daily.....m<sup>3</sup>/day minimum.....m<sup>3</sup>/day

#### 1.3 Feeding of wastewater to the treatment plant:

pressured  gravity flow

#### 1.4 Removing of wastewater from treatment plant:

pressured  gravity flow

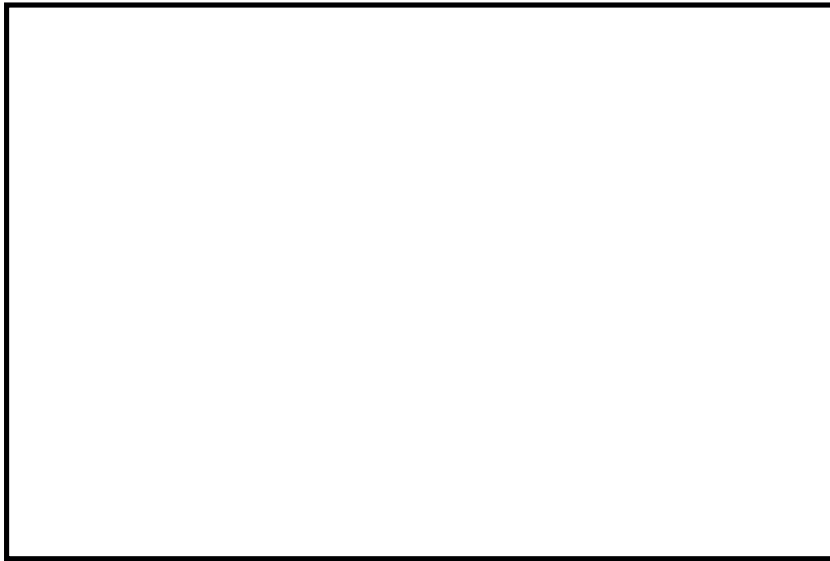
### 2. INLET CHAMBER

#### 2.1 Dimensions of inlet chamber:

.....

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## 2.2 Drawing of inlet chamber:



## 2.3 Number of supply pipelines

.....

## 2.4 Diameters of supply pipelines (mm)

.....

## 2.5 Depth of supply pipelines (m)

.....

## 2.6 Number of pressure pipelines

.....

## 2.7 Diameters of pressure pipelines (mm)

.....

## 2.8 Depth of pressure pipelines (m)

.....

# SEWAGE TREATMENT FACILITIES

## 3. THE STATEMENT OF SLIDE GATES

Main technical characteristics of slide gates:

Nº	Width of the gate frame aperture in the light,mm	The height of the aperture,overlapped with gate,mm	The direction of the hydrostatic pressure	Type of the drive	Weight of the moving parts,kg
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					

## 4. MECHANICAL PRETREATMENT BUILDING

### 4.1 Installation site of screen

.....

### 4.2 Channel dimensions at the screen installation site:

width, mm .....

depth, mm .....

straight length, mm .....

### 4.3 Currency there are install screens of brand

.....

on duty/stand by ..... / ..... capacity of screens .....kW

### 4.4 For hydraulic calculation indicate the water depth in the channel behind the existing screen (or without it) with associated flows (for example: morning, afternoon, evening).

	1	2	3
h water, mm	.....	.....	.....
Q water, m <sup>3</sup> /h	.....	.....	.....

### 4.5 The wastewater supply mode to supply channels

pressured

gravity flow

### 4.6 Amount of screenings removed by one screen, l<sup>3</sup>/day

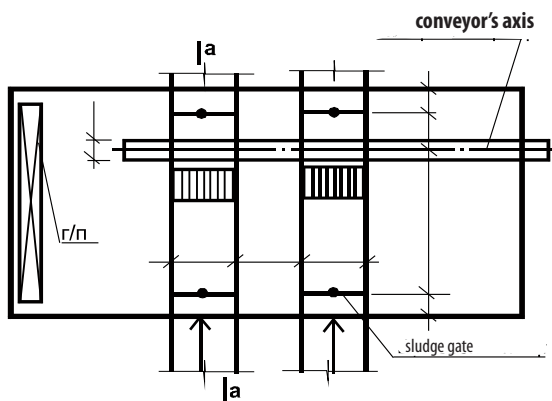
.....

### 4.7 The existence of specific contaminants (wood chips, bark, grit etc.):

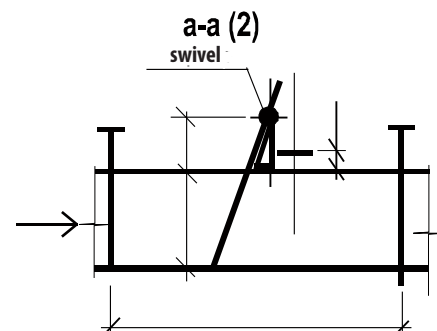
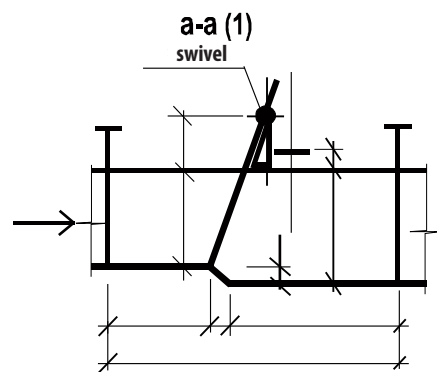
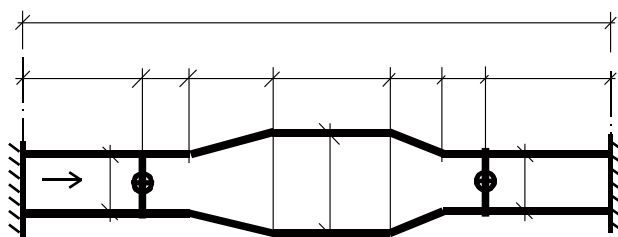
yes .....

no

### PREVIEW OF THE SCREEN BUILDING (COMPLETED EXAMPLE) INDICATE DIMENTIONS IN FACT



Possible alternative of a channel



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## 5. GRIT CHAMBERS (SAND CATCHERS)

### 5.1 Type of grit chamber

horizontal       vertical       tangential       aerated

### 5.2 Dimensions of grit chamber:

length, mm .....      width, mm.....      height, mm.....      diameter, mm .....

### 5.3 Number of grit chambers (on duty /stand by):

.....

### 5.4 The design productivity of grit chamber, m<sup>3</sup>/day:

.....

## 6. GRIT DRYING BED

### 6.1 Number of grit drying bed:

.....

### 6.2 Dimensions of grit drying bed:

width, mm.....      length, mm .....

## 7.PRIMARY CLARIFIER

### 7.1 Type of clarifiers:

vertical       radial       horizontal

### 7.2 Dimensional parameters of clarifier:

vertical:	diameter..... m	depth..... m
radial:	diameter..... m	depth..... m
horizontal:	diameter..... m	depth..... m

### 7.3 Number of clarifiers (on duty/stand by):

.....

**7.4 The design productivity of clarifiers, m<sup>3</sup>/day**

.....

**7.5 Volume of removed sludge, m<sup>3</sup>/day**

.....

**7.6 Moisture (or DS concentration) of removing sludge, %**

.....

**7.7 Type of scraper mechanism:**

.....

**7.8 A method of sludge removing:**

pumps

hydraulic elevator

airlift

**7.9 Dimensions of the primary sludge pump station:**

length.....m

width..... m

height..... m

**7.10 Installed pumps:**

Pump model	Productivity, m <sup>3</sup> /h	Head, MPa	Mode of operation (continuous, periodic)	Electric motor			Dimensions weight
				Power, kW	Voltage, V	Rated current, A	

## 8. AERO TANKS

### 8.1 Type of aero tanks:

.....

### 8.2 Aero tank parameters:

- number of aero tanks (on duty/ stand by) .....
- number of sections .....
- number of corridors in the section .....
- corridor length, m .....
- corridor width, m .....
- working depth, m .....
- surface area of the aerotank, m<sup>2</sup> .....
- volume of aero tank, m<sup>3</sup>/day .....

### 8.3 Aeration system parameters:

- type of equipment:       blowers       aerators       etc .....
- type of aerators:       filter plates       perforated pipes       etc .....

### 8.4 Amount of excess sludge, m<sup>3</sup>/day:

.....

### 8.5 Method of sludge removing:

.....

### 8.6 Moisture (or DS concentration) of excess sludge, %

.....

### 8.7 Sludge volume index, g/cm<sup>3</sup>

.....

8.8 Amount of dissolved oxygen:

.....

8.9 The degree of activated recycling sludge, %:

.....

8.10 Method of sludge recirculation supplying:

airlift

pump

8.11 The amount of air supply manifolds(in all):

.....

8.12 The amount of manifolds in the corridors:

1

2

3

4

8.13 Number of branches of aeration systems in the corridors:

1

2

3

4

8.14 Air consumption for airo tank, m<sup>3</sup>/h

.....

8.15 Blower/aerator model

.....

8.16 The amount of blowers / aerators (on duty / stand by):

.....

8.17 Electric motor power of blower/aerator,kW:

.....

8.18 Aero tank outline:

Plan of the aero tank top (with pagging rises)	Plan of the aero tank bottom

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# SEWAGE TREATMENT FACILITIES

## 9. SECONDARY CLARIFIERS

### 9.1 Type of clarifiers:

horizontal                       vertical                       radial

### 9.2 Dimensional parameters of clarifier:

vertical:                      diameter..... m                      depth..... m  
radial:                      diameter..... m                      depth..... m  
horizontal:                      diameter..... m                      depth..... m

### 9.3 Number of clarifiers (on duty/stand by):

.....

### 9.4 The design productivity of clarifiers, m<sup>3</sup>/day

.....

### 9.5 Installed pumps:

Pump model	Productivity, m <sup>3</sup> /h	Head,MP	Mode of operation (permanent, periodic)	Electric motor			Dimensions, weight
				Power,kW	Voltage, V	Rated current, A	

## 10. DESINFECTION

### 10.1 Method of disinfection:

.....

### 10.2 Dimensional parameters of disinfection building:

length .....m                      width..... m                      height..... m

### 10.3 Installed equipment for disinfection:

.....

### 10.4 In case of chlorination, please indicate the size of contact tanks:

.....

### 10.5 Additional information

.....

## 11. SLUDGE TREATMENT

### 11.1 Type of sludge mineralizator

.....

### 11.2 Dimensional parameters of mineralizator, m

.....

### 11.3 The amount (on duty/stand by)

.....

### 11.4 Mineralization, days

.....

### 11.5 Moisture of sludge before and after mineralization, %

.....

### 11.6 Aeration system type

.....

### 11.7 Type of sludge thickenner

.....

11.8 The amount of sludge thickener (on duty/stand by)

.....

11.9 Dimensional parameters of sludge thickener, m

.....

11.10 Moisture (or DS concentration) of the sludge after using sludge thickener, %

.....

11.11 A method of thickener sludge removing:

11.12 A method of removing over sludge liquid:

## 12. MECHANICAL SLUDGE DEWATERING

12.1 Dimensional parameters of mechanical sludge dewatering building:

length.....m

width..... m

height..... m

12.2 Type of installed equipment:

.....

12.3 Equipment model:

.....

12.4 Quantity (on duty / stand by):

.....

12.5 Equipment productivity, m<sup>2</sup>/h

.....

12.6 Electric motor power, kW

.....

12.7 Cake moisture, coming into the mechanical dewatering, %

.....

12.8 Volume of sludge, coming to dewatering, m<sup>3</sup>/day

.....

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