

**TABLE : SEWERAGE PRODUCT AND SYSTEM CATEGORY**

**A. Sewerage Product And System Category For PROCESS FUNCTION (No 1 – 15)**

NO	CATEGORY	PRODUCT	TYPE				OTHER TERM	
(1)	Primary & Secondary Screening	Screen	Manual	Bar Screen	-	-	-	
			Mechanical	Bar Screen	Raking	Front rake	1. Climber screen 2. Inclined Screen	
					Non raking	Back rake		
					Belt screen	-	-	Step screen
				Drum screen	-	-	Rotary screen	
				Screw screen	-	-		
		Screening transfer	Conveyor	Screw conveyor				
				Belt conveyor				
(2)	Raw Sewage Pumping	Pump	Centrifugal	Submersible				
				End suction				
				Self priming				
		Positive displacement	Rotary	Screw		Archimedes		
(3)	Grit & Grease Removal	Grit & grease collector	Horizontal flow	Chain and flight				
				Travelling bridge				
				Detritor				
		Grit collector	Horizontal flow	Chain and flight				
				Aerated				
			Vortex	Natural/Hydraulic			Cyclone degritter	
		Grease collector	Weir skimmer	Floated				
				Fixed				
			Trough/ pipe skimmer					
		Grit transfer	Conveyor	Chain and flight				
				Pump	Centrifugal	Screw conveyor		
						Submersible		
			End suction					
			Self priming					
			Positive displacement	Rotary	Screw	Archimedes		
Progressive cavity								
Reciprocating	Diaphragm							
	Plunger	Piston						
Chain & bucket								

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NO	CATEGORY	PRODUCT	TYPE				OTHER TERM
(3)	<b>Grit &amp; Grease Removal (cont.)</b>	Grit washing & dewatering	Screw classifier				
			Static screen				
			Drum screen				Rotary screen
(4)	<b>Aeration</b>	Mechanical aerator	Surface aerator	Low speed			
				High speed			
			Brush aerator	Blade type			Hydrojet aerator
				Disc type			
		Paddle wheel aerator					
		Diffused aerator	Ejector				
			Aspirating aerator				
			Submersible aerator				
		Diffuser	Disc				
			Tube/pipe				
Panel							
(5)	<b>Nitrification</b>	Nitrification unit					
(6)	<b>Mixing</b>	Mixer				Flow booster	
		Agitator					
(7)	<b>Air Supply</b>	Air blower	Positive displacement	Rotary lobes	Surface		
				Submersible			
			Regenerative			Side channel	
		Centrifugal					
Air compressor							
(8)	<b>Clarifier/ Sedimentation</b>	Sludge scrapper & scum skimmer	Circular	Peripheral driven	Half bridge		
					Full bridge		
				Central driven	Bridge mounted		
			Pier mounted				
			Chain and flight				
			Rectangular	Bridge travelling			
		Multiple horizontal travelling collector					
Sludge scrapper	Rectangular	Chain and flight					
		Multiple horizontal travelling collector					

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(8)	<b>Clarifier/ Sedimentation (cont.)</b>	Scum skimmer	Weir skimmer	Floated			
				Fixed			
			Trough/ pipe skimmer				
		Chain and flight					
(9)	<b>Effluent Decanting</b>	Effluent decanter	Surface skimming				
			Floating				
			Fixed pipe				
(10)	<b>Sludge Treatment</b>	Sludge thickener	Gravity thickener				
			Gravity belt thickener			Table thickener	
			Rotary drum thickener				
			Disc thickener				
		Sludge dewatering	Belt press				
			Centrifuge				Centrifuge decanter
			Filter press				
			Screw press				Contipress
		Sludge dryer	Fluidised bed sludge				
			Rotary kiln				
		Sludge digester					
		Biogas system					
		Polymer dosing	Polymer preparation				
			Polymer				
			Pump	Positive displacement	Reciprocating	Diaphragm Plunger	Peristaltic Piston
		Sludge transfer	Pump	Centrifugal	Submersible		
					End suction		
					Self priming		
				Positive displacement	Rotary	Screw Progressive cavity	Archimedes
					Reciprocating	Diaphragm Plunger	Piston
Sludge screen	Mechanical	Drum screen					
		Screw screen			Micro screen Sludge screen		

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<b>NO</b>	<b>CATEGORY</b>	<b>PRODUCT</b>	<b>TYPE</b>				<b>OTHER TERM</b>
(11)	<b>Disinfection</b>	Chlorination					
		Ultra violet					
(12)	<b>Effluent &amp; Water Removal</b>	Effluent transfer & dewatering	Pump	Centrifugal	Submersible		
					End suction		
					Self priming		
(13)	<b>Odour Control &amp; Treatment</b>	Bio scrubber					
		Bio filter					
(14)	<b>Treatment system</b>	Package plant	FRP				
			HDPE				
		Trickling filter					
		Septic tank	Conventional				
			Mechanical				
		Rotating Biological Contactor (RBC)	Submerged Contact Biodisc Aerator				
Biodrum							
(15)	<b>Treatment Media</b>	Biological/ biochemical	Bacterial culture				Natural Zeolite
		Filter media					

**TABLE : SEWERAGE PRODUCT AND SYSTEM CATEGORY**

**B. Sewerage Product And System Category For NON PROCESS FUNCTION (No 16 – 18)**

NO	CATEGORY	PRODUCT	TYPE				OTHER TERM	
(16)	<b>Sewage Conveyance</b>	Vacuum sewerage system						
		Manholes						
		Manhole cover					Manhole tops	
		Pipes and fittings	Gravity sewer	Vitrified Clay				
				Reinforced Concrete				
				Ductile/ cast iron				
				Glass Fibre Reinforced				
				HDPE (Profile)				
				ABS				
			Force main	Ductile / cast iron				
				HDPE (Solid)				
				ABS				
				Stainless steel				
		Vacuum Jacking	HDPE (Solid)					
		Sewer liner	Cement lining	Vitrified Clay				
				Reinforced Concrete				
				FRP slip lining				
HDPE								
(17)	<b>Flow control</b>	Penstock	Wall mounted					
			Channel type					
			Weir gate					
		Valves	Air valve					
			Ball valve					
			Butterfly valve					

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NO	CATEGORY	PRODUCT	TYPE				OTHER TERM
(17)	Flow control (cont.)	Valves (cont.)	Check valve				
			Gate valve				
			Plug valve				
			Safety relief valve				
			Flap valve				
			Knife gate valve				
(18)	Instrumentation and control	Flow meter	Electromagnetic				
			Ultrasonic				
			Differential Pressure				
			Rotameter				
		Level meter	Ultrasonic				
			Electrode				
			Capacitive				
			Float Gauging				Float switch
		Pressure meter	Transmitter				
			Switch				
			Differential				
		Sludge Density meter					
		D.O meter	Galvanic				
			Luminescent Principle				
			Amperometric				
		ORP meter					
		pH meter					
		Gas control	Gas detector				
			Gas combustor				
		Temperature meter	Transmitter				
			Switch				
RTD							
Thermocouple							
System control	SCADA						

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(18)	Instrumentation and control (cont.)	Analyser	Suspended Solids				
			Chlorine	Colorimetric			
				Amperometric			
			Total Organic Carbon				
		Ammonium & Nitrate					
		Chemical dosing	Chemical monitoring system				
		Actuator	Pneumatic				
			Electric				