

Creator : Mr. Shahzad (AD, QA)

Moderator : Shri A.V.Muralidharan ( Dy. CEO GeM )

Approver :Shri A.K.Kamra( Ad. CEO GeM )

Major category - Refuse disposal and treatment UNSPSC Code - 76120000

Sub Product Category - Nonhazardous waste disposal UNSPSC code - 76121600

Product category - UNSPSC code - Municipal solid waste Twin shaft shredder 76121696 (T)

S. No.	Parameters	Grouping	Type of Field	Value 1	Value 2	Value 3	Value 4	Value 5	Value 6	Whether Filter Required	Priority	unit	Golden Parameters	Remarks/Validation
1	Type of shredder	P	E	Twin Shaft									G	
2	Application of shredder	P	E	Shredder for Municipal Solid Waste containing various objects such as plastic bottles, plastic waste, thrash waste, organic waste etc									G	
	Nature of Operation			Light Duty	Medium Duty	Heavy Duty								
3	Material of Housing Enclosure	M	E	Mild steel	Stainless Steel								G	
4	Capacity of shredder taking 8 hrs per day operation in tonnes(1000 Kg)	P	E	3	5	7.5	10	20	30			TPD	G	
				40	80	120	150	50	60					
				180	200	300	400	250	350					
5	Hooper Loading	P	E	Manual	Conveyor								G	
6	Type of Drive	P	E	Electrical									G	



7	Shape of Shaft	P	E	Hexagonal Shaped												G	
10	Length of shaft in mm with tolerance $\pm 10$ mm	D	E	150	250	300	350	550	650			mm	G				
				950	1100	1300	1550										
11	Diameter of Shaft in mm with tolerance $\pm 5$ mm	D	E	100	115	175	200	250	300			mm	G				
				400	500	800											
12	Material of Shaft	M	E	Mild Steel	Stainless Steel	Alloy Steel										G	
13	Inside dimension of shredder chamber in mm x mm with tolerance $\pm 5$ mm	D	E	150 x 200	225 X 300	300 X 300	300 X 500	450 X 600	300 X 900			mm x mm	G				
				205 x 230	225 x 345	295 x 430	285 x 515	442 x 545	545 x 643								
				555 x 732	555 x 733	700 x 853	700 x 1100	900 x 1250	1100 x 1450								
				1100 x 1860													
14	Opening of loading hooper in mm x mm with tolerance $\pm 5$ mm	D	E	150 x 250	300 x 300	400 x 400	500 x 500	600 x 800	400 x 450								
				450 x 550	450 x 600	400 x 750	650 x 800	750 x 850	800 x 950								
				800 x 1050	900 x 1200	900 x 1400	1400 x 1700	1400 x 1900	1400 x 2100								
15	Input Electrical Supply	P	E	Single phase (230 V, 50 Hz)	Three phase (440 V, 50 Hz)												G
16	Motor Power in HP @rpm	P	E	2 HP, 1440 RPM	3 HP, 1440 RPM	3.7 HP, 1440 RPM	5 HP, 1440 RPM	7.5 HP, 1440 RPM	20 HP, 1440 RPM			HP @ RPM	G				
				30 HP, 1440 RPM	40 HP, 1440 RPM	50 HP, 1440 RPM	80 HP, 1440 RPM	120 HP, 1440 RPM	100 HP, 1440 RPM								
				150 HP, 1440 RPM	300 HP, 1440 RPM	200 HP, 1440 RPM	400 HP, 1440 RPM										
17	Motor class	P	E	IE2	IE3											G	
18	Type of control panel	p	E	PLC Based	Manual Based											G	



19	Independent electrical panel	P	E	Yes											
20	Noise level in dB at 1 meter distance while working	P	Numerical											≤ 85 dB	
21	Type of Conveyor provided with Twin shaft shredding machine	Conveyor	E	Slider Bed Type or sorting conveyor	Screw Conveyor	Trough Conveyor									
22	Range of Capacity handled by Conveyor in TPD with 8 hour duty	Conveyor	E	3-5	6-10	20-40	11-15	16-20	60-80				TPD		
				101-130	181-200	41-60	81-100	151-180	131-150						
				151-180											
23	Width of Belt for slider bed type/trough conveyor in mm	Conveyor	E	400	500	600	700	800	1000				mm		
				1200	1500										
24	Diameter of Driving Pulley for slider bed type conveyor in mm with tolerance ±5 mm	Conveyor	E	180	190	200	210	220	230				mm		
		Conveyor	E	240	Not Applicable for Screw Type Conveyor or No conveyor is provided			300	350	400					
25	Diameter of Driven Pulley for slider bed type conveyor in mm with tolerance ±5 mm	Conveyor	E	30	40	50	60	70	Not Applicable for Screw Type Conveyor				mm		
				300	350	400	80	90	100						

				120	150	180	200	250								
26	Type of Screw Conveyor	Conveyor	E	Spiral Type Screw Conveyor	Horizontal Type Screw Conveyor	Vertical Type Screw Conveyor	Not Applicable for sorting type Conveyor									
27	Screw dia or pitch screw conveyor in mm with tolerance +/- 5 mm	Conveyor	E	210	220	230	240	250	Not applicable for sorting type conveyor			mm				
28	Casing of screw conveyor	Conveyor	E	Fabricated from 3 mm thick mild steel	Not Applicable for sorting type Conveyor											
29	Outside Diameter of Screw pipe with Tolerance of +/- 3 mm for screw conveyor	Conveyor	E	40	45	50	55	60	65			mm				
		Conveyor	E	70	Not Applicable for sorting type Conveyor			80	100	150	200					
30	Supporting Cutter Blades for screw conveyor	Conveyor	E	12 mm thick SS210 blades with profile cutting edge	Not Applicable for sorting type Conveyor or No conveyor is provided											
31	Motor Rating in HP for Conveyor	Conveyor	E	1.00	1.5	2.0	No conveyor is provided		3	5			HP			
				7.5												
32	Type of Coating on Conveyor	Conveyor	E	Enamel Paint of Desired Shade	No conveyor is provided											
33	Overall Dimension of shredding machine in Length x width x height (mm x mm x mm)	D	Text											mm x mm x mm		
34	Overall weight of the Machine in Kg	D	N											kg		

*Red*

35	Capacity of waste bin in litres	P	N							litres			
36	Material of Base Frame	A	E	MS	SS	Alloy							
37	Machine should be painted with enamel paint of buyer desired shade	A	E	Yes									
38	Auto Reverse System available	P	E	Yes									
39	Installation and Demonstration by seller at site before acceptance by buyer	P	E	Yes									
40	Warranty (with free spare parts and free service) on machine	P	E	1	2	3	4	5				years	G
41	Number of preventative maintenance visits during warranty (number per annum)	P	E	2	3	4							G
42	Product Instruction Manual, Maintenance Manual and servicing instructions to be supplied	P	E	Yes									
43	Tool kit for Repair and maintenance to be supplied	P	E	Yes	No							G	
44	Availability of base frame with accessories	P	E	Yes									
45	Over load protection	P	E	Yes									
46	Gear box for speed reduction	P	B	Yes	No						G		
47	Availability of Door Open Cut off switch	P	E	Yes									
48	Electrical safety requirement as per IS 302-1:2008 latest amendment	A	E	Yes									
49	Availability of ISO Certification for machine	C	E	Yes	No								



