



**FACTORY ACCEPTANCE TEST FOR RMG**

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**FACTORY ACCEPTANCE TEST FOR RMG**

**1. OBJECTIVE:**

- The objective of this protocol is to confirm that the machine Rapid Mixer Granulator – 100 Liter / 30 Kg. manufactured by M/s. ...., at their Works in ..... is in line with the specifications as desired by the customer.

**2. SCOPE:**

- The scope of this protocol is limited to the Factory Acceptance Test of Rapid Mixer Granulator-100 Liter / 30 Kg.
- The testing of the support utilities does not come in the scope of this protocol.
- Any auxiliary equipment supporting this machine, required along with the machine, for its effective overall performance shall not be tested in this protocol. Any such auxiliary equipment, if present, shall be tested separately.

**3. RESPONSIBILITIES:**

**3.1 MANUFACTURER (M/s. ....)**

- 3.1.1 The manufacturer is responsible for the preparation of the FAT protocol, unless and until, it is specified by the Customer for its indigenous protocol.
- 3.1.2 The manufacturer shall assist the customer in performing the Factory Acceptance Test at the manufacturer's factory, until and unless, it is specified by the customer to conduct the **PROXY-FAT**.

**3.2 CUSTOMER (.....).**

- 3.2.1 The Customer shall conduct the Factory Acceptance Test at the manufacturer's factory.
- 3.2.2 In case the customer wants the manufacturer to conduct the **PROXY-FAT**, a written communication, as an ANNEXURE, shall be attached along with this protocol

**NOTE: PLEASE CHECK THE BELOW**



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• <b>FAT BY THE CUSTOMER</b>	
• <b>PROXY-FAT BY THE MANUFACTURER</b>	

**4. VERIFICATION OF TECHNICAL SPECIFICATION:**

S.No.	Parameter	Specifications	Observation	Remarks
1.				
2.				
3.				
4.				
5.				
6.				
7.				



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**5. VERIFICATION OF COMPONENTS AND SUB COMPONENTS USED / BOUGHT ITEMS.**

S.No.	Description	Specifications
1.	Main drive motor	Make – Mega, 7.5/10 HP, 720/1440 RPM, 415V, 3 phase, Dual speed
2.	Main Drive Gear Box	Make: Elecon Model: SNU-V-5, Ratio : 7.5:1
3.	Chopper Motor	Make – Mega 2/3 HP, 1440/2880 RPM, 415V, 3 phase, Dual speed
4.	MCB	Make: LS, BKN -16
5.	Relay	Make PLA 11 pin 220 volts
6.	Emergency switch	Make Technique
7.	Start & stop Push Button	Make Technique
8.	Selector switch	Make Technique
9.	Air flow pressure switch	Make Denfors
10.	Ampere meter	Make Multispan Model AVM-21
11.	Process Timer	Make Multispan Model MDT – 2044
12.	Speed Regulator Pot	Make Bourns, Model 07X
13.	Limit switch	Make Essen, Model MS-7

**6. VERIFICATION OF MOTOR SPECIFICATION:**

S.No.	Type of Motor	Parameter				Observation	Remarks
		A	HP	kW	V		
1.	Main Drive Motor	15	7.5/10	5.6/7.5	415		
2.	Chopper Motor	4.5	2/3	1.5/2.25	415		



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**7. VERIFICATION OF MATERIAL OF CONSTRUCTION CERTIFICATES:**

S.No.	Component	MOC	Observation	Remarks
1.	Product Bowl	SS 316		
2.	Top cover/ Lid	SS 316		
3.	Mixing Impeller Blade	S.S.316		
4.	Chopper Blade	S.S.316		
5.	Discharge assembly	S.S.316		
6.	Machine structure & cover	S.S.304		
7.	Rubber Seal	Silicon		

**8. VERIFICATION OF TEST/CALIBRATION CERTIFICATES:**

S.No.	Component	Type	Observation	Remarks
1.	Main Drive Motor	Test Certificate		
2.	Gear Box	Test Certificate		
3.	Chopper motor	Test Certificate		
4.	AMP meter	Test Certificate		
5.	Timer	Test Certificate		



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**9. VERIFICATION OF INTERLOCKS (IF ANY):**

S.No.	Interlock Message	Justification	Observation	Remarks
1.				
2.				
3.				

**10. VERIFICATION OF OPERATIONS:**

S.No.	Type of Operation	Mode of Simulation	Observation	Remarks
1.	Dry Powder charge in Product Container			
2.	Set the process time for dry mixing, Binder adding and wet mixing than Start the both motor. The speed of mixing blade and chopper to be adjusted by switch during all process. When wet mixing process doing that time 'Ampere' is increased of mixing blade motor so take care for its should be under as per motor specification. The process timer is stopping the machine when desired/ set value is achieved.			
3.	Checked working of air pursing system.			
4.	Checked the working of discharge assembly by pneumatically operated.			
5.	Checked the function of limit switch at discharge assembly and top lid/ cover for safety.			



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**11. VERIFICATION OF SURFACE FINISH:**

S.No.	Component	Surface Finish- Mirror/ Matt	Observation	Remarks
1.	Top cover / Lid	Mirror		
2.	Product Bowl	Mirror		
3.	Mixing Impeller Blade	Mirror		
4.	Chopper Blade	Mirror		
5.	Discharge assembly	Mirror		
6.	Main Body structure	Matt		
7.	Base Plate	Matt		



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**12. MACHINE TRIAL SHEET:**

**DRY RUN TEST**

S.No.	Check Points	Observation	Remarks
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			

**WET RUN TEST**

**ACTUAL PRODUCT**

**DUMMY PRODUCT**

S.No.	Parameter	Specification			
1.	Name of the Product				
2.	Type of granulation	DRY		WET	
3.	Property	Corrosive	Non-Corrosive	Abrasive	Non-Abrasive
4.	Color				

**COMMENTS BASED ON THE TRIALS:**







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**13. SUGGESTIONS / MODIFICATIONS:**

COMMENTS FROM THE CUSTOMER	MANUFACTURER'S ACCEPTANCE



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**14. FAT CLOSEOUT:**

- The Factory Acceptance Test for Rapid Mixer Granulator 100 Liter / 30 kg completed.
- All the parameters have been checked and found in line with the requirement of M/s. ....
- The machine is cleared, by the undersigned authority of M/s. .... for dispatch to their plant at .....

For, M/s. ....

Name	Designation	Department	Signature

For, M/s. ....

Name	Designation	Department	Signature
		Production	
		Design	
		Quality	
		Validation	
		Marketing	