

1.0 SEC AND 3.5 SEC DELAY IGNITER ASSEMBLY MACHINE

INPUT:-

1. PREPARED 1.0 SEC DELAY TUBE.
 - a) PITCH=10 MM X 1.25
 - b) HEIGHT=14.45±0.5 MM.
 - c) 4 HOLES OF UPPER SIDE.
2. PREPARED 3.5 SEC DELAY TUBE.
 - a) PITCH=10 MM X 1.25
 - b) HEIGHT=17.50±0.5 MM.
 - c) 4 HOLES OF UPPER SIDE.
3. ASSEMBLED R F CASE.
4. R D CEMENT.
5. ALUMINUM FOIL DISC.
6. N C LACQUER APC-210 (LIQUID)

PROCESS:-

1. PLACE AN ALUMINUM FOIL DISC INSIDE FILLED DELAY TUBE AT THE LOWER END OF THE PRESSED COMPOSITION.
2. APPLY A THIN COATING OF NC LIQUOR ON THE ALUMINUM FOIL WITH A THIN BRUSH.
3. SCREW FEW THREADS OF UPPER END OF DELAY TUBE INSIDE THE THREAD PORTION OF ASSEMBLED CAP CHAMBER.
4. APPLY A THIN COATING OF RD CEMENT ON THREADS.
5. SCREW FIT DELAY TUBE AND CAP CHAMBER IN SUCH A WAY THAT THE DRILLED HOLE OF DELAY TUBE REMAINS BETWEEN THE CAP CHAMBER CUT PORTIONS.

OUTPUT:-

1. 1.0 SEC AND 3.5 SEC DELAY IGNITER.

RATE:- 800/HOUR

QUALITATIVE/REQUIREMENTS:-

1)	ALL MOVING PARTS OF MACHINE SHOULD BE CORROSION RESISTANT, FLAME AND SPARK PROOF AND MADE OF ISI / CLASS APPROVED QUALITY MATERIAL.
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2)	IN CASE OF MALFUNCTIONING, THE MACHINE SHOULD HAVE AUTOMATIC TRIPPING SYSTEM ALONG WITH AUDIO AND VISUAL INDICATORS.
3)	MACHINE SHOULD HAVE EARTHING FACILITY/STATIC DISCHARGE PANEL.
4)	ALL ELECTRICAL EQUIPMENTS/COMPONENTS FITTED IN THE MACHINE SHOULD BE OF REPUTED BRAND AND OF ISO CERTIFIED COMPANY.
5)	MACHINE SHOULD HAVE SEPARATE HUMAN MACHINE INTERFACE (HMI)/CONTROL PANEL FACILITY.
6)	MACHINE SHOULD OPERATE PREFERABLE ON PLC CONTROL OF IEC-61131 STANDARD.
7)	MACHINE SHOULD WORK PREFERABLY ON PNEUMATIC BASE.
8)	TUBES CONNECTING THE MACHINE TO PNEUMATIC MACHINE SHOULD BE OF REQUISITE DIMENSIONS AND ISI MAKE.
9)	MACHINE SHOULD HAVE AUTOMATIC LOADING AND UNLOADING SYSTEM.
10)	MINIMUM ONE HOLE OF DELAY TUBE SHOULD REMAIN OPEN.
11)	MACHINE SHOULD HAVE DIGITAL DISPLAY TO INDICATE FINISHED NO'S OF PRODUCTS.
12)	MACHINE SHOULD HAVE FACILITY OF DEDUCTION OF OMISSION AND MALFUNCTIONING AT ANY STAGES OF PROCESS AND SHOULD HAVE FACILITY TO SEPARATE THE REJECTED/ DEFECTIVE PRODUCTS.
13)	MACHINE SHOULD BE ABLE TO OPERATE WITHIN OPERATING TEMPERATURE $25 \pm 10^{\circ}$ C AND OPERATING HUMIDITY $40 \pm 15\%$.
14)	ALL ELECTRIC WIRING AND ELECTRICAL COMPONENTS SHOULD BE PROPERLY CASED AND FLAME PROOF AND EASILY ACCESSIBLE FOR REPAIR AND MAINTENANCES.
15)	MACHINE SHOULD BE COMPACT TO SAVE SPACE AND EASY TO ACCESS FOR REPAIR AND MAINTENANCES.
16)	BASIC STRUCTURE OF MACHINE SHOULD BE MADE OF ISI / CLASS APPROVED QUALITY METAL, RESISTANT TO CORROSION / RUSTING AND FLAME.
17)	USER MANUAL WITH REQUIRED ILLUSTRATIONS TO BE PROVIDED WITH MACHINE.

18)	INSTRUCTION ON REPAIR & MAINTENANCE TO BE PROVIDED WITH MACHINE.
19)	RUNNING SPARE PARTS WITH ILLUSTRATED LIST SHOULD BE PROVIDED WITH MACHINE.
20)	OPERATIONAL TRAINING SHOULD BE ARRANGED FOR 1 WEEKS FOR MINIMUM 15 PERS.
21)	REPAIR AND MAINTENANCE TRAINING SHOULD BE ARRANGED FOR 1 WEEKS FOR MINIMUM 10 PERS.
22)	SPECIFIC GAUGES AND MAINTENANCE TOOLS SHOULD BE PROVIDED WITH MACHINE.
23)	<u>GUARANTEE / WARRANTY:-</u> xiii) MACHINE SHOULD HAVE 2 YEARS GUARANTEE / WARRANTY AFTER COMMISSIONING. xiv) PREVENTIVE MAINTENANCE ONCE IN 3 MONTH DURING GUARANTEE / WARRANTY PERIOD. xv) GUARANTEE/ WARRANTY WILL BE COMPREHENSIVE i.e INCLUSIVE OF SPARE PARTS.
24)	AMC PERIOD SHOULD BE 05 YEARS AFTER EXPIRY OF GUARANTEE / WARRANTY PERIOD.

1.0 SEC AND 3.5 SEC DELAY IGNITER ASSEMBLY MACHINE

SL NO	QUALITATIVE / REQUIREMENTS	METHODOLOGY	COMPLIED / NOT COMPLIED
1	ALL MOVING PARTS OF MACHINE SHOULD BE CORROSION RESISTANT, FLAME AND SPARK PROOF AND MADE OF ISI / CLASS APPROVED QUALITY MATERIAL.	The firm should submit national / International accredited Lab test report for this aspect	
2	IN CASE OF MALFUNCTIONING, THE MACHINE SHOULD HAVE AUTOMATIC TRIPPING SYSTEM ALONG WITH AUDIO AND VISUAL INDICATORS.	The firm should submit national / International accredited Lab test report for this aspect & Physical Verification by BOOs	
3	MACHINE SHOULD HAVE EARTHING FACILITY/STATIC DISCHARGE PANEL.	Physical Verification by BOOs	
4	ALL ELECTRICAL EQUIPMENTS/COMPONENTS FITTED IN THE MACHINE SHOULD BE OF REPUTED BRAND AND OF ISO CERTIFIED COMPANY.	The firm should submit national / International accredited Lab test report for this aspect	
5	MACHINE SHOULD HAVE SEPARATE HUMAN MACHINE INTERFACE (HMI)/CONTROL PANEL FACILITY.	Physical Verification by BOOs	
6	MACHINE SHOULD OPERATE PREFERABLY ON PLC CONTROL OF IEC-61131 STANDARD.	The firm should submit national / International accredited Lab test report for this aspect	
7	MACHINE SHOULD WORK PREFERABLY ON PNEUMATIC BASE.	Physical Verification by BOOs	
8	TUBES CONNECTING THE MACHINE TO PNEUMATIC MACHINE SHOULD BE OF REQUISITE DIMENSIONS AND ISI MAKE.	Physical Verification by BOOs	
9	MACHINE SHOULD HAVE AUTOMATIC LOADING AND UNLOADING SYSTEM.	Physical Verification by BOOs	
10	MINIMUM ONE HOLE OF DELAY TUBE SHOULD REMAIN OPEN.	Physical Verification by BOOs	
11	MACHINE SHOULD HAVE DIGITAL DISPLAY TO INDICATE FINISHED NO'S OF PRODUCTS.	Physical Verification by BOOs	
12	MACHINE SHOULD HAVE FACILITY OF DEDUCTION OF OMISSION AND MALFUNCTIONING AT ANY STAGES OF PROCESS AND SHOULD HAVE FACILITY TO SEPARATE THE REJECTED/ DEFECTIVE PRODUCTS.	Physical Verification by BOOs	

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13	MACHINE SHOULD BE ABLE TO OPERATE WITHIN OPERATING TEMPERATURE $25 \pm 10^{\circ}$ C AND OPERATING HUMIDITY $40 \pm 15\%$.	Physical Verification by BOOs	
14	ALL ELECTRIC WIRING AND ELECTRICAL COMPONENTS SHOULD BE PROPERLY CASED AND FLAME PROOF AND EASILY ACCESSIBLE FOR REPAIR AND MAINTENANCES.	The firm should submit national / International accredited Lab test report for this aspect & Physical Verification by BOOs	
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20	OPERATIONAL TRAINING SHOULD BE ARRANGED FOR 1 WEEKS FOR MINIMUM 15 PERS.	Physical Verification by BOOs	
21	REPAIR AND MAINTENANCE TRAINING SHOULD BE ARRANGED FOR 1 WEEKS FOR MINIMUM 10 PERS.	Physical Verification by BOOs	
22	SPECIFIC GAUGES AND MAINTENANCE TOOLS SHOULD BE PROVIDED WITH MACHINE.	Physical Verification by BOOs	
23	GUARANTEE / WARRANTY:- i) MACHINE SHOULD HAVE 2 YEARS GUARANTEE / WARRANTY AFTER COMMISSIONING. ii) PREVENTIVE MAINTENANCE ONCE IN 3 MONTH DURING GUARANTEE / WARRANTY PERIOD. iii) GUARANTEE/ WARRANTY WILL BE COMPREHENSIVE i.e INCLUSIVE OF SPARE PARTS.	Physical Verification by BOOs	
24	AMC PERIOD SHOULD BE 05 YEARS AFTER EXPIRY OF GUARANTEE / WARRANTY PERIOD.	Physical Verification by BOOs	

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