

# MECHANISM TRAINER

Model: MT-1090

## I. MECHANICAL STRUCTURE

### SPECIFICATION

1. 300mm SCREW ROD SLIDER MECHANISM
  - a. TRAVEL DISTANCE: 300mm.
  - b. PITCH: 4mm/Revolution.
  - c. DIMENSION: 500mm (W)x140mm (D)x100mm (H).
2. CONVEYER MECHANISM
  - a. ADJUSTABLE.
  - b. DIMENSION: 700mm (W)x180mm (D)x100mm (H).
3. INDEXING MECHANISM
  - a. TRAVEL DISTANCE: 200mm (diameter)x150mm (H).
  - b. HORIZONTAL OR VERTICAL.
  - c. SPEED RATIO: 1:90.
4. AUTOMATIC DOOR MECHANISM
  - a. TRAVEL DISTANCE: 310mm.
  - b. PRESSURE SENSING, 2 PIECES.
  - c. DIMENSION: 400mm (W)x125mm (D)x310mm (H).
5. WORM GEAR SPEED REDUCER MECHANISM
  - a. 60 LIGHT SLOTS STEEL PLATE.
  - b. ENCODER: A, B PHASE; 10 Pulses/Revolution.
  - c. DIMENSION: 160mm (W)x175mm (D)x193mm (H).
6. MAIN SHAFT MECHANISM OF DRILLER, TYPE-B
  - a. TRAVEL DISTANCE: 125mm.
  - b. MOTION POWER: PNEUMATIC.
  - c. LIGHT LOAD STYLE.
7. PHOTOINTERRUPTER
  - a. PHOTOELECTRICAL COMPONENT, 2 PIECES.
  - b. CONCAVE STYLE, STEEL.
  - c. DIMENSION: 60mm (W)x55mm (D)x50mm (H).
8. EXTENSION SHAFT
  - a. SHAFT SIZE: 50mm (DIAMETER)x51mm (L), 2 PIECES.
  - b. MATERIAL: CAST-IRON.
  - c. DIMENSION: 500mm (W)x140mm (D)x100mm (H).
9. L-SHAPE STAND
  - a. 2 PIECES.
  - b. DIMENSION: 245mm (W)x140mm (D)x95mm (H).
10. PLATE BOARD
  - a. DIMENSION: 350mm (W)x140mm (D)x200mm (H).
11. WEIGHT DETECTION MECHANISM
  - a. LOAD CELL SENSOR, STEEL.
  - b. DIMENSION: 170mm (W)x170mm (D)x95mm (H).
12. LENGTH DETECTION MECHANISM
  - a. LVDT SENSOR, STEEL.
  - b. DIMENSION: 140mm (W)x40mm (D)x195mm (H).
13. REFLECTIVE PHOTOELECTRIC SWITCH
  - a. SENSING DISTANCE: 150mm Max.
  - b. DIMENSION: 70mm (W)x140mm (D)x200mm (H).
14. LIMIT SWITCH MECHANISM
  - a. LIMIT SWITCH: 250V, 2A, 4 PIECES.
  - b. STEEL.
  - c. DIMENSION: 60mm (W)x55mm (D)x50mm (H).
15. PROXIMITY SWITCH MECHANISM
  - a. SENSING DISTANCE: 4mm.
  - b. ALUMINUM, 2 PIECE.
  - c. DIMENSION: 70mm (W)x140mm (D)x200mm (H).
16. CYLINDER OBJECT SAMPLE
  - a. COPPER, 23mm IN DIAMETER; HEIGHT: 13mm, 14mm, 15mm, 16mm, and 17mm, 10 PIECES EACH.
17. PNEUMATIC ROBOTICS ARM MECHANISM
  - a. TRAVEL DISTANCE: 70mm.
  - b. UPPER and LOWER LIMIT SENSORS, 2 PIECES.
35. CAM MECHANISM
  - a. RADIUS: 80mm Max., 70mm Min., 15mm ALUMINUM BASE.
  - b. INPUT SHAFT/CAM SHAFT RATIO: 10:1.
  - c. COUPLER ON INPUT SHAFT.
  - d. DIMENSION: 345mm (W)x200mm (D)x190mm (H).
36. CRANK MECHANISM
  - a. RADIUS: 20 ~ 100mm, ADJUSTABLE.
  - b. INPUT/OUTPUT RATIO: 1:10. 15mm ALUMINUM BASE.
  - c. COUPLER ON INPUT SHAFT.
  - d. DIMENSION: 220mm (W)x140mm (D)x190mm (H).
37. ROCKING LEVER MECHANISM
  - c. SUCTION PLATE NOT INCLUDED.
18. MOTOR ROBOTICS ARM MECHANISM
  - a. TRAVEL DISTANCE: 300mm.
  - b. SINGLE-PHASE MOTOR.
  - c. CHUCK NOT INCLUDED.
19. STORAGE RACK MECHANISM
  - a. STEEL.
  - b. DIMENSION: 400mm (W)x500mm (D)x300mm (H).
20. Z-AXIS SCREW ROD MECHANISM
  - a. TRAVEL DISTANCE: 300mm.
  - b. PITCH: 4mm/Revolution.
  - c. DIMENSION: 500mm (W)x140mm (D)x100mm (H).
21. ELEVATOR MECHANISM
  - a. 5 STORIES, STEEL.
  - b. DIMENSION: 450mm (W)x200mm (D)x500mm (H).
22. VIBRATORY FEEDER MECHANISM
  - a. SIZE: 400mm (DIAMETER)x300mm (H).
  - b. ADJUSTABLE VIBRATION.
23. ROCKER ARM MECHANISM
  - a. CAN BE FIXED ON L-SHAPE STAND.
  - b. DIMENSION: 360mm (W)x140mm (D)x170mm (H).
24. PRODUCT MOVING GUIDE MECHANISM
  - a. DIMENSION: 70mm (W)x140mm (D)x200mm (H).
25. GEAR COUPLER MECHANISM
  - a. COUPLER IS INSTALLED IN GENEVA or ROLLER CAM GEAR.
  - c. DIMENSION: 70mm (W)x140mm (D)x200mm (H).
26. ROTARY TABLE MECHANISM
  - a. TABLE DIAMETER: 200mm. 15mm ALUMINUM BASE.
  - b. SHAFT ROTATION RATIO: 10:1. COUPLER ON INPUT SHAFT.
  - c. DIMENSION: 200mm (W)x200mm (D)x170mm (H).
  - d. THIS ITEM IS INSTALLED WITH GEAR INDEXING.
27. GENEVA GEAR INDEXING MECHANISM
  - a. 6 DIVISIONS; 15mm ALUMINUM BASE.
  - b. COUPLERS ON INPUT and OUTPUT SHAFTS.
  - c. DIMENSION: 200mm (W)x100mm (D)x150mm (H).
28. ROLLER GEAR CAM MECHANISM
  - a. 6 DIVISIONS; 15mm ALUMINUM BASE.
  - b. COUPLERS ON INPUT and OUTPUT SHAFTS.
  - c. DIMENSION: 200mm (W)x205mm (D)x240mm (H).
  - d. OUTPUT SHAFT ROTATES 60° per REVOLUTION OF INPUT.
29. RACK AND PINION (GEAR) MECHANISM
  - a. RACK GEAR LENGTH: 500mm; TRAVEL DISTANCE: 300mm.
  - b. COUPLERS ON GEAR SHAFTS. 15mm ALUMINUM BASE.
  - c. DIMENSION: 500mm (W)x175mm (D)x175mm (H).
30. RACK AND ONE WAY CLUTCH GEARING MECHANISM
  - a. RACK GEAR LENGTH: 500mm; TRAVEL DISTANCE: 300mm.
  - b. COUPLER ON GEAR SHAFT. 15mm ALUMINUM BASE.
  - c. DIMENSION: 500mm (W)x175mm (D)x175mm (H).
31. ONE WAY CLUTCH MECHANISM
  - a. FORWARD DRIVEN (ENGAGED); REVERSE RELEASE.
  - b. INPUT and OUTPUT COUPLER; 15mm ALUMINUM BASE.
  - c. DIMENSION: 210mm (W)x180mm (D)x140mm (H).
32. RACK AND ONE WAY RATCHET GEARING MECHANISM
  - a. RACK GEAR LENGTH: 500mm; TRAVEL DISTANCE: 300mm.
  - b. COUPLER ON GEAR SHAFT. 15mm ALUMINUM BASE.
  - c. DIMENSION: 500mm (W)x210mm (D)x175mm (H).
33. ONE WAY RATCHET GEARING MECHANISM
  - a. FORWARD DRIVEN (ENGAGED); REVERSE RELEASE.
  - b. INPUT and OUTPUT COUPLER; 15mm ALUMINUM BASE.
  - c. DIMENSION: 210mm (W)x160mm (D)x140mm (H).
34. GEAR SET MECHANISM
  - a. INPUT/OUTPUT RATIO: 1:2. 15mm ALUMINUM BASE.
  - b. TWO COUPLERS.
  - c. DIMENSION: 210mm (W)x640mm (D)x140mm (H).
  - a. ROCKING ANGLE: 60°; AMPLITUDE: 110 ~ 130mm ADJUSTABLE. 15mm ALUMINUM BASE.
  - b. COUPLER ON INPUT SHAFT.
  - c. DRIVEN SHAFT TO ROCKING LEVER SHAFT RATIO: 10:1.
  - d. DIMENSION: 300mm (W)x160mm (D)x190mm (H).
38. TOGGLE JOINT MECHANISM
  - a. TRAVEL DISTANCE: 250mm. 15mm ALUMINUM BASE.
  - b. COUPLER PINS ON INPUT BLOCK AND OUTPUT SHAFT.
  - c. DIMENSION: 300mm (W)x150mm (D)x170mm (H).
39. SLIDING PLATFORM MECHANISM
  - a. TRAVEL DISTANCE: 300mm Min. CONTROLLED by PROXIMITY

SWITCHES.

- b. COUPLER PIN ON PLATFORM. 15mm ALUMINUM BASE.
  - c. DIMENSION: 500mm (W)x140mm (D)x90mm (H).
- 40 EXPERIMENT FLAT BOARD AND STEP SPACERS
- a. ALUMINUM ALLOY. 15mm THICK MINIMUM.
  - b. DIMENSION: 800mm (W)x600mm (D)x15mm (H).

