

Dip Spin Coating Machine Model DST- 400



Machine Specifications

Model Name	DST- 400
Overall Size L x W x H	2800x3500x2300 mm
Loading Height	800 mm
Parts loading	A bin loader filter will load the parts through a weigher fitted on conveyor Through bucket elevator
Parts unloading	Through tilting basket on flat bed conveyor further to the curing furnace
Basket size	400 mm
Basket tilting	45 Deg, Hydraulically operated
Basket load carrying capacity	35-45 kg each time
Production cycle time	3 min without tilting (load 35-45kg) 4.5 min with tilting (load 20-25kg)
Spin Speed	200- 500 RPM
Paint Barrel	SS 304 leakproof with stirrer
Paint tank capacity	80-100 Ltrs
Paint Barrel with water cooling jacket	Could be provided
Paint lifter movement	Hydraulic Scissor Lift
Machine Operation	Fully Automatic
Operating panel	PLC with HMI
Machine power requirement	9 HP
Machine weight Approx	2000 Kg
Machine enclosure	Panel fitting
Power pack Hyd oil	110 Lts

Bought out parts details

Part description	Make
PLC, HMI, VFD	Siemens or Equivalent
Motors	Siemens / Nord
Pneumatics	Janatics/ Festo
Spindle Gear Motor	Siemens
Hydraulic Cylinder	SMC/ Equivalent
Hyd Power pack Switch	IFM
Bearings	SKF/ Equivalent
Power Supply	Omron
Contactors	Siemens/ Schneider
ELCB/ MCB	Siemens/ Schneider
Relay Module	Omron
Push Buttons & Lamps	Telemecanique

Sequence of Operation

- Operator will start the cycle ,which further initiate the operations of loading the parts from bin loader for further coating operation in the Dip spin machine.
- Operator will load bin of parts through loading system or by pallet lifter/fork lift (approx 400 kg) in the bin loader. The bin loader will further transfer the parts in the tilter. The tilter will turn 90 Deg & deliver the parts on the belt conveyor. From this conveyor the parts will be exactly weighed & transferred to the hooper of machine loader.
- The hooper will deliver the parts into the basket, which is mounted on the sliding carriage & move to the next position.
- The basket will be gripped by the jaws of the machine & will go to the Zero position of the operation.
- Dip tank will move up by hydraulic cylinder for dipping.
- After dipping, tank will move down for spinning.
- Basket will get rotated for spinning.
- After spinning basket will tilted by 45°-65° for predefined time.
- After tilting cycle basket will tilted to home position.
- After completion of the cycle dip tank will move down. The basket with the coated parts will be transferred from the transfer mechanism to the unloading position.
- Basket will be tilted & the parts will be loaded onto the intermediate conveyor. This conveyor will further transfer the coated parts to the Oven conveyor.
- After unloading the parts from the basket, it will come to loading stage & second cycle will be started.
- Same cycle will be repeated for next component.