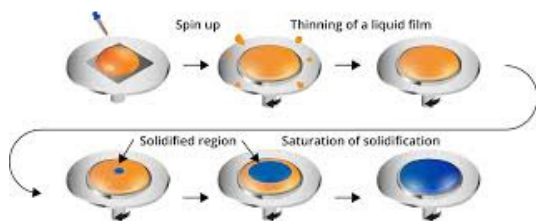


## FEED BACK CONTROLLED SPIN COATER

**Introduction:** MSSC series of precision rotational spin coaters are available in 4 different regular models apart from tailor made solutions virtually covering all industrial and research applications meeting all electrical, thermal, mechanical, and environmental specifications. These finds applications in polymer, paint, medicine, food, coating, defense, electrical/mechanical m/c testing instrument, industrial electronics, railway, and avionics and solid state physical application like dielectrics characterization, switch gears, MEMS and many research and development activities. These are compatible to any standard or controllers with very high degree of accuracy/repeatability/reliability and are available in different constructional material like ceramic-coated MS, poly carbonate cabinets.

**Operating Principle:** Spin coating is a procedure used to deposit uniform thin films to flat substrates. Usually a small amount of coating material is applied on the center of the substrate, which is either spinning at low speed or not spinning at all. The substrate is then rotated at high speed in order to spread the coating material by centrifugal force.. Rotation is continued while the fluid spins off the edges of the substrate, until the desired thickness of the film is achieved. The applied solvent is usually volatile, and simultaneously evaporates. So, the higher the angular speed of spinning, the thinner the film. The thickness of the film also depends on the viscosity and concentration of the solution and the solvent.

- High r.p.m. with high stability./contact speed/torque mode
- 5-1/2 & 6-1/2 digit display /consistent performance
- Consistence performance over large temperature/humidity range (70oC and 80 % RH)
- Auto/manual zero offset without drift./Auto drift tracking
- RS-32 interface/high sample rate – 10,000 sample/second.
- Feed back current measurement technique.



MSSC- 0099991



MSSC-9999992

### Precision Spin coaters

RPM Range&lt;UPTO 15000

Model	R.P.M. Range	Torque Range MILI . nEW	Burdon	Accuracy Restricted to Resolution level	Resolution Quantified/ optional	INTERFACE
MSSC-9999990101	10.0/5.0 -08000	0.02	< 100 nano Nm	99.99999%	5 u.R.P.M./5nN	RS-232USB
MSSC-9999990401	10.0/5.0 -08000	0.04	< 100 nano Nm	99.99999%	5 u.R.P.M./5nN	RS-232/USB
MSSC-9999990102	10.0/5.0 -10000	0.06	< 100 nano Nm	99.99999%	5 u.R.P.M./5pN	RS-232/USB
MSSC-9999990402	10.0/5.0 -10000	0.08	< 100 nano Nm	99.99999%	5 u.R.P.M./5pN	RS-232/USB
MSSC-9999991002	10.0/5.0 -12000	0.06	< 100 nano Nm	99.99999%	5 u.R.P.M./5pN	RS-232/USB
MSSC-9999992002	10.0/5.0 -12000	0.08	< 100 nano Nm	99.99999%	5 u.R.P.M./5pN	RS-232/USB
MSSC-9999992003	10.0/5.0 -150000	0.0	< 100 nano Nm	99.99999%	5 u.R.P.M./5fN	RS-232/USB

Six digit after product code indicate count, next, Two digit indicate voltage and last digit indicate 01- nano amp/02-pico amp/03-femto amp.

### General electrical/mechanical specifications:

Operating voltage: 220 volt A.C. (50-20,000 Hz)/ 12 D.C.

Measurement range (full scale): as above in different model.

Range (R.P.M.):0-15,000

Torque (N.m.) rang :10<sup>-04</sup>-10<sup>-02</sup>

Angular rotation range: 0-300 degree with resolution of 0.001 degree

Viscosity range: upto 3000.000 Pas

Temperature range -20 °C to +180 °C

Response time: 1000 sample/sec

Burden: less than 100 micro volt/full scales current or better

Input capacitance: 10 nF

Accuracy: 99.999 % reading

Repeatability: 100 of reading

Resolution: 1/MILI NEWTON, Linearity adjustment: upto 100 nano-Newton

Isolation: > 100 giga ohm

Connector: BNC-9 pinx2 and BNC-25 pinx2

Size: 8X8X12 inches/rack mounted or portable

Interface: RS-232

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