



COMPUTERIZED AUTOMATIC, LOAD CELL BASED, SERVO LOAD CONTROLLED,
BRINELL HARDNESS TESTING MACHINE
WITH PROGRAMMABLE DWELL TIME, WITH AUTO JOB LIFTING / LOWERING FACILITY,
MODEL : OPFA-3000-IPC(S)



Machine working as under :

- For load application there will be a double acting hydraulic cylinder and piston arrangement along with swiveling index head for the Indenter, Optics, CCD, Industrial PC, Software etc.
- The hydraulic power pack with all the required components with solenoid operated DC valve, Pressure relief valve etc. will be provided.
- A torque limiter will be provided for the geared motor for avoiding the over loads while clamping the jobs.
The total cycle will be automatic as under :
 - Position the job manually.
 - Bring the test point below the indenter.
 - Adjust the height of the lower table for the first job.

Mastering the fine art of testing

Now start the cycle start button. Following cycle will operate -

- Auto table moves up till the job gets clamped.
- Then the indenter will get indexed and become vertical and it will start moving down due to hydraulic pressure from top.
- Load will be applied slowly through Servo valve.
- Once the selected loads is reached the load will be maintained for a preset time.
- Then the load will be removed.
- The indenter will go up and get indexed. The image will be visible on the computer screen. It will be measured and hardness value will be displayed.
- The job will go down to its initial position set by the timer. Now the machine is ready for testing the next job.

The major specifications of the machine will be as under -

Model	OPFA-3000-IPC (S)
Type	Heavy duty
Machine frame	"C" type
Load stages	187.5, 250, 500 to 3000 kg in step of 250kg - hydraulic loading
Machine test height	380 mm
Throat of the machine	200 mm
Size of the table	250 x 400 mm
Load capacity of the table	100 kg
Indentation measurement system	Direct reading through CCD on IPC of 16X magnification
Least count of measurement	0.01 mm
Accuracy of load application	± 1% as per IS : 2281 - 2005
Power supply	3 Phase, 440 Volts, 50 Cycles / Sec AC
Power	2 Motors of 0.5 Hp - Total 1 HP
Weight (approx)	750 kg

Standard Accessories -

Machine as per above specifications	1 No
Power Pack	1 No
Test table with slots for clamping	1 No
Dia 70 mm V table for round jobs	1 No
Ball holder with Tungsten Carbide ball dia 5 mm	1 No
Ball holder with Tungsten Carbide ball dia 10 mm	1 No
Test Block HBW 5 / 750	1 No
Test Block HBW 10 / 3000	1 No
Test Block HBW 2.5/187.5	1 No
Spanner Set	1 No
Instruction Manual	1 Book

We can also supply - Universal Testing Machine, Tensile Testing Machine, Spring Testing Machine, Horizontal Chain and Rope Testing Machine, Hardness Testers (Brinell, Rockwell, Vickers), Digital Rockwell Hardness Testers, Dynamic Balancing Machine, Impact Testing Machine, Digital Torsion Testing Machine, Dynamic Hardness Tester, Portable Hardness Tester, Compression Testing Machine & Special purpose Material Testing Machines, etc

Manufactured by -



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