



NG-ODR – Oscillating Disc Rheometer

Standards:

ASTM D2084, ASTM D5289, ISO 6502

Description:

This machine is designed to get the characteristic curve and characteristic parameters of rubber vulcanization by measuring the applied moment of rubber to the oscillating dye body. NG-ODR rotor-free vulcameter has an excellent stability of results. The data and diagrams can be used as a reference for development, research and production quality.

NG-ODR describes precisely and quickly the curing and processing characteristics of vulcanized rubber compounds. It works on a very simple principle. A test piece of rubber compound is contained in a sealed test cavity under positive pressure and maintained at a specified elevated temperature. A Rotor (oscillating disc) is embedded in the test piece and is oscillated through a small specified rotary amplitude. This action exerts a shear strain on the test piece and the torque (force) required to oscillate the disc depending on stiffness (shear modulus) of the rubber compound.

Special Features:

- Body surface treatment: American DuPont powder and electrostatic painting process are adopted. It is cured at 200 °C to ensure long-term color fastness;
- Alpha closed mold cavity structure;
- The alpha force sensor technology is adopted;
- The control accuracy of the heating plate at the inlet of the upper and lower mold cavities shall be within ± 0.15 °C;
- The result report can be printed directly to check the change of vulcanization curve;
- LED lighting observation is set in the box;
- Software control can independently correct PID parameter values;
- Oil water separator with secondary pass rate self-locking;
- The machine is equipped with self seat platform, storage box cabinet and convenient mobile platform;
- The mechanical parts are composed of non corrosive structural aluminum and stainless steel materials;
- Metal led button, waterproof, safe and durable, soft vision;
- Color LCD touch screen controls and displays, human-computer interaction interface, simple operation, convenient maintenance, stability and reliability;
- One button automatic test, simple and convenient operation.





Technical Specification

Model	NG-ODR
Temperature Control	The temperature is controlled by computer, and the drift of upper and lower molds does not exceed 0.2 degrees
Heating rate	15 °C / min
Control range	Room temperature to -200 °C
Minimum display	0.01 °C
Heating rate	120 °C / min
Torque range	0 -- 20nm
Minimum torque reading	0.001nm
Number of swing angles	± 0.5 °C, ± 1 °C, ± 2 °C (standard matching angle 1 degree)
Swing angle	100r / min (1.66hz)
Communication mode	COM port
Weight	573 lbs / 260kgs
Voltage	220V
Power	1000W

Standard Accessories

Item	QTY	Item	QTY
Sealing rings	10	Heating plate	2
High temperature paper	3	Desktop computer	1
Hexagonal wrench	1	Printer	1

Lead Time

2-5 Months Depending on when the PO is placed

* Request a [formal quotation](#) or send an e-mail to sales@nextgentest.com for the most up-to-date pricing and applicable discounts and incentives