

KASON-RMD300 No Rotor Rubber Moving Die Rheometer



(Picture just for reference)

I. Equipment overview:

Rotorless vulcanization instrument is the most widely used instrument in rubber processing industry to control rubber quality, rapid inspection and rubber basic research, which provides accurate data for rubber optimization formula combination, and can accurately measure the scorch time, positive vulcanization instrument time, vulcanization index and maximum and minimum torque parameters.

2. Main features:

- 1, no rotor vulcanization instrument adopts the latest version of the most advanced software, with fast heating (within 3 minutes), high temperature control accuracy.
- 2, no rotor vulcanization instrument adopts alpha closed mold cavity structure, in the international leading position.
- 3, no rotor vulcanization instrument adopts advanced alpha force sensor technology: (sensor accuracy up to 0.001N.m)
- 4, no rotor vulcanization instrument adopts advanced alpha closed cavity structure, the rotating cavity and the fixed cavity are closed through the imported sealing ring, and the structure of the closed cavity and the general open cavity is completely different, and its accuracy and requirements and advancement are not comparable. Closed cavity repeatability is completely consistent, in the international leading position.

3. Working principle:

The rubber sample is put into an almost completely closed mold cavity and kept at the test temperature. The mold cavity has two parts, the lower part moves in a small linear reciprocating motion (oscillating oscillation), and the oscillation causes the sample to produce shear strain. The reaction torque (force) of the sample to the mold cavity is determined.

After the vulcanization test begins, the shear modulus of the sample increases, and the computer displays and records the torque (force) in real time. When the torque (force) rises to the stable value or maximum value or even the return state, a curve of the relationship between torque (force) and time is obtained, that is, the vulcanization curve (Figure 1). The shape of the curve is related to the temperature of the test and the characteristics of the rubber material.

4. Standards:

The rotor-free vulcanization test instrument meets the requirements of GB/T16584 "Rubber - Determination of vulcanization characteristics with rotor-free vulcanization instrument", ISO6502 requirements and the data of T10, T30, T50, T60 and T90 required by Italian standards. ASTM-D5289, ISO-6502.

5. Application Industry:

It is the most important testing instrument stipulated by the state for the development of new products, the research of rubber formula, the control of rubber quality and the basic research and application of rubber. Widely used in all walks of life of rubber products.

6. Technical parameters:

Temperature control range	Room temp—200℃
Temperature fluctuation range	±0.15℃
Torque resolution	1/500000
Torque accuracy	0.3%
Torque unit	N.m、N.cm、N.inch、kN.m、kN.cm、kN.inch、kg.m、kg.cm、kg.inch、lp.m、lp.cm、lp.inch、g.m、g.cm、g.inch
Temperature display resolution	0.01℃
Temperature recovery time after closing	< 1.5min
Temperature unit	C (Celsius), F (Fahrenheit), K (Kelvin)
Acquisition rate	200 times per second
Support language	English, Simplified Chinese, Traditional Chinese.
Standard of use	GB/T 16584、ASTM D5289、ISO 6502
Calculation parameter	ts1、ts2、t10、t30、t50、t70、t90、Vc1、Vc2
Software interface	USB2.0
Print content	Date, time, temperature, vulcanization curve, temperature curve, ML, MH, ts1, ts2, t10, t50, t90, Vc1, Vc2
Test standard	Conforms to ASTM D 5289, ISO6502
Oscillation frequency	100 cycles per minute (1.67Hz)
Amplitude of oscillation	Standard: ±1 degree ±0.03 degree
	[Optional] ±0.5 degrees ±0.03 degrees, ±3 degrees ± 0.03 degrees
Temperature change time	170℃→190℃ within 55 seconds at ±0.3℃
Reheating time after film closing	190 ° C →170 ° C within 1 minute and 40 seconds and at ±0.3 ° C
Rate of warming	The temperature compensation returns to the set temperature of 170 ° C (error within ±0.3 ° C) in no more than 30±3 seconds
Power source	220VAC±10%, 50±3Hz;
Air pressure source	minimum 65psi (4.5kg/cm ²)
dimension	L65cm x W59cmx H148cm

7. Configuration

Name	Quantity
Complete casing	1set
Main engine locker	1set
Vulcanizer main board	1set
AC motor	1set
software	1set
Torque sensor	1set
Air cylinder	1set
Open cavity	Up and low
Acrylic protective cover	1set
Oil-water separator	1set
Solenoid valve	1set
Temperature sensor	2pc
Heating sheet	2pc
Exhaust fan	1set
filter	1set
Electric wire	several

19 YEARS

Professional focused on testing equipment

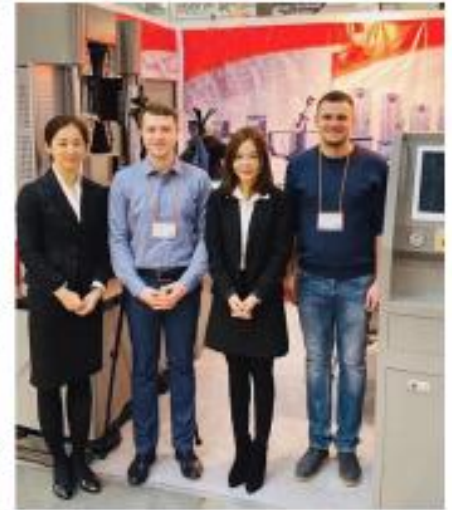
KASON is established in 2003, owns more than 8000 square meters factory. has a professional sales teams, modern enter prise technology center, scientific and technological research and development team.

Machines passed the European CE authentication, American FDA certificate and and ISO 9001.

Products sold to USA, Canada, Australia, Europe, Africa etc, more than 130 countries and supply OEM service for many customers

PROFESSIONAL TEAM

KASON has a professional sales teams, modern enter prise technology center, scientific and technological research and development team.



OUR CUSTOMERS (more than 130 countries)



