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DW5320 ROTORLESS RHEOMETER





MODEL NO.

DW5320

APPLICATION

DW5320 Rotorless Rheometer. This instrument is applicable for vulcanization of rubbers to acquire characteristic curves and parameters through measuring the torque which rubber materials effect on the oscillating die.

STANDARDS

STANDARDS	ASTMD5289-95	ISO6502:1991	GB/T16584-1996
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Note: this tester can conform to but not limit to the standards above, for more standards conformance, please contact us.

FEATURES

- High accuracy of torque sensor, high repeatability and stability;
- Easy to maintain, low failure rate;
- Excellent repeatability and smoothness of curves;
- Adopting PID method to ensure stable temperature control, high heating speed and rapid temperature recovery;
- With automatic safety door, ensure the operator's safety;
- Powerful function of processing software.

KEY SPECIFICATION

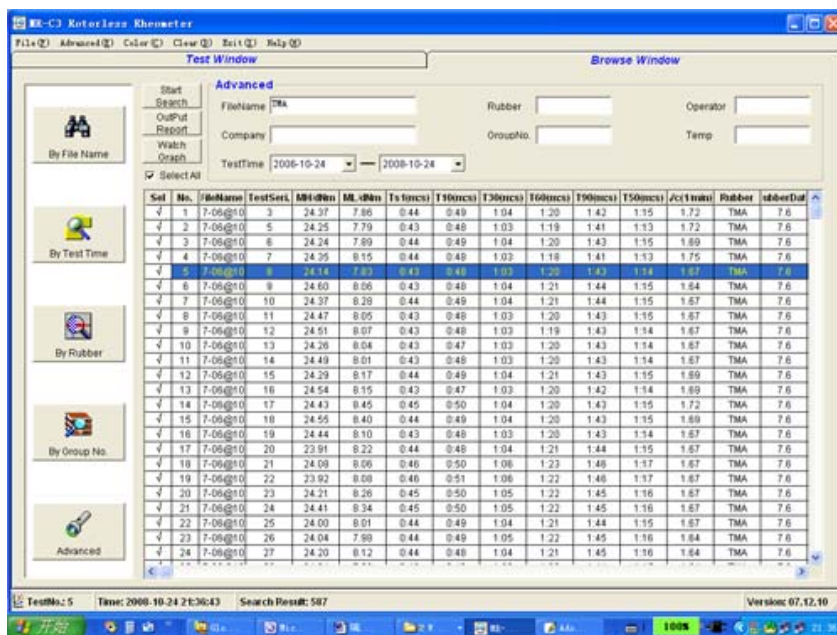
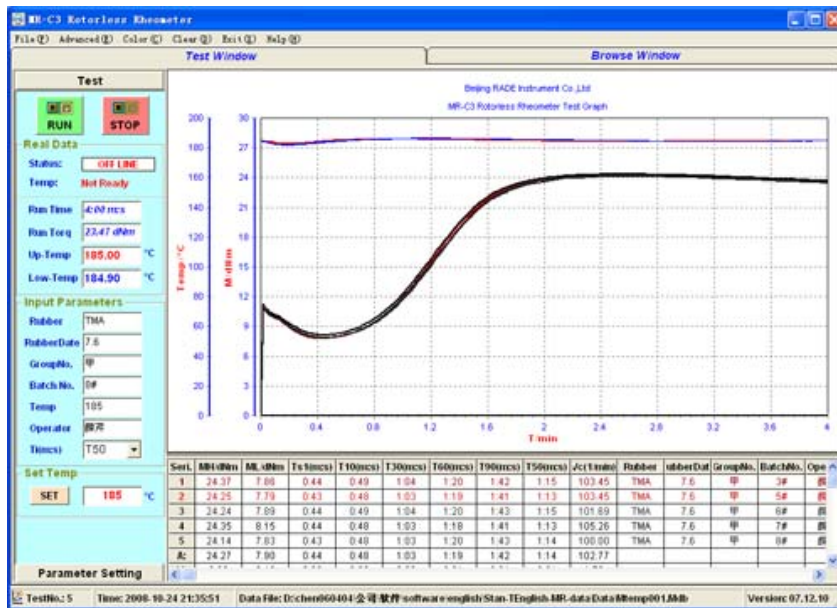
- | | |
|-------------------------------------|---|
| ● Temperature range | room temperature~200℃ |
| ● Temperature fluctuation in die: | $\leq \pm 0.1^{\circ}\text{C}$ |
| ● Resolution of temperature display | 0.1℃ |
| ● Heating speed | about 25℃/min |
| ● Torque range | 0~300dNm |
| ● Torque resolution | 0.01dNm |
| ● Angle of oscillation | $\pm 1^{\circ}$, $\pm 3^{\circ}$, ($\pm 0.5^{\circ}$ optional) |



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- AC220~230V, 50/60 HZ, 3A

SOFTWARE USER INTERFACE



TESTING RESULT

M_L : Min. torque (dNm)—The testing value of sample's vulcanization characteristics (viscosity) before vulcanization.

M_H : Max. torque (dNm)—The testing value of sample's shearing modulus or rigidity. Including even torque, max. torque for returning curve, and the max. torque during the specific period of no even or returning curve happens.

T_{S1} (min)—The time when the torque increases to $M_L + 1\text{dNm}$, the angle of oscillation is 0.5° or 1° . This figure shows the scorch time.

T_{S2} (min)—The relative time when the torque increases to $M_L + 2\text{dNm}$, the angle of oscillation is 3° . This figure shows the scorch time.

T_{10} (min)—The time when the torque increases to $M_L + 10 (M_H - M_L) / 100\text{dNm}$. This figure shows the scorch time.

T_{30} (min)—The time when the torque increases to $M_L + 30 (M_H - M_L) / 100\text{dNm}$.

T_{60} (min)—The time when the torque increases to $M_L + 60 (M_H - M_L) / 100\text{dNm}$.

T_{90} (min)—The time when the torque increases to $M_L + 90 (M_H - M_L) / 100\text{dNm}$. This figure shows the optimum cure time.

T_i (min)—The time when the torque increases to $M_L + i (M_H - M_L) / 100\text{dNm}$.

V_c —Vulcanizing speed index. $V_c = 100 / (T_{90} - T_{Si})$.

STANDARD CONFIGURATION

No.	Item	Quantity
1	Main machine	1 set
2	Base of main machine	1 set
3	Computer	1 set
4	Printer	1 set
5	Allen wrench	1 set
6	Torque calibration	1 pcs



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7	0.5° eccentric wheel	1 pcs
8	Power cord	1 pcs
9	Signal wire	1 pcs
10	Fuse (3A)	10 pcs
11	Software CD and driver	1 pcs
12	Copper brush	1 pcs
13	Tweezers	1 pcs
14	Cellophane (0.02mm thick)	5 pcs
15	Air pipe 8mm	2 m
16	Electric balance	1 set
17	Product qualification certificate	1 copy
18	User manual	1 copy

OPTIONAL ACCESSORIES

No.	Item
1	
2	