

Summary:

Professional Rubber Mooney Viscometer is used for determining rubber's viscosity and vulcanization index. Sample in a certain temperature and pressure, the rotor to a certain degree of rotation torque on the sample to a certain degree of shear stress, measure out the rubber anti-shear torque. It's a indispensable instrument of reclaimed rubber, rubber, wire and cable industry.

Standards:

ASTM-D2084,ASTM-D5289,ISO-6502, ASTM-D1646

Features:

1. The strong data function can support the drawing,storage and output printing of multiple curves under the same interface.
2. It support the data query in many forms and output of excel queries and reports
3. It has many analysis function like statics, deviation setting,standards curve setting ,and CPK statistical calculation
4. It has such function as interface query,local zoom and curve comparison.
5. Selection of any any vulcanization time,range selection and screen capture.
6. Analyzed the past test data once again,and increase or modify the reports, to avoid the loss of data.
7. The test data are stored in the way of database,which is scientist the multiple data sequencing ways are convince for data retrieval and query.
8. The machine will get the characteristic curve and data by measuring the strength of rubber.
9. Good reproducible and stasis tics.

Specifications

Model	NG-320
Control temperature range	Normal temperature~200℃
Temperature display resolution	0.01℃ (0.1℃ common type of imported temperature controller temperature)
Temperature control accuracy	±0.3℃
Calibration accuracy	Mooney value ±0.5
Rotor speed	2 rotation/ min ±0.02rotation/ min
Torque range	Mooney value 0~200
Torque resolution	Mooney value 0.1
Print content	Date, time, temperature, Mooney scorch curve and MV,T5,T35,T3,T18,@15,@30
Power	50HZ, ~220V±10%

Test results

Measure of Mooney viscosity (Large rotor):

MI -- initial Mooney viscosity.

ML – The minimum Mooney value in the last 30 seconds before the motor stopped.

Mx-t - Mooney value relating to time t.

x-the time of preheat, t-Mooney test time

Stress Relaxation

MRe - Mooney value at the end of stress relaxation.

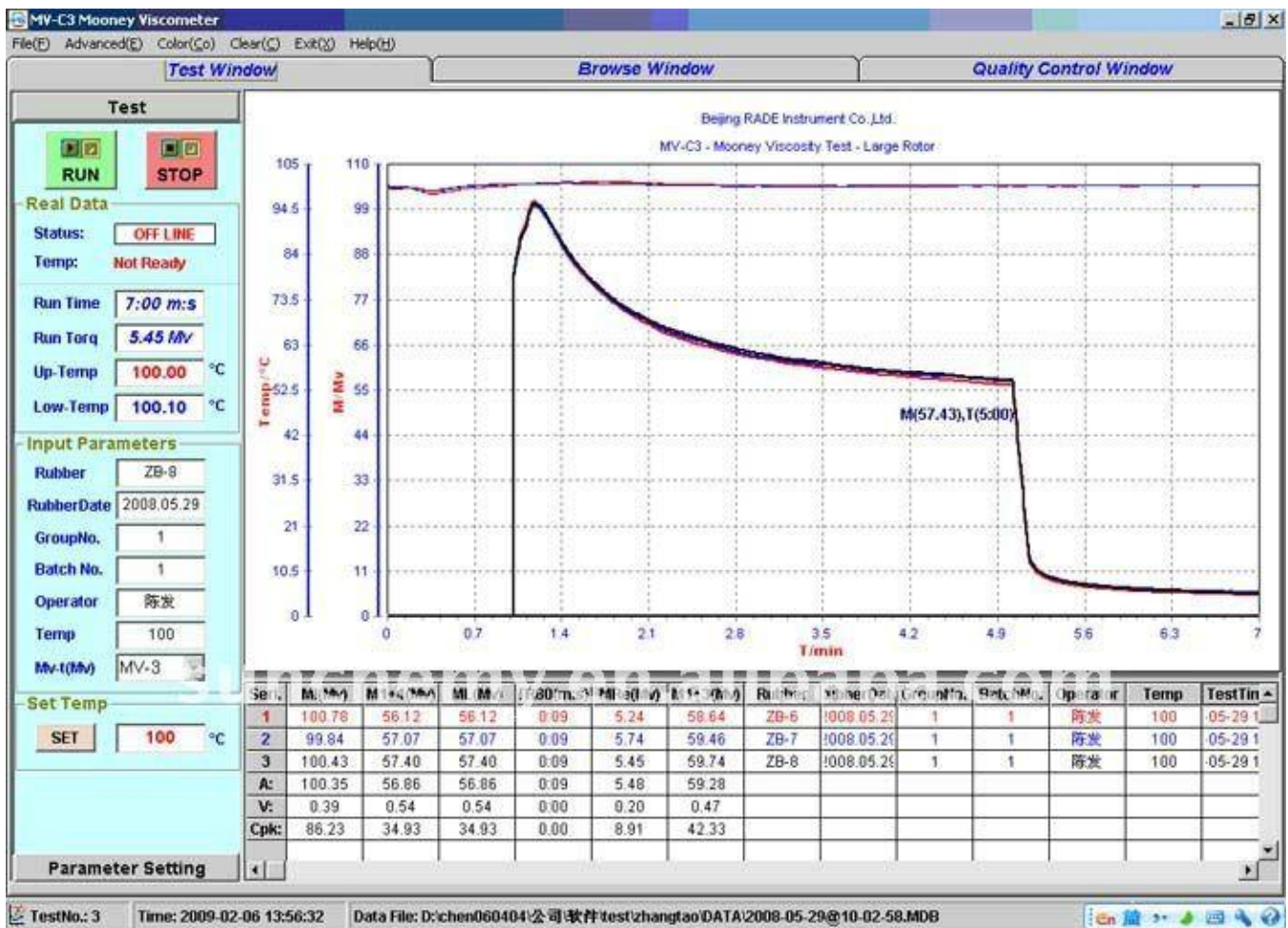
TR_x - time needed for x% torque stress relaxation.

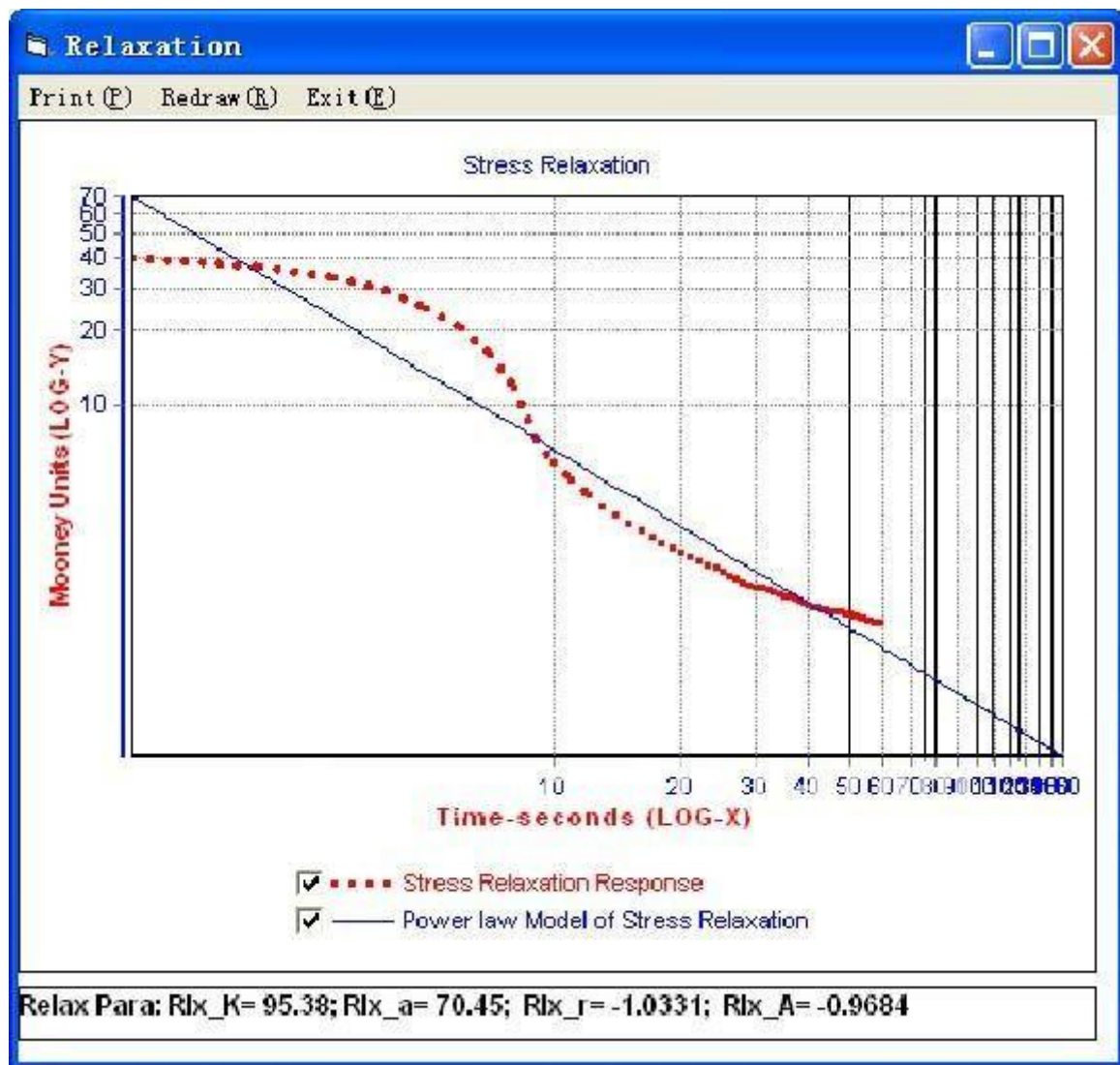
Xy% - % of Viscosity decay after motor stopped y sec.

The value of exponent a , the constant k , the correlation coefficient r , and the area A .

Graph (with Viscosity-Time curve and Test temperature curve)

Mooney viscosity graph; Relaxation graph; log Mooney units Versus Log time graph.





Scorch Data testing sample results:

- Scorch time curve
- Temperature curve
- Curve index (Input small or Large Rotor test

MI - initial Mooney viscosity

ML - Minimum Mooney viscosit

MF - Maximum Mooney viscosity in the end of the test

Mx-t - Mooney value relating to time t.

x-the time of preheat, t-Mooney test time

M5/M3 - $ML + 5/3$ Mooney

M35/M18 - $ML + 35/18$ Mooney

t35/t18 - Mooney vulcanizing time, ML+35/18 corresponding time, unit: min.

