Introduction for RRL
friction evaluating apparatus

Highfrequency Viscoelasticity Corporation

Cover four test modes required in equipment development

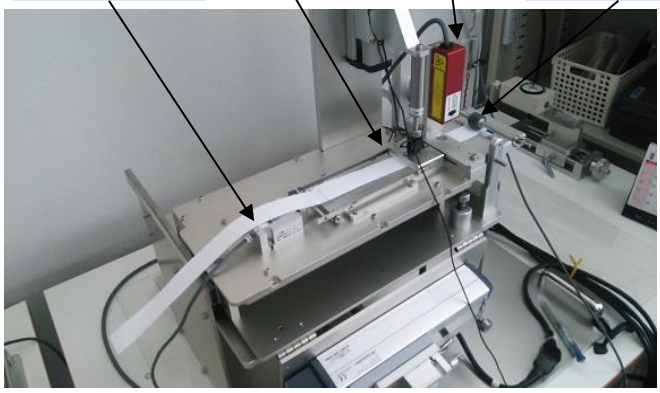
Slip rate measurement unit

(The slip rate measured by the transport load)

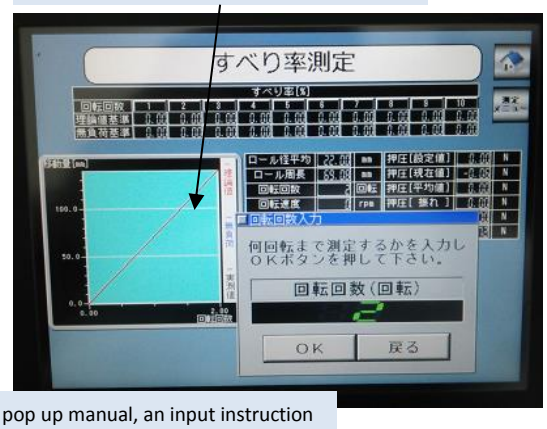
・Slip rate measurement mode

・ Automatically set the load force of the transport load equivalent

・Accelerated testing the transport reliability degradation due to paper dust adhesion

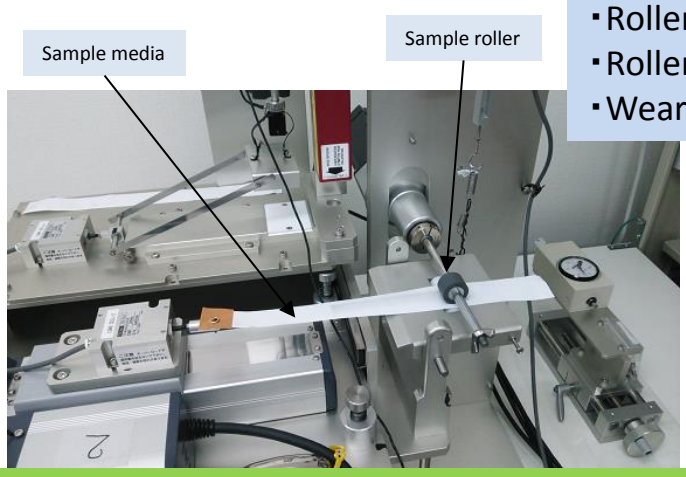


Easy View of measurement results



pop up manual, an input instruction

・Roller rotational friction measurement mode
・Roller fixed friction measurement mode
・Wear test mode



Easy View of measurement results

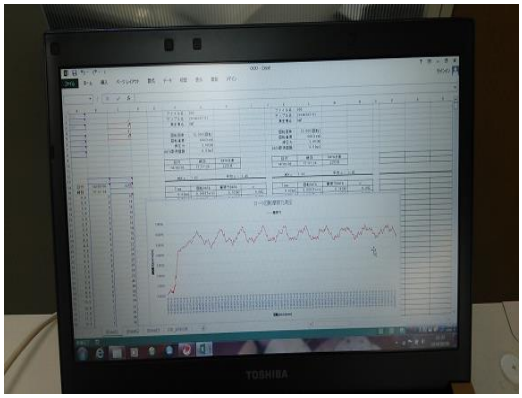
Friction coefficient measurement unit

(Friction force measurement in the slip rate of 100%)

Data processing

Results are automatically displayed with USB data link to EXCEL of PC 。

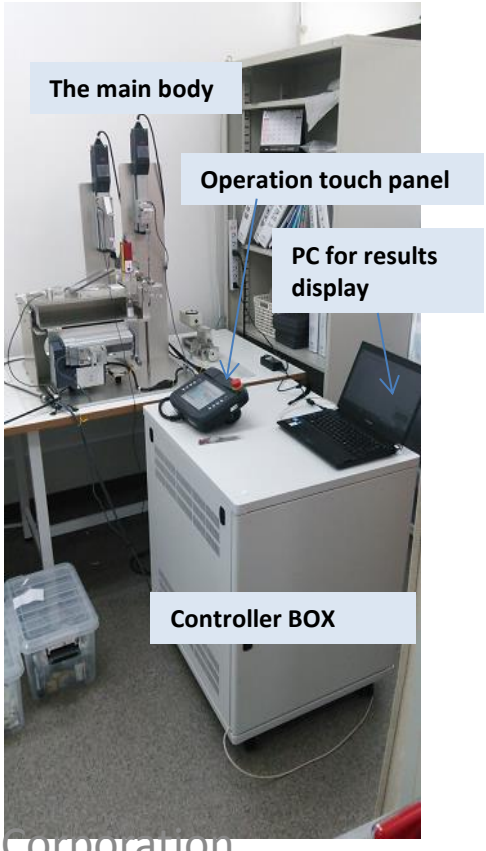
- **There is no record mistake because measurement parameter is able to list.**
- **automatically create graph.**



Features of RRL type friction evaluating apparatus

Worthful test can do without an actual machine ！

- **Slip rate measurement (roller rotation)**
  - **Measuring the amount of movement without marking the sample medium, calculate the Slip rate from the difference between the roller rotational amount.**
  - **Paper dust adhesion degradation it can promote test at the micro slip state.**
- **Friction coefficient measurement (roller rotation, roller fixed)**
  - **Since the inertia of the measurement system is small, you can understand the real phenomenon**
  - **It will reproduce the very actual friction from low speed to high speed.**
- **Wear test is also available.**
- **Since the speed range is wide, it is possible to understand and optimize the rubber physical properties.**



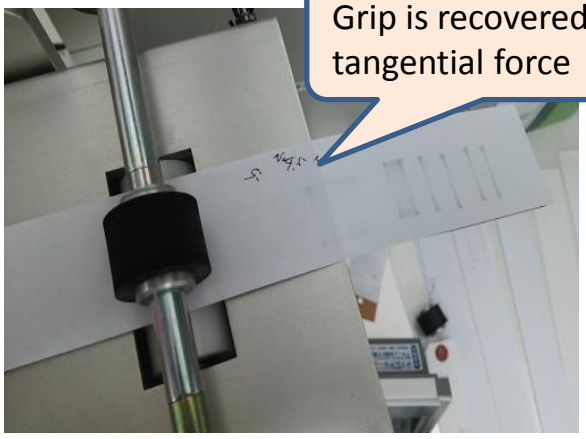
Examples of paper dust adhesion accelerated test using the functions of this machine

Adhesion degradation accelerated test using the wear test mode

・Since the roller rotation and a medium back and forth can be tested while changing the conditions, you can adapt to different operating conditions.

・Use the promotion medium, you can substitute the actual test of the long-term in one round trip.

In coefficient of friction measurement mode, visualizing the grip recovery

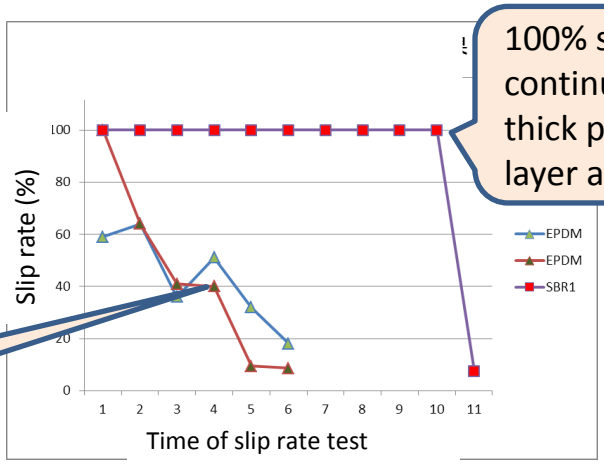


Slip rate measurement mode

・To quantify the adhesion of paper dust degradation

・You can consider whether possible recovery in the load force of the actual equipment.

・Directly connected to the optimization of the pickup roller control.



paper dust adhesion accelerated test

The Useful point of this apparatus

Product development

Media handling equipment
Equipment to handle bill and copy paper, film, etc.
Tire

Skill of tribology application technology, decisive factor of success in the differentiation and stabilization of the quality of performance

Rubber roller selected in accordance with the media and equipment characteristics

Prolonged maintenance cycle
Performance stabilization

A logical and standardization of evaluation methods, contribute to the sophistication and efficiency of research and development.

Technical issues

Quantitative evaluation method of the tribological properties of the rubber roller

The friction accelerated deterioration test method due to the adhesion of paper dust

Rubber material development with less paper dust adhesion degradation

Improvement of media

Logical thinking of the evaluation (Advanced)

Share the data that is reproducible by suppliers and product developers (efficiency)

RRL type friction evaluation apparatus specification

- Mountable roller Size: ϕ40mmMAX X 幅30mmMAX
- Roller rotation speed ：Max3000rpm
- Medium moving speed ：Max600mm/s
- Measurable speed of media movement amount： Max10000mm/s
- Maximum measurable friction force ：2N
- Body size WDH:600X600X900mm
- Controller size WDH:600X700X770mm
- Power supply ：100~250V

Since the specifications are subject to revision without notice for improvement,
Please contact us in case of use 。

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