

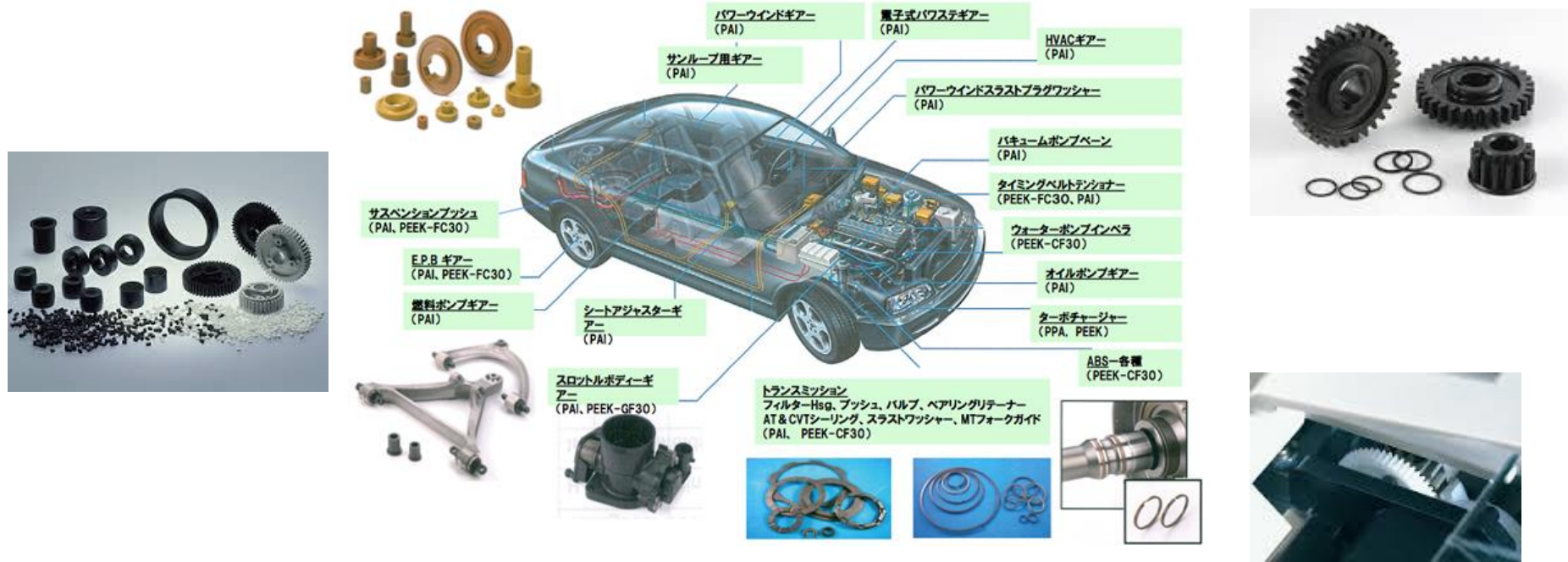


No.283

PLASTIC SLIDING  
ABRASION TESTER

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# PLASTIC SLIDING ABRASION TESTER



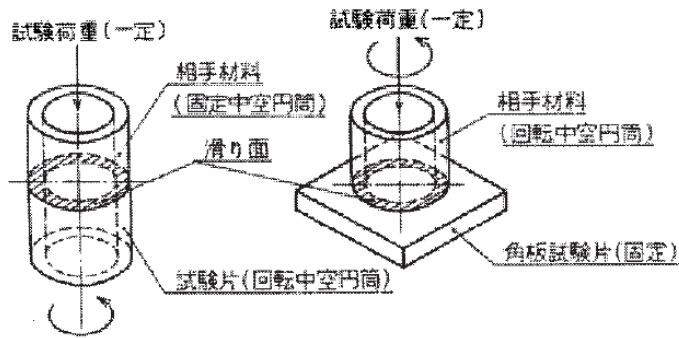
## “SLIDING ABRATION TEST”

is one relative term dependent upon the materials involved. The abrasion strength of plastic is getting to be one of important required performance.

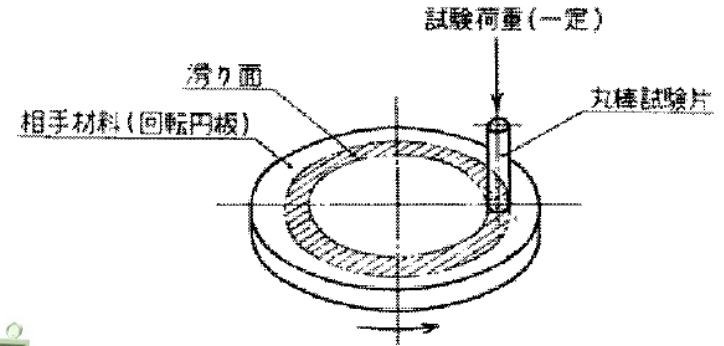
That is because the plastic part

- ① has high abrasion resistance.
- ② is more cheaper than Metal.
- ③ does not need lubricating oil for its use.

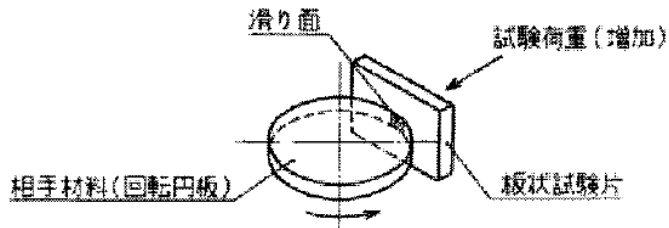
# PLASTIC SLIDING ABRASION TESTER



JIS K 7218 A Meth.  
Ring on Ring / Ring on Plate



JIS K 7218 B Meth.  
Pin on Disc



JIS K 7218 C Meth.  
Sheet on Disc

The tester can test for each method of JIS K 7218

Please let us know which method customer wants to test for before making quotation.

# PLASTIC SLIDING ABRASION TESTER

## 《Feature》

This tester is used to conduct a sliding abrasion test for plastic. Contacting tabular and hollow cylinder type test specimen to the edge face of the opponent's material at a constant load and giving them a high speed sliding and rotation, the operator is to measure the abrasion force and the abrasion volume.

## 《Specification》

Sample : Square Shape :  $30 \times 30 \times T2 - 5\text{mm}$   
Disc Shape :  $\phi 40 \times T2 - 5\text{mm}$   
Cylindrical Shape : Outer  $\phi 25.6$ , Inner  $\phi 20\text{mm}$ , L15mm

Co-Sample : Cylindrical Shape : Outer  $\phi 25.6$ , Inner  $\phi 20\text{mm}$ , L15mm

Press Load : 10-500N (Dead Weight)

Friction Load Measuring : Load Cell : 8-200N $\cdot$ cm (option: Chart Recorder)

Friction Speed: 0.2-200cm/s

Option : Constant Temperature Oven

Power Source: AC100V, 1phase, 15A, 50/60Hz  
AC200V, 3phases, 30A, 50/60Hz

Dimension / Weight (Approx.) : W820  $\times$  D770  $\times$  H1,720mm/200kg





# PLASTIC SLIDING ABRASION TESTER

## Touch Panel

No. 283-S-PC

プラスチック滑り摩耗,  
ギヤ摩耗試験機

### Initial Screen

The operator can choose language from Japanese, English, Chinese, Taiwanese, Korean

**A法試験①**

円筒外径(mm) 12.34  
 円筒内径(mm) 12.34  
 試験片密度(kg/m<sup>3</sup>) 1234.5  
 試験前質量測定値(mg) 12345  
 設定温度(°C) 123.4  
 予熱時間(s) 12345  
 時間間隔 1234 × 100 ms

**A法試験②**

試験終了条件  
 オペリ距離(m) 12345.67  
 試験時間(s) 12345  
 変位量(mm) 12.34  
 試料付近温度(°C) 123.4  
 荷重低下率(%) 12345

**A法試験③**

No.	主軸速度 m/s	押付力 N	時間 s	PV値 MPa·m/s
123	+12.34	123	1234.5	123.456
123	+12.34	123	1234.5	123.456
123	+12.34	123	1234.5	123.456
123	+12.34	123	1234.5	123.456
123	+12.34	123	1234.5	123.456
123	+12.34	123	1234.5	123.456
123	+12.34	123	1234.5	123.456
123	+12.34	123	1234.5	123.456

保存No. 12

### Test Setting

The operator can put the value of Test Condition by ten key which is on the TP.  
 On ③ screen the operator can save and recall the condition.

**A法試験④**

オペリ距離(m) 12345.67 / 12345.67  
 槽内温度(°C) 123.4 / 123.4  
 予熱時間(s) 12345 / 12345  
 試料付近温度(°C) 123.4  
 試験時間(s) 12345 / 12345 試験完了  
 摩耗変位(mm) 1234.56  
 試験荷重(N) 1234.5  
 摩擦トルク(N·cm) 1234.5

押付け力低下

原点復帰 開始 停止 結果表示

**A法試験⑤**

試験後質量(mg) 12345 計算実行

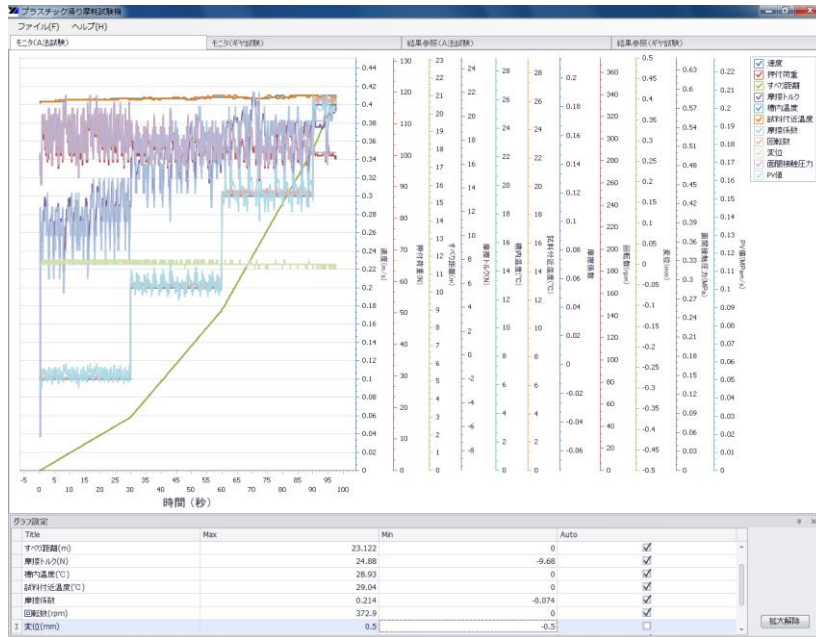
A) 摩耗変位から計算  
 摩耗体積(mm<sup>3</sup>) 12345.67  
 比摩耗量(mm<sup>3</sup>/(N·km)) 123456.789

B) 摩耗質量から計算  
 摩耗体積(mm<sup>3</sup>) 12345.67  
 比摩耗量(mm<sup>3</sup>/(N·km)) 123456.789

### Test Screen and Test Result

After Setting value, the operator can easily start the test by pressing “開始” after test, the only thing the operator do is putting weight of the sample on the square and press “計算実行” the test result will be shown on below.

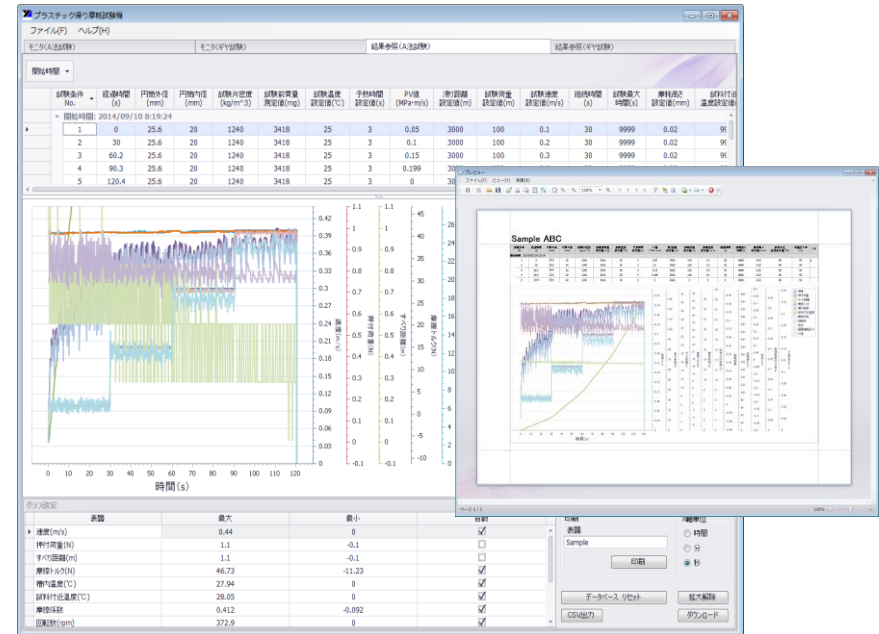
# PLASTIC SLIDING ABRASION TESTER Software



## Monitoring Screen

With connecting software to the machine, the operator can see the how the test goes on the software.

The operator can set the graph on below window to see the graph clearly.



## Test Result Screen

The operator can check the old test result on the software and edit the data on the software.

After editing, the operator can not only put the CSV file out from the software, but also print out the test result.