## **RUN-OUT GAUGE SYSTEM**

■ FOR LONG OBJECT

**ROG-581S** 

■ FOR LARGE DIAMETER

Capable of measuring up to 300mm length work.







#### **SPECIFICATIONS**

- ■Accuracy: Within 4µm \*4 $\mu$ m=When measuring  $\phi$ 20mm workpiece (in-house measurements)
- Operating temperature: 0~40°C
- Storage temperature: -10~50°C
- Base material: Aluminum, carbon steel
- Roller material: Tool steel
- Provided with an aluminum carrying case

### **MEASURABLE WORK CONDITIONS**

ROG-307S ●OD: *φ*10~110mm

Shape: Cylindrical

●Length: 5~80mm

● Length: 5~300mm

- ncreasing distance from rollers. \*Soft materials such as non-ferrous aluminum) and plastics may deflect and cause measurement errors depending on the outer diameter and length
- Reference portion of the workpiece must have enough length to clamp to the rollers.
- The two reference parts must be coaxial and of the same diameter. (ROG-581S only)

## **■WITH DOUBLE CARRIERS** ROG-241SSW

Capable of simultaneous measurement at two points, in front of/ behind the workpiece.





### ■ WITH MOTOR

ROG-251SM

The motor drives enables continuous run-out measurement. (with/ without motor switchable)





#### SPECIFICATIONS (mutual)

- Accuracy: Within 2-3.5  $\mu$ m \*2 $\mu$ m = When measuring  $\phi$ 20mm workpiece (in-house measurements)
- Operating temperature: 0~40°C
   Storage temperature: -10~50°C
- Base material: Carbon steel
   Roller material: Tool steel
- Provided with an aluminum carrying case

### SPECIFICATIONS (ROG-251SM only)

- Power (To be used with the included AC adapter): AC100~240V 50/60Hz
- Speed setting range of main roller: 5.5∼9.5min<sup>-</sup>1 (OD of main roller:  $\phi$ 21.9mm)
- Power consumption: Max. 5W

#### MEASURABLE WORK CONDITIONS

- ●OD: φ4~30mm
- \*A custom roller for measuring under  $\phi$ 4mm is also available
- Length: 5~80mm Shape: Cylindrical
- Reference portion of the workpiece must have enough length to clamp to the rollers.

\*Measurement error increases at with increasing distance from rollers. \*Soft materials such as non-ferrous (aluminum) and plastics may deflect and cause measurement errors depending on the outer

Order No.	Model No.	Base size (mm)	Roller type	Carrier type	Weight
010215	ROG-581S	580 × 190	Slit roller	No carrier	13 kg
010216	ROG-307S	300 × 160	Flat roller	No carrier	13 kg
010217	ROG-241SSW	236 × 185	Slit roller	Shaft carrier	6.3kg
010218	ROG-251SM	250 × 240	Slit roller	No carrier	10 kg

## **MEASURING FIXTURE FOR RUN-OUT GAUGE SYSTEM**

#### <Applicable Products>

- ●No carrier (Either long or short base) (ROG-221S • 223S • 351S • 353S • 225S • 355S)
- Clamp base (ROG-101S 103S 105S)
- ●With motor (ROG-251SM)

\*Size and Weight are approximate value.

\*Colors may vary slightly between printed

and actual product.
\*Magnetic base and indicator not included.

to change without notice for product

Appearance and specifications are subject

### ■ADJUSTABLE ROLLER HOLDER LRH-Y1

Suitable for measuring a long length or stepped workpiece. Measuring fixture with adjustable height.

#### **SPECIFICATIONS**

- Height setting range:
- 73±8mm (bottom base ~ center of the rollers)
- Fine feed vertical stroke: 2.5mm or over
- Magnetic base (ON/ OFF switchable)
- Order No. Model No. NEW 010219

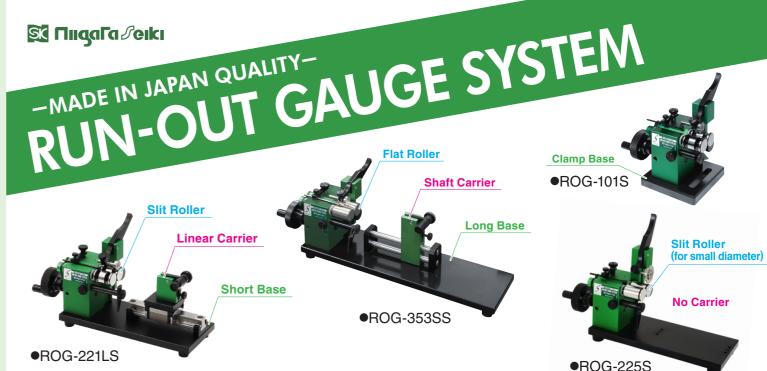
### ■ Distributor

#### 5-3-14, Tsukanome, Sanjo, Niigata, Japan, 955-0055 Tel.: +81-256-33-5522 Fax.: +81-256-33-5518 MAIL intl.sales@niigataseiki.co.jp URL http://www.niigataseiki.co.jp

Niigata Seiki Co., Ltd.



No 2304



- For those who handle a large number of cylindrical parts (small diameter) ...
- For those who use V-Blocks ···
- For those with variability in measurement by workers ...



- Easy to measure concentricity by mounting your current indicator.
- Three base length, three rollers and three carriers (incl. no carrier type), total 21 product configurations available.
- **Up to 2\mu accuracy.** Highly accurate measurement is possible. \*Up to  $3\mu$ m accuracy when slit roller (for small diameter).
- Smooth measurement with grip handle and timing belt & pulley operation system.
- Carrier with angle fine adjustment for easy zero-setting of measuring instruments. Free movement in Z-direction enables **measurement at the optimum position**.
- Equipped with work retainer for holding front and rear of workpiece and to enable measurement of axial run-out.

#### <Configurations>

Order No.	Model No.	Base type	Roller type	Carrier type	Weight
010201	ROG-221S	Short base	Slit roller	No carrier	3.6kg
010202	ROG-221SS			Shaft carrier	4.0kg
010203	ROG-221LS			Linear carrier	4.3kg
010204	ROG-223S		Flat roller	No carrier	3.7kg
010205	ROG-223SS			Shaft carrier	4.1kg
010206	ROG-223LS			Linear carrier	4.4kg
010224	ROG-225S		Slit roller (for small diameter)	No carrier	3.7kg
010225	ROG-225SS			Shaft carrier	4.1kg
010226	ROG-225LS			Linear carrier	4.4kg
010207	ROG-351S	Long base	Slit roller	No carrier	4.6kg
010208	ROG-351SS			Shaft carrier	5.0kg
010209	ROG-351LS			Linear carrier	5.3kg
010210	ROG-353S		Flat roller	No carrier	4.7kg
010211	ROG-353SS			Shaft carrier	5.1kg
010212	ROG-353LS			Linear carrier	5.4kg
010227	ROG-355S		Slit roller (for small diameter)	No carrier	4.7kg
010228	ROG-355SS			Shaft carrier	5.1kg
010229	ROG-355LS			Linear carrier	5.4kg
010213	ROG-101S	Clamp base	Slit roller	No carrier	2.5kg
010214	ROG-103S		Flat roller	No carrier	2.6kg
010230	ROG-105S		Slit roller (for small diameter)	No carrier	2.6kg

#### **SPECIFICATIONS**

- Accuracy
- Slit/ Flat roller type: Within 2-3.5 $\mu$ m
- \*2 $\mu$ m = When measuring  $\phi$ 20mm workpiece (in-house measurements) Slit roller type (for small diameter): Within 3-6.5 $\mu$ m \*3 $\mu$ m = When measuring  $\phi$ 8mm workpiece (in-house measurements)
- Operating temperature: 0~40°C Provided with a carrying case
- Base material: Carbon steel
- ●Storage temperature: -10~50°C Roller material: Tool steel

## MEASURABLE WORK CONDITIONS ——

- OD Slit/ Flat roller type: φ4-30mm
- Slit roller (for small diameter) type:  $\phi$ 1-8mm
- ●Length: 5~80mm Shape: Cylindrical
- Reference portion of the workpiece must have enough length to clamp to the rollers.
- \*Measurement error increases at with increasing distance from rollers \*Soft materials such as non-ferrous (aluminum) and plastics may deflect and cause measurement errors depending on the outer diameter and length.



## Main rollers (lower rollers)

### Flat roller

No slit.

Ideal for measuring non-flanged workpiece such as a round bar.

Model No.: 103/223/353 series



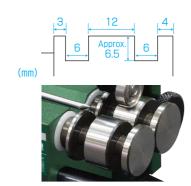


### Slit roller

With slits.

Ideal for measuring flanged workpiece.

Model No.: 101/221/351 series



## Slit roller (for small diameter)

For small diameter. Ideal for workpiece of  $\phi$ 1-8.

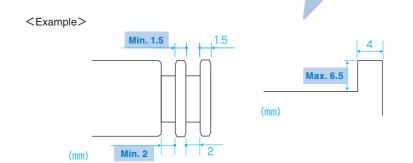


## Customization of main roller possible.

## We will produce to meet your request as much as possible.

\*Conditions of customization Roller width: Min. 1.5mm Slit width: Min. 2mm Slit depth: Max. 6.5mm

(Please refer to the drawing on the right)



# Top roller (upper roller)

## ■ Regular top roller

Top roller for the flat/slit main rollers.



## For slit main rollers (small diameter)

Matching top roller of slit main rollers models (for small diameter). To be used in a narrow groove on Slit Roller (main roller).





## Customization of top roller possible.

## ex. For increasing work holding force!

Triple (or double) bearing for stronger work holding force. The clamp spring can be replaced to increase the holding force.





## ex. 2 In case worried about scratches on the work!

Can be resolved by using scratch-resistant rollers made by resin.





## Carrier (Indicator holder)

### No carrier

Mountable of your current magnetic base on the base of the product.

Model No.: ROG-□□□S series



### Shaft carrier

Standard carrier capable of mounting a measuring device and positioning its location according to length of workpiece.

Model No.: ROG-□□□SS series



### Linear carrier

Linear slide carrier provides smooth movement for accurate positioning.

Model No.: ROG-□□□LS series



## Base

### ■Short base

Compact and space-saving size. Model No.: ROG-22□ series



## Long base

The largest size in the series. Easy to measure multiple points at the same time by mounting your current magnetic base.

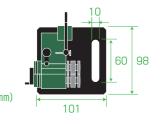
Model No.: ROG-35□ series



## **■Clamp** base

Super-compact base with a long hole, which is suitable for placing on the stage of large measuring instruments.

Model No.: ROG-10 ☐ series



# **Example of use**

#### Run-out measurement of outer diameter (one measuring point)

- <Tools used>
  - ROG-221SS: Short base/Slit roller/Shaft carrier
- · S-line digital indicator: DET-234S1

ex. 2 Run-out measurement of outside and incide diameter outside and inside diameter (two measuring points)

<Tools used>

- ROG-353SS:
- Long base/Flat roller/Shaft carrier · S-line digital indicator: DET-234S1
- Dial indicator



### inside diameter and end surface (two measuring points)

<Tools used>

• ROG-351SS: Short base/Slit roller/Shaft carrier

Run-out measurement of

- · S-line digital indicator: DET-234S1
- Dial indicator



The new model for small work-diameter is newly added. Total 21 configurations plus optional custom are available to meet various requirements.