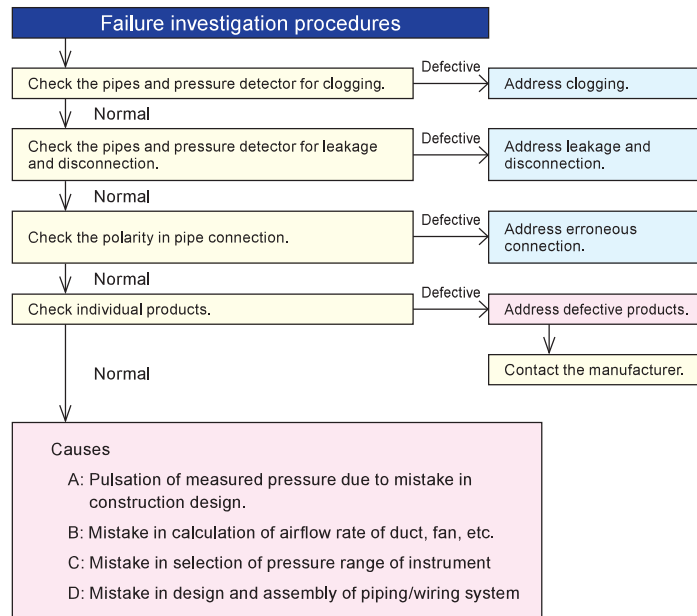


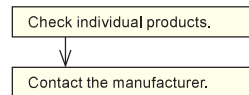
Maintenance

Actions to take in the event of failure and malfunctioning

- If a Manostar product (instrument) does not operate normally, by referring to the investigation procedures shown below, investigate the product yourself to see whether the malfunctioning has been caused by an instrument failure, pressure detector, or the piping system.
- If an investigation has made clear that the instrument has failed, contact us via the following.



- Actions to take concerning product returned to distributor or trading company that handles it



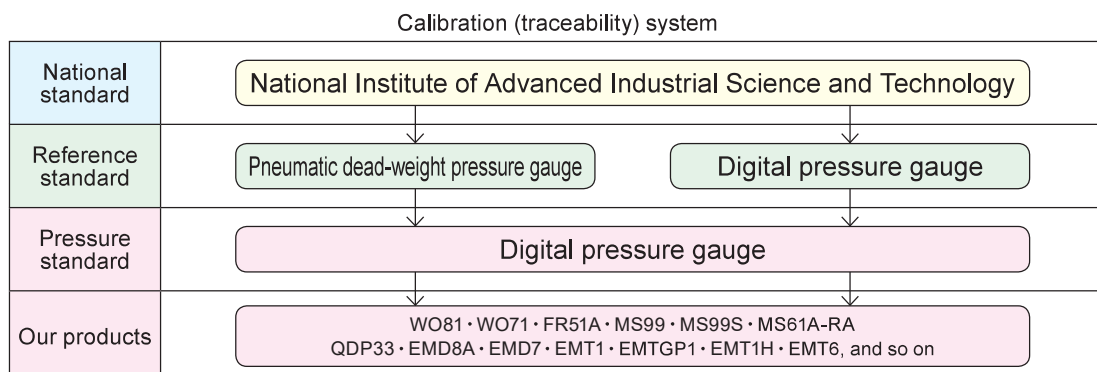
Contact for failure and malfunctioning
Manostar Co., Ltd.
 1-2-3, Nishi-shiraike-cho, Nagata-ku, Kobe,
 Hyogo 653-0031 JAPAN
 TEL. +81-78-621-7000 FAX. +81-78-621-7788

Periodical calibration of instrument

- In general, to retain the service life and reliability of an instrument for a long period, it is important to prevent stress due to external factors from being applied to the instrument. It is not necessary to conduct maintenance, lubrication in particular, as long as the instrument is appropriately used in accordance with the instruction manual. However, we recommend that you conduct periodic calibrations once a year. For periodic calibrations, contact the distributor or us.
- Please be advised that depending on the condition of the instrument, we may decline your request for calibration.

Accuracy maintenance

The calibration system for maintaining the accuracy of our pressure standards is shown below.



List of products

WO81

WO71

FR51A

MS99

MS99S

MS61A-RA

QDP33

EMD8A

EMD7

EMT1

EMTGP1

EMT1H

EMT6

EMP5A

EMRT1

HWS15A

Accessories

Application

Precautions

Maintenance

Maintenance

Maintenance

List of products

WO81

Calibration service

- In our calibration service, we conduct calibration of products and make optimum adjustments in accordance with the condition of each product.

We provide the services of maintaining the accuracy and reliability of instruments by returning them in good condition to customers.

*We provide calibration services for our products only.

Types of calibration service

- Standard calibration: We conduct calibration and optimum adjustment of the instrument.
- Speedy calibration: We conduct calibration and optimum adjustment of the instrument in a short period. (Speedy calibration requires an extra fee in addition to the fee for the standard calibration.)

What is optimum adjustment?

It refers to an adjustment conducted by us to make the instrument indicate values as close to the true values as possible regardless of whether the calibration result is within or outside the tolerable range.

When you want optimum adjustment: We will conduct optimum adjustment regardless of whether the calibration result is within or outside the guaranteed accuracy range. (For instruments compliant with RoHS only) However, if a product that is to be adjusted is already in the optimum condition, we will not conduct optimum adjustment.

When you do not desire optimum adjustment: We will not conduct optimum adjustment as long as the product is within the guaranteed accuracy range. If the product is out of the guaranteed accuracy range, we will contact you.

Documents to be issued

When optimum adjustment is conducted: We will issue inspection reports (two copies) listing data before adjustment and data after adjustment, respectively.

When optimum adjustment is not conducted: We will issue an inspection report of the calibrated data only.

*We will issue a calibration certificate and a standard calibration certificate, each for a fee. The expense for the inspection report is included in the calibration service fee.

Others

When a product is to be calibrated but cannot be calibrated, we will contact the customer and report whether it can be repaired or not.

Repair service

- We will repair products requested to be calibrated that require repair, and products requested to be repaired.

*We provide a repair service for our products only.

*We cannot repair products not compliant with RoHS.

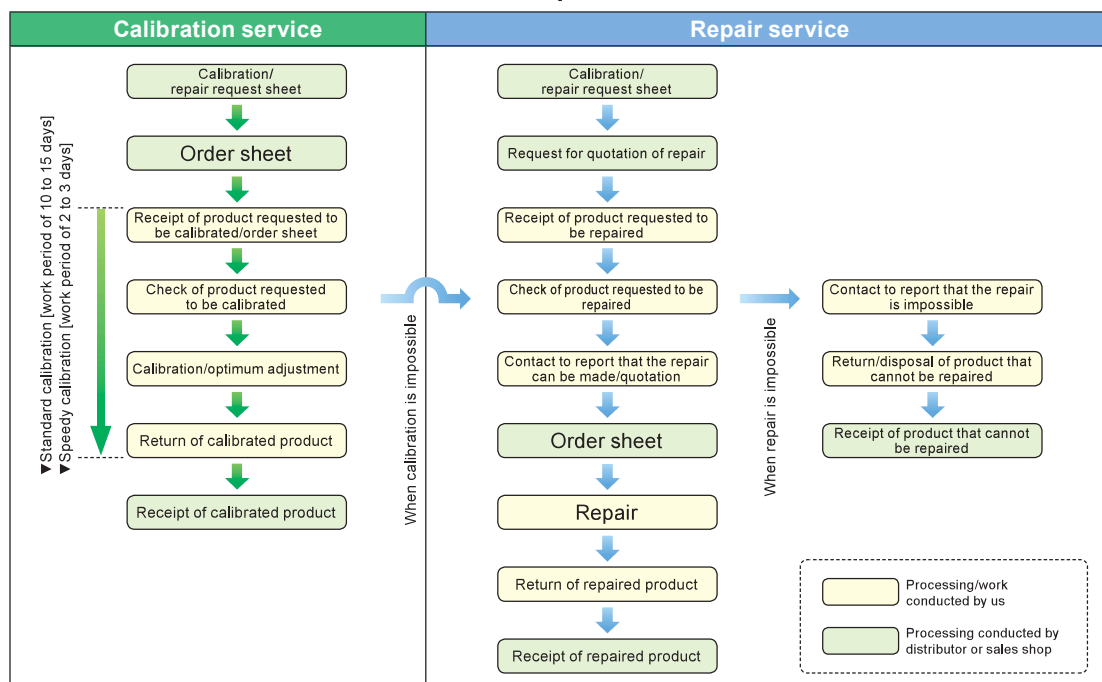
Documents to be issued

When we have conducted a repair, we will issue an inspection report after the repair (one copy).

Others

When a product is to be repaired but cannot be repaired, we will contact the customer.

<Flow from request to return>



*The calibration/repair request sheet can be downloaded from our website.

Warranty

Warranty period

The warranty period for our product is one (1) year from delivery to the location specified by the orderer who makes a direct transaction with us.

Scope of warranty

If any failure or defect attributable to us becomes clear during the above warranty period, we will repair the product or supply a substitute product free of charge. However, even during the warranty period, we will exclude the product from the scope of the warranty if the failure or defect corresponds to any of the following:

- (1) The failure or defect was caused by an unreasonable condition, environment, handling, or usage not mentioned in the instruction manual, specifications, and our product catalog.
- (2) The failure or defect was caused by a factor other than our product.
- (3) The failure or defect was caused by a modification or repair conducted by a party other than us.
- (4) The failure or defect was caused by an event that could not be foreseen at the scientific and technical levels at the time of product shipment from us.
- (5) The failure or defect was caused by an external factor not attributable to us, such as acts of God and disasters.

Please note that the warranty mentioned here means the warranty for our individual product, and damage provoked by a failure or defect of the product is excluded from the scope of the warranty.

*This warranty is valid only in Japan.

Application and usage

Our products are designed and manufactured as general-purpose instruments for general industries.

Therefore, our products are not intended for the following uses, and our products used in such a manner are outside the scope of application.

- (1) Equipment that is anticipated to greatly affect lives and properties, such as nuclear power generation, aviation, railways, marine vessels, vehicles, and medical devices
- (2) Utilities that include electricity, gas, and service water
- (3) Use in outdoor locations and under similar conditions or environments other than those stipulated in the instruction manual
- (4) Usage to which considerable safety consideration and attention equivalent to (1) and (2) above need to be given

Service

Scope of service

Because the product price does not include service expenses, such as the dispatch of engineers, we will separately charge for the expenses in the following cases:

- (1) Instruction for installation and adjustment and a witnessed test run
- (2) Maintenance inspection, adjustments, and repairs
- (3) Technical guidance and technical education
- (4) Witnessed inspections of products at our factory

<<Note>> The product specifications and information in this catalog are subject to change without prior notice for product improvement or other reasons.

● For order placement, contact

General agent  **Manostar Co., Ltd.**

1-2-3 Nishishiraike-cho, Nagata-ku, Kobe City, Hyogo 653-0031
TEL. +81-78-621-7000 FAX. +81-78-621-7788

Manufacturer  **Yamamoto Electric Works Co., Ltd.**

1-2-3 Nishishiraike-cho, Nagata-ku, Kobe City, Hyogo 653-0031
TEL. +81-78-631-6000 FAX. +81-78-631-6020