FOR PROBLEM FREE USE OF GAUGES

Safety precautions

1. Do not use the gauges except for inspection purposes. For example, if you use thread gauges instead of nuts and bolts, the related purpose cannot be achieved; it will result in loss of gauge precision and damage. Never use as a substitute for tools like a hammer, tap, die, or deburring. If used in such a way, the gauges will no longer function as intended, and the quality assurance will not be effective.
2. Exercise extreme care to avoid injury. Gauges contain sharp parts according to operational needs. Especially in the case of thread limit gauges, top and edge of thread are sharp, so exercise care when removing the special nut-inhibiting protective layer or nut-inhibiting paper etc.
3. Gauges and handles may become bored over a long period of time. Be on guard against unexpected accidents caused by a large size gauge falling due to a loose handle.
4. Do not apply gauge to moving parts. The possibility exists a serious accident caused by dropping, damaging or occluding etc. Even if an accident does not occur, it may cause abnormal conditions, wears, or overheating of the gauge, shortening the life of the gauge.
5. Wash hands in soapy water or clean water after handling the special nut inhibiting paper (VFI paper). Please contact the Japan Rush-Inhibiting "Technical Organization for details.

Caution before use

1. Before using gauges, clean threads or paper product throughly in cleaning solvent or benzene, or wipe off thoroughly with a clean dry cloth.
2. Before checking, use for nuts, screws, or bolts on the gauge, if found, remove completely with a solvent etc.
3. It is advisable to carefully remove the nut preventive compound and reuse it when storing the gauge.

Caution during use

1. Apply lubrication oil on the gauge. Use the gauge after thorough wiping free of dust and dirt. Especially if sand is adhering to the product, use with the gauge accelerated.
2. Paralyzing NO GO gauge inspection after entering the GO gauge inspection properly operates. For thread limit gauges, it is advisable to screw in and back out several times, remove excess lubricating oil and dust from the thread ridge. GO and NO GO check depends on the assessment criteria of the limit gauges.
3. As a general rule, the time used by the gauge when inspecting is the gauge’s own weight, operating weight for snap gauge. For small diameter gauges, the force exerted when writing with a pen is advisable.
4. Although this may vary depending on one’s gender, race, still, age, and so on, by writing on a scale you can measure this force. The 3-5N range is considered normal. With regard to thread limit gauges, the same force used to write with a pen is recommended. Although this is not carried actually, the gauge is usually screwed with a factor of 10N. In any case, do not screw in by holding the handle with your whole hand except on exceptionally large gauges. For thread limit gauges, it is advisable to carefully remove the gauge holder, hold the product in your hand and then screw in, avoiding excessive torque.
5. Re-inspecting the gauges with the taper cone threads by using taper thread gauge, you screw too far and too fast on the other hand, the excess force will cause the gauge to freeze. Please screw carefully in the near end.
6. Do not leave the screw at the condition of starting edge of thread. Nuts or bolts can cause a misjudgment. Especially in the case of screw products, a redimension, imperfect thread is likely to cause an error in misjudgment.
7. At times, the gauge and product will be jammed and be unable to go through, or unwork if the center of the shaft and the gauge cannot be aligned. Damage may occur not only to the product but also to the gauge in this case. When dealing with a large diameter or thin thread, be especially careful.
8. In this situation, you should carefully wipe with a wood or plastic handle to allow the center of each other or, heat the side of the ring in order to make it expand and take it off.
9. Do not let the gauge roll over and drop or fall over. In cases when the gauge is accidentally dropped, check it damages and give it suitable way to do, remove any burns with all of the same. The same applies if something is dropped on the work against the gauge.
10. Magnetical gauges can make iron and other metal stick to them. This accelerates wear on the gauge. Under such conditions, please do nothing.

Tips: Making the gauge or product for a long time may change the dimensions as a result of the heat from your hand. This expanded value should be considered when judging inspection result like satisfactory or negative. The same as above, temperature difference between product and gauge should be considered when inspecting product soon after marking. If the product is like thin ring, carefully inspect it not to make plug gauge stick to ring because this ring is easy to shrink due to dropping.

Caution while storing

1. Do not store gauges with screwed together or in condition. They may freeze up and/or rust.
2. When storing take anti-corrosion practices by thoroughly removing any dust, chips or fingerprints. Store gauges in a non-humid and at a constant temperature. For anticorrosion (1) Wipe the gauges thoroughly and clean them in cleaning solvent or benzene, or after applying a fingerprint neutralization agent, coat or cool in rust-inhibiting oil. (2) After washing the gauge thoroughly, wrap it in rust-inhibiting paper or wrap the surface of the gauge with a rust-inhibiting. (3) After washing, coat with a special nut-inhibiting surface protecting compound.

Tips: For dimensional control

2. Gauges need to be carefully checked for wear. Conduct regular checking according to usage. Do not use gauges which have extended wear limits. Be sure to measure the lip since it car wear easily.
3. Dimensions are valid at 25℃. If the environment temperature is not 25℃, conduct dimensional assessments according to 25℃. Beware of weather differences when using the black gauge to perform comparative measurements.
4. When inspecting, wear gloves and tweezers. Avoid direct contact to reduce dimensional changes caused by temperature and rust.