



# First of its kind !

Shows the ability of  
anti loosening under hard vibration  
and large temperature change.

Self-tapping Screw  
for Plastic

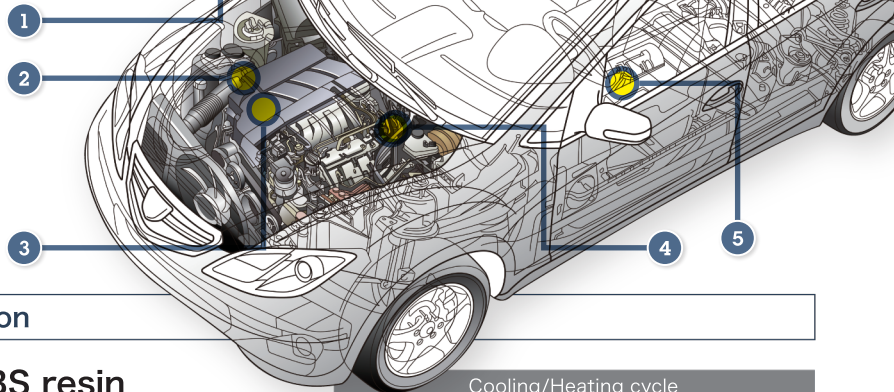
## GIZATITE®

- ✓ Sharp thread angle relieves internal stress to prevents cracking of boss.
- ✓ It can be manufactured from aluminium for weight saving.
- ✓ Fastening Solution, Quality starts from the first turn.

### TECHNICAL REPORT 01

### Major application for automotive

- 1 Door mirror
- 2 Air flow sensor
- 3 Intake manifold
- 4 Water pump
- 5 Window regulator



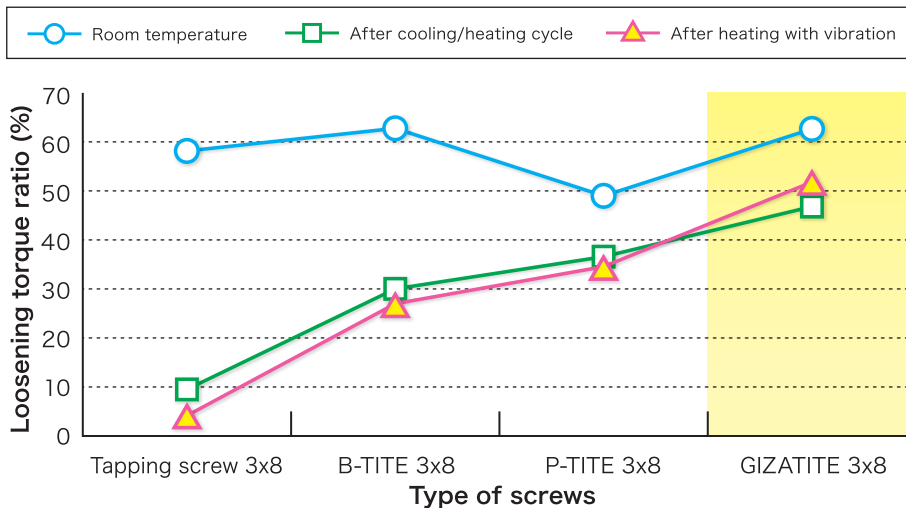
### TECHNICAL REPORT 02

### Performance comparison

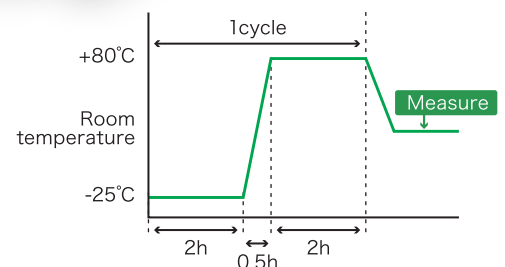
#### Loosening torque comparison to ABS resin

Loosening torque ratio : Breaking torque / Tightening torque

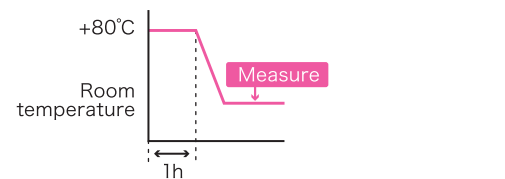
※Tightening torque=0.8N·m



Cooling/Heating cycle



Heating - Vibration



[ Vibration condition ]

Put a load only for one side of the test piece  
Time : 1 hour Amplitude : 2mm  
Frequency : 33.3Hz Vibration acceleration : 4.4G

### TECHNICAL REPORT 03

### Loosening torque performance after repetition use (Room temperature)

- Screw : GTP3×12 Zinc + Trivalent Chromate
- Mating part : PBT+GF55% Hole diameter 2.60
- Object : SPCC t=3.6

[ N · m ]

|                        | Number of repetitions |          |          |          |          |          |          |          |          |           | Average value |
|------------------------|-----------------------|----------|----------|----------|----------|----------|----------|----------|----------|-----------|---------------|
|                        | 1st time              | 2nd time | 3rd time | 4th time | 5th time | 6th time | 7th time | 8th time | 9th time | 10th time |               |
| Tightening torque      | 0.71                  | 0.84     | 0.77     | 0.76     | 0.86     | 0.92     | 0.90     | 0.87     | 0.81     | 0.87      | 0.831         |
| Breaking torque        | 0.58                  | 0.57     | 0.57     | 0.60     | 0.63     | 0.62     | 0.65     | 0.65     | 0.69     | 0.65      | 0.621         |
| Loosening torque ratio | 82%                   | 68%      | 74%      | 79%      | 73%      | 67%      | 72%      | 75%      | 85%      | 75%       | 74.7%         |

# NITTOSEIKO CO.,LTD.

## Fastener Division Global Sales Section

Website : <https://www.nittoseiko.co.jp/en.html>



[Website]



[Inquiry Form]



IATF 16949  
JP18/063026



ISO9001  
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