FIT-TITE ™

【Outline】
FIT-TITE is the best solution for people who is,
- worrying about loosening of machine screw.
- thinking cost saving of glued screw.
- having trouble about workability due to unstable torque by unstable female thread dimensions.

This time, we have devised innovative screws that have high removal torque, and are convenient even if female thread is unstable dimension.

【Special features】
- High-reliable loose proof due to multi-contact spots.
- Very convenient screw if female thread is unstable dimension because it is given importance to contact with root of thread.
- High removal torque and also it can be used for adjusting screw.

◆ Condition of engagement

Yellow arrows of figure A are spots that plating is shaved, and it is showing that there are three contact spots with female thread on root area of C side. (Only two contact points are on the photo.) And green arrow of figure C shows contact area with internal diameter of female thread is broadened out due to fastening by FIT-TITE. Because of such big and many to contacts, FIT-TITE generates proper prevailing torque. It’s this kind of fastening that you can use for adjusting screw.

【Application】
- Mobile device
- Camera & watch
- OA equipment
- Power tool
- Air-conditioner

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**Test specification**
Testing Machine: AX Driver (Manufactured by Nitto Seiko)
1-step Fastening = 0.10N•m, 200rpm
2-step Fastening = 0.16N•m, 60rpm
Workpiece: Commercial steel nut M1.7 / Liner: Steel Plate t=0.6mm

**Performance of FIT-TITE (Typical torque waveform)**

![Torque waveforms for Machine Screw, FIT-TITE, and POWERLOK](image)

**Comparison of removal ratio**

<table>
<thead>
<tr>
<th>Comparison</th>
<th>Machine Screw</th>
<th>FIT-TITE</th>
<th>POWERLOK</th>
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</thead>
<tbody>
<tr>
<td>Removal ratio after Fastening</td>
<td>61.5%</td>
<td>82.3%</td>
<td>80.2%</td>
</tr>
<tr>
<td>Removal ratio after Vibration test</td>
<td>53.1%</td>
<td>80.2%</td>
<td>86.5%</td>
</tr>
<tr>
<td>Removal ratio after Heat cycle test</td>
<td>74%</td>
<td>85.4%</td>
<td>83.3%</td>
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</tbody>
</table>

If you are interested in using our FIT-TITE for your concrete application, please send actual work pieces to our fastener laboratory. We can provide you more detailed data for your best fastening by examination.

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