

## Item # item-1188, Inch Series DUO-TAPTITE® Fasteners

Request Information

# **DUO-TAPTITE® Thread Rolling Screws**

TAPTITE® screws were the leap forward in high production assembly using threaded fasteners. DUO-TAPTITE® screws represent the refinement of the TRILOBULAR™ principle for specific demanding applications.

DUO-TAPTITE® screws have generous lobulation at the screw point for easy entry and optimum thread forming action plus reduced lobulation in the screw body holding area. A stabilizing threaded dog point insures ready, aligned entry, with easy pick-up requiring minimal starting end load.

#### Advantages

- · High vibrational resistance
- · Good axial alignment
- Low end load
- High strip-to-drive ratio
- · High prevailing torque
- Good torque tension relationship

DUO-TAPTITE® fasteners, and/or their manufacture according to REMINC specifications, covered by one or more of the following patents: 6,089,806, 6,089,986, 6,261,040.

Note: All screws were tested in unthreaded weld nuts of uniform hardness (Rockwell B 82-84) having 7.1mm hole diameters. End pressure was manually developed, measured and recorded by an electronic load cell and recorder. Drive, prevailing and strip torque values, and torque-tension values were measured with a GSE torque cell and recorded on a BLH electronic recorder. All test data is based on 5/16 - 18 or M8 x 1.25 screws.

Originators of the Trilobular™ Family of Fasteners Providing Technical Support, Marketing Support and Innovative Fastener Design

## Reduced In-Place Cost!!

DUO-TAPTITE® thread rolling screws reduce in-place fastener costs and provide vibration resistant assemblies. DUO-TAPTITE® thread rolling screws are used to create strong, uniform load carrying internal threads into untapped nut members upon installation. When REMINC developed the original TAPTITE® TRILOBULAR™ shape thread rolling screw, it revolutionized the use of threaded fasteners in high production assembly. Assembly efficiency and joint performance, along with lower in-place fastening cost, have been the benefits of using TAPTITE® screws. DUO-TAPTITE® screws and bolts continue these benefits along with meeting the quality and performance needs of the future.

### **Lower In-Place Fastening Costs**

Only 15% of the total in-place cost of a fastening is the cost of the screw or bolt. DUO-TAPTITE® screws and bolts lower the cost of the remaining 85%. The following is a list of some of the cost-savings advantages of using DUO-TAPTITE® thread rolling

- Elimination of separate tapping operations and associated costs.
- · Built-in resistance to vibrational loosening eliminates the need for lock washers, adhesives, or plastic patches and plugs.
- · Generates stronger mating threads with uninterrupted grain flow due to work hardening of the nut for higher stripping
- · Accepts larger pilot hole variations than drilled and tapped holes.
- Works in punched, drilled, cored and extruded holes in many different metals.
- With use of CORFLEX® metallurgy, can be provided in grade strengths of high tensile bolts for use in structural applications in deep thread lengths of engagement.
- No assembly line cross threading.
- Prevailing torque often equals or exceeds locking screw standards.
- · Manufactured to REMINC standards all over the world by over 68 of the world's leading fastener, fastener processing and tooling companies.

#### MORE IMAGES

**DUO-TAPTITE Screws** 

Better Starting Stability - Axial Alianment

Lower Starting End Pressure

A - Higher Strip-to-drive Ratio

B - Higher Prevailing Torque

Torque-tension Comparison M8 x 1.25 DUO-TAPTITE vs. TAPTITE Fastener

#### **DOWNLOADS**

Pilot Hole Sizes for Taptite



Percent Thread Chart







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#### **Specifications**

Screw Size	5/16-18 in
Max. C Dimension	0.3180 in
Min. C Dimension	0.3120 in
Max. D Dimension	0.3125 in
Min. D Dimension	0.3065 in
Max. Point Cp	0.278 in

## **Better Starting Stability - Axial Alignment**

Less misalignment at start of driving operation . . . the self-aligning characteristic of DUO-TAPTITE® screws reduces operator fatigue; eliminates interruptions in production; adds speed to every fastening operation. Suitable for automated and robotic assembly.

#### **Lower Starting End Pressure**

Lower starting end pressure combines with lower driving torque to reduce time and power costs right down the line.

# A - Higher Strip-to-drive Ratio

The higher, more uniform, strip-to-drive torque ratio of DUO-TAPTITE® screws provides a built-in safety factor against over-driving. Eliminates broken screws, damaged mating threads and inferior fastenings.

## **B** - Higher Prevailing Torque

Superior elastic action of a DUO-TAPTITE® screw gives it better locking characteristics than many fasteners specifically designed as locking screws! Competitive round-bodied, thread- forming fasteners have no locking torque. Graph shows comparison of a DUO-TAPTITE® screw with the IFI-124 minimum requirement for self-locking screws.

## Torque-tension Comparison M8 x 1.25 DUO-TAPTITE® vs. TAPTITE® Fastener

Superior tension at any given applied torque (with normal clamping pressure) is a major factor in the better holding capability of a DUO-TAPTITE® screw.

### Advantages

Easy entry, positive alignment and consistent starting stability. Lower starting end pressure. Higher strip-to-drive ratio. Higher prevailing torque. Excellent resistance to vibrational loosening.

### Applications

All ductile metals, die castings and punch extruded metals.