

LocTec[®]

The secure screw connection

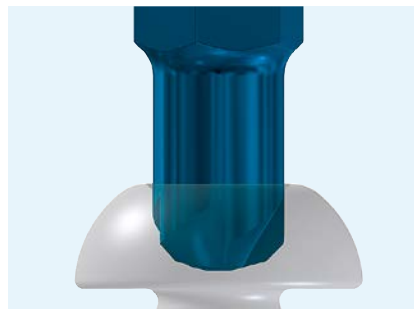
- + accurate transmission of defined torques
 - + cannot be detached without destroying the fastener
 - + no additional locking elements
 - + no risk of damaging the component
 - + no corrosion restrictions
 - + automated assembly possible
- ➔ www.arnold-fastening.com



LocTec® – Cannot be detached without destroying the fastener? Surely not!

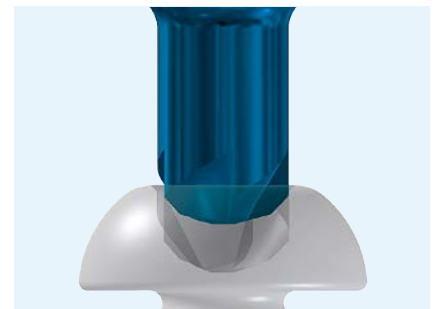
A screw fastened with LocTec® locking drive cannot be removed by conventional means, and there's no need for additional security devices. No need to hammer in a steel ball, or use shear-off fasteners.

It means that with LocTec®, you can reduce assembly costs, keep stocks to a minimum and drastically cut the costs for your lock fasteners. Simply fit the screw with the special LocTec® locking screwdriver bit and the job is done. With the drive's unique flank geometry, all you have to do is to fasten the screw with the LocTec® locking screwdriver. Any attempt to unscrew it will cause the assembly tool to disengage from the head of its own accord. Even if you are using the LocTec® driver bit that was used to fit it in the first place. There is no risk even if the LocTec® safety screwdriver bit should fall into the wrong hands.



Screw-in process

Simply use the LocTec® safety driving bit to drive the LocTec® screw into the component, and tighten. This produces a secure fastening. And now it cannot be undone without destroying the fastener. There's no need for any further locking devices.



Attempt to remove

The LocTec®'s special flank geometry ensures that any attempt to undo the fastening, even using the LocTec® locking bit, will result in the tool disengaging from the head.

Conventional fastening methods and their disadvantages

	Single use slot very low transferable torques
	Special shapes Fitting tools widely available from retailers
	Shear-off screw Wasted scrap, risk of corrosion, risk of injury, noise from shearing process
	Hammering in a star or ball Additional work step, vibration from hammering operation, lack of processing reliability, risk of damage, noise
	Drive drilled on Additional work step, risk of corrosion, contamination caused by chips
	Drive bonded on Additional work step, drying time; drive has to be cleaned in preparation

The additional advantages of LocTec®

In addition to creating protection against every conventional attempt to unscrew the fastener, LocTec® provides the extra advantages of a high-quality screw:

- + accurate transmission of defined torques
- + cannot be detached without destroying the fastener
- + no waste scrap as would be caused by shear-off screws
- + no additional work steps as would be needed for drilling on or bonding
- + no danger that the end product will be damaged, as can happen when a ball is hammered in
- + same process speed as for other screw fasteners
- + automatic assembly possible due to precise bit guidance
- + not influenced by corrosion

Variants and designs

- ⊕ Diameter range M3 to M10
- ⊕ System comprised of LocTec® screw and LocTec® screwdriver bit, with or without locking bit

⊕ Standard strength 8.8 and 10.9

Other strengths such as stainless steel and non-ferrous metals on request

Head size LocTec® screw *

Size of screw								LocTec® locking drive
	Ø dk	f	k	Ø dk	k	Ø dk	k	
M3	5.50	0.55	2.10	6.00	2.80	5.50	2.80	15-LI
M4	8.40	0.77	2.70	8.00	3.20	7.00	3.20	20-LI
M5	9.30	0.90	2.70	10.00	3.80	8.50	3.90	25-LI
M6	11.30	1.05	3.30	12.00	4.40	10.00	4.70	30-LI
M8	15.80	1.53	4.70	16.00	5.80	13.00	6.20	45-LI
M10	18.30	1.61	5.00	20.00	7.50	-	-	50-LI

* Other sizes and variants on request.

LocTec® Locking bit



Dimen- sions	SW	L +0.2	Description
M3	1/4"	25.0	LocTec® 15-LI
M4	1/4"	25.0	LocTec® 20-LI
M5	1/4"	25.0	LocTec® 25-LI
M6	1/4"	25.0	LocTec® 30-LI
M8	5/16"	30.0	LocTec® 45-LI
M10	5/16"	30.0	LocTec® 50-LI

Thread combinations

	Metric/inch	✓
	Thread rolling screws for metals	✓
	Thread rolling screws for plastics	✓
	Screws for wood and clamping plates	✓
	Sheet metal screws	✓

Additional thread locks

	mechanical thread lock	✓
	chemical thread lock as per DIN 267-27 DIN 267-28	✓

Automated fastening

	Threaded end according to standard and customer requirements	✓
	MAThread®	✓

Special parts

	Threaded pin	✓
	Special parts	✓



The ARNOLD GROUP

Wherever customers need us.

The ARNOLD GROUP

With a foundation of many years of expertise in the production of intelligent fastening systems and very complex extruded parts, the ARNOLD GROUP has developed over a number of years into a comprehensive supplier and development partner for complex fastening systems. With our new positioning of "BlueFastening Systems" this development process will now continue under a united and harmonised structure. Engineering, fastenings, and functional parts, together with feeder processing systems, all from a single source – efficient, sustained and international.



ARNOLD FASTENING SYSTEMS

Rochester Hills
USA



ARNOLD TECHNIQUE FRANCE

Anneyron
France



ARNOLD UMFORMTECHNIK

Ernsbach
Germany



ARNOLD UMFORMTECHNIK

Dörzbach
Germany



ARNOLD FASTENERS SHENYANG

Shenyang
China

ARNOLD UMFORMTECHNIK GmbH & Co. KG

Carl-Arnold-Straße 25
D-74670 Forchtenberg-Ernsbach
T +49 7947 821-0
F +49 7947 821-111

ARNOLD FASTENING SYSTEMS Inc.

1873 Rochester Industrial Ct, Rochester Hills, MI 48309-3336, USA
T +1 248 997-2000
F +1 248 475-9470

ARNOLD TECHNIQUE FRANCE S.A.

4, rue St Didier
F-26140 Anneyron
T +33 475 313260
F +33 475 314440

ARNOLD FASTENERS (SHENYANG) Co., Ltd.

No. 119-2 Jianshe Road
CN-110122 Shenyang
T +86 24887 90633
F +86 24887 90999