autocraft

TORXplus®

HIGH TORQUE TRANSFER DRIVE SYSTEM

ENGINEERED TO ENHANCE ASSEMBLY LINE PERFORMANCE

Most drive systems can cause problems on the assembly line that affect assembly speed, downtime, product design, worker comfort and increased rework and scrapped components. Since its introduction, TORX PLUS® Drive has consistently outperformed every other drive system. Its longer tool life and optimal torque transfer have enhanced product reliability, increased productivity, and reduced total assembly costs on assembly lines in a multitude of industries around the world.

FEATURES

- Elliptically-based geometry and lobe engagement
- 0˚ drive angle
- Six lobes with large cross-sectional areas
- Vertical sidewalls & reduced recess fallaway
- Greatly increased strength and reliability
- Inch and metric in one drive tool
- Compatible with TORX® Drive for field service

BENEFITS

- Straight, vertical sidewalls virtually eliminate camout
- Elliptical-based geometric configuration maximizes the engagement between driver and fastener spreading driving forces over the surface area and extending tool life
- Designed to ensure optimum torque transmission and, ultimately, required clamp load
- The system virtually eliminates the radial forces that can cause stress on fastener recesses
- Reduce fatigue and muscular stress during manual assembly due to little to no required end load

DESIGN OPTIONS

- Internal TORX PLUS® Drive
- External TORX PLUS® Drive
- External TORX PLUS® Low-Profile Head
- External TORX PLUS® Ultra Low-Profile Head
- Tamper-Resistant TORX PLUS® Drive
- TORX PLUS® Stem Double-Ended Studs
- Dual Drive Systems
- AUTOSERT® Feature
- ClearDrive® Feature
- Oversized “A” lobes for heavy coatings

IDEAL APPLICATIONS

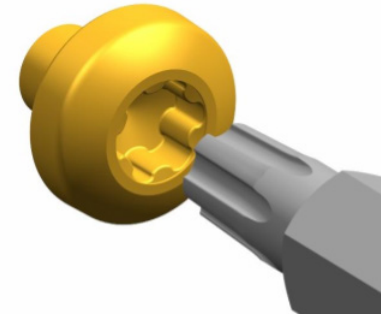
- High torque capabilities
- Low head height
- Drive train
- Suspension
- Steering

acument GLOBAL TECHNOLOGIES

PERFECT FOR HIGH-SPEED ASSEMBLY LINES

The TORX PLUS® Drive was designed to enhance assembly line performance. Manufacturers all over the world have realized significant improvements and cost savings by switching to the TORX PLUS® drive.

Ensuring optimal torque transmission, the true 0˚ drive angle virtually eliminates the radial forces that can cause stress on fastener recesses. The high torque transfer capabilities means it can utilize increased seating torques without increasing current bit usage levels. These capabilities are also important during removal of a fastener in service environments, where corrosion can cause seizing in the joint.



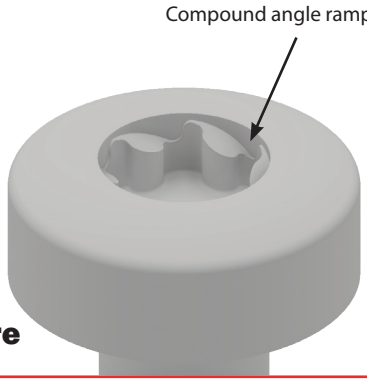
TORX PLUS® Stick fit bit applications

- Elliptically-based geometric configuration with 0° drive angle
- Lobe engagement with large cross-sectional area
- Minimizes wobble and dropped parts during assembly
- Maximizes engagement and eliminates camout to prevent tool slippage
- Available in sizes 10IPS to 100IPS
- Works with xx-PLI-531 punch pins

AUTOSERT® Feature - The high productivity answer to high rpm engagement

The compound angle ramps of the AUTOSERT® feature guide the driver bit into the recess, creating a self-centering and engaging action. It's the perfect solution for automated, robotic and other assembly situations where the driver bit is continuously rotating.

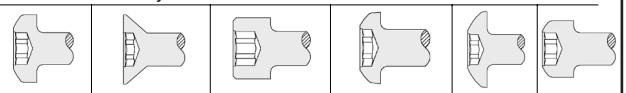
- Allows for higher rpm engagement (up to 700 rpm)
- Speeds engagement
- Reduces assembly time
- Increases productivity



AUTOSERT® Feature

DESIGN & DRIVE SELECTION GUIDELINES

Internal TORX PLUS® Drive System Standard Drive Size Selection



	Pan		Flat		Socket Head		Socket Button		Truss		Fillister
	inch	metric	inch	metric	inch	metric	inch	metric	inch	metric	inch
1IP		M0.9		M0.9 & M1		M0.9					
2IP		M1		M1.2		M1					
3IP		M1.2	#0	M1.4		M1.2					
5IP	#0	M1.4 & M1.6	#1	M1.6 & M1.8		M1.4 & M1.6					
6IP	#1	M2	#2	M2	#0	M2	#2		#2		#1
7IP	#2		#3		#1		#3		#3		#2
8IP	#3	M2.5	#4	M2.5	#2 & #3	M2.5	#4	M3	#4		#3
10IP	#5	M3	#5 & #6	M3	#4 & #5	M3	#6	M3.5	#5 & #6	M3.5	#4 & #5
15IP	#6	M3.5	#8	M3.5	#6	M3.5	#8	M4	#8	M4	#6
20IP	#8	M4	#10	M4	#8	M4	#10		#10	M5	#8
25IP	#10	M5	#12	M5	#10	M4.5		M5	#12		#10
27IP	#12					M5		M6	1/4		#12
30IP	1/4	M6	1/4	M6	1/4	M6	1/4		5/16	M6	1/4
40IP	5/16		5/16	M8		M7	5/16	M8	3/8	M8	5/16
45IP	3/8	M8	3/8 & 7/16		5/16	M8	3/8	M10	7/16		3/8
50IP	7/16	M10	1/2	M10	3/8	M10			1/2	M10	7/16
55IP	1/2	M12	9/16 & 5/8	M12	7/16 & 1/2	M12	1/2	M12 & M14	9/16 & 5/8	M12	1/2 & 9/16
60IP			3/4		9/16	M14	5/8	M16	3/4		5/8
70IP					5/8	M16					3/4
80IP					3/4	M18					
90IP						M20					
100IP					7/16 & 1	M22 & M24					

External TORX PLUS® Low-Profile Head Standard Drive Size Selection

SOCKET SIZE	inch	metric	14EP	5/16	M8
H7EP	#0000	M0.6	16EP	3/8	M10
H4EP	#000	M0.8	18EP	7/16	
H3EP		M1.0	20EP		M12
H2EP	#00	M1.2	22EP	1/2	
1EP	#0	M1.6	24EP	9/16	M14
2EP	#1	M2	26EP	5/8	M16
4EP	#2 & #3	M2.5	30EP		M18
5EP	#4 & #5	M3	32EP	3/4	M20
6EP	#6	M3.5	36EP	7/8	M22
7EP	#8	M4	40EP		M24
8EP	#10	M4.5 & M5	42EP	1	
10EP	#12 & 1/4	M6			
12EP		M7			