

STANLEY[®]
Engineered Fastening



AVDEL[®]

Engineered Fasteners, Structural and
Speed Rivets for Specialized Applications



Stanley® Engineered Fastening is committed to helping our customers improve production efficiency and reduce defect level by delivering solutions tailored to customer application requirements and production ergonomics.

Avdel® represents the broadest range of highly engineered structural blind fasteners available, ensuring that our customers are offered the most appropriate technology for their application.

All Avdel solutions are supported by the global network of Stanley Engineered Fastening application engineers, offering on-site and design support.

The range includes:

Specialist & Structural Blind Fasteners

World renowned, premium quality engineered fasteners for single sided access.

Lockbolts

Structural vibration-resistant fasteners with high clamp load performance and multi-grip capabilities.

Speed Fastening®

High speed, blind-sided assembly.

Avseal® Blind Sealing Plugs

Efficient sealing performance in low and high pressure systems.

Blind Rivet Nuts

Avdel threaded inserts provide a fast, reliable and cost effective method of inserting high quality, load bearing threads.





Stanley Engineered Fastening also offers market-leading installation equipment through our Stanley® Assembly Technologies brand. Our engineering expertise in delivering a complete application solution helps our customers to reduce complexity in the assembly process and achieve the lowest total cost of ownership.

STANLEY ENGINEERED FASTENING FAMILY OF BRANDS

AVDEL

INTEGRA

NELSON

OPTIA

POP

STANLEY
Assembly Technologies

TUCKER

Specialist Blind Fasteners

Avdel fastening system offers multi-grip performance, consistent installation, and high-speed, high-performance assembly. ISO-9000 / IATF 16949 accredited. PPAP available on request.

Avex® and Stavex®

- Multi-grip capability accommodates wide variations in material thickness – inventory reduction
- Sizes – 3.0 – 6.4mm (1/8" – 1/4")
- Materials – Aluminum or Steel
- Spreads the tail bearing load/clamp load on the rear sheet making it ideal for use in thin sheet materials
- Compensates for irregular, oversized, slotted or misaligned holes



Structural Blind Fasteners

Structural breakstem fasteners with a locked stem giving the rivet a high shear strength. For highly stressed or dynamically loaded applications.

Avibulb®XT and Avinox®XT

- High performance structural breakstem fasteners with excellent bulbing tail formation
- Size - 6.4mm (1/4")
- Materials Steel and Stainless Steel
- Stainless steel version offers high resistance to corrosion and elevated temperatures



Hemlok®

- Exceptional shear and tensile strength and a large blind side bearing area against the rear sheet
- Sizes: 6.4mm (1/4")
- Materials: Aluminum alloy, steel
- Interference lock formed by splined stem ensures the strongest vibration resistant joints
- Large blind side bearing area spreads the load and prevents creep



Monobolt® / Interlock

- Multi-grip structural breakstem fasteners providing a fully sealed joint and visible lock
- Sizes: 4.8 mm, 6.4 mm and 10 mm (3/16", 1/4" and 3/8")
- Materials: Aluminum, Steel, Stainless Steel, A4 Stainless Steel
- Excellent hole fill via radially expanded body provides very strong joint
- Multi-grip capability





Solar customers choose the cordless Neobolt solution to reduce assembly cost by dramatically reducing assembly time and complexity.

Lockbolts

Designed for high-strength assembly, our two-piece lockbolt systems form joints capable of withstanding the toughest applications and environments.

Neobolt®

Unlike traditional lockbolt fasteners, there is no pin break so there is no metal waste, reduced noise, no installation shock, no risk of pintails being dropped into the application or work area, and no corrosion at a pin break surface.

- Reduced pin size and weight for lower warehousing and shipping cost
- Fine pitch pin groove design for superior vibration resistance
- Collar 'fit-up' feature for easy preassembly of the joint - no need to support the pin during the placing operation
- Sizes: 3/16" to 1" (4.8 mm to 25.4 mm)
- Material: Aluminum and Steel



PB2500N NeoBolt® Tool

Stanley Assembly Technologies offers a cordless installation tool for the Neobolt range.

- Offers unrivaled mobility on the job-site – replacing heavy compressors and hoses with a small battery tool
- Ergonomic design, minimizes fatigue & improves application access
- High power output - 8,9kN
- 25mm stroke
- Rapid placing, saving time and money



Speed Fastening®

Speed Fastening systems provide rapid and reliable assembly of metals, plastics, composites and passive electronic components. The fasteners are either magazine-fed or fed via a vibrating bowl to a wide choice of installation equipment.

- High speed assembly with magazine fed tool or automation
- Highly controlled with low placing load shock
- No stem rattle, no debris, no waste
- Vibration resistant, Corrosion resistant
- Eco friendly, Zero waste
- Up to 60% lighter than conventional rivets or screws



Avseal® Blind Sealing Plugs

Ideal for automation, Avseal is commonly used to solve the most challenging sealing applications, including; thin wall, restricted space, shorter hole length, and high pressure. Typical applications include powertrain, engine, transmission and manifold blocks.

- Larger hole tolerance facilitates hole alignment for automated placing
- Fully annealed sleeve yields high sealing performance
- Improved stem retention and increased vibration resistance
- Hole size - 4mm - 12mm in the high pressure version
- 9mm - 16mm in the low pressure version



Blind Rivet Nuts

Avdel blind rivet nuts provide a fast, reliable and cost effective method of inserting high quality, load bearing threads.

- Blind sided assembly
- Reliable and secure thread installation
- No damage to surface coatings
- Reduced rework and wastage
- Lower cost of installation
- Suitable for use in stamped or drilled holes
- Designed for automation



Powered Installation Equipment

Stanley Assembly Technologies offer both Cordless and Hydro-Pneumatic equipment to install Avdel fasteners, with varying degrees of automation.



ProSet® PB3400 Cordless Rivet Tool

- Ensures high productivity and fast return on investment with very low installation cost
- Durable brushless motor that requires minimal maintenance
- 1,000 $\varnothing 6,4$ mm structural blind rivets per charge



ProSert XTN20 Rivet Nut Tool

- Lightweight hydro-pneumatic tool
- Flexible operation in both pull-to-force or pull-to-stroke modes
- High force-to-weight ratio of 11.1 kN/kg
- Cycle time 1.5 secs for complete setting



7539 Vertical Speed Fastening Work Station

- Rapid assembly and fatigue proof operation
- Easy integration into production line – only requires air supply
- Smooth hydraulic riveting unit, ideal for sensitive components





AVDEL

Structural Blind Fasteners

INTEGRA

Plastic Components

NELSON

Stud Welding

OPTIA

Threaded Fasteners

POP

Non-structural Blind Fasteners

STANLEY
Assembly Technologies

Specialist Assembly

TUCKER

Automated Fastener Systems



STANLEY
Engineered Fastening

Stanley Engineered Fastening — a division of Stanley Black and Decker — is the global leader in precision fastening and assembly solutions. Our industry-leading brands, Avdel®, Integra™, Nelson®, Optia®, POP®, Stanley® Assembly Technologies, and Tucker®, elevate what our customers create. Backed by a team of passionate and responsive problem-solvers, we empower engineers to create the future.

STANLEY ENGINEERED FASTENING FAMILY OF BRANDS

AVDEL **INTEGRA** **NELSON** **OPTIA** **POP** **STANLEY** **TUCKER**
Assembly Technologies