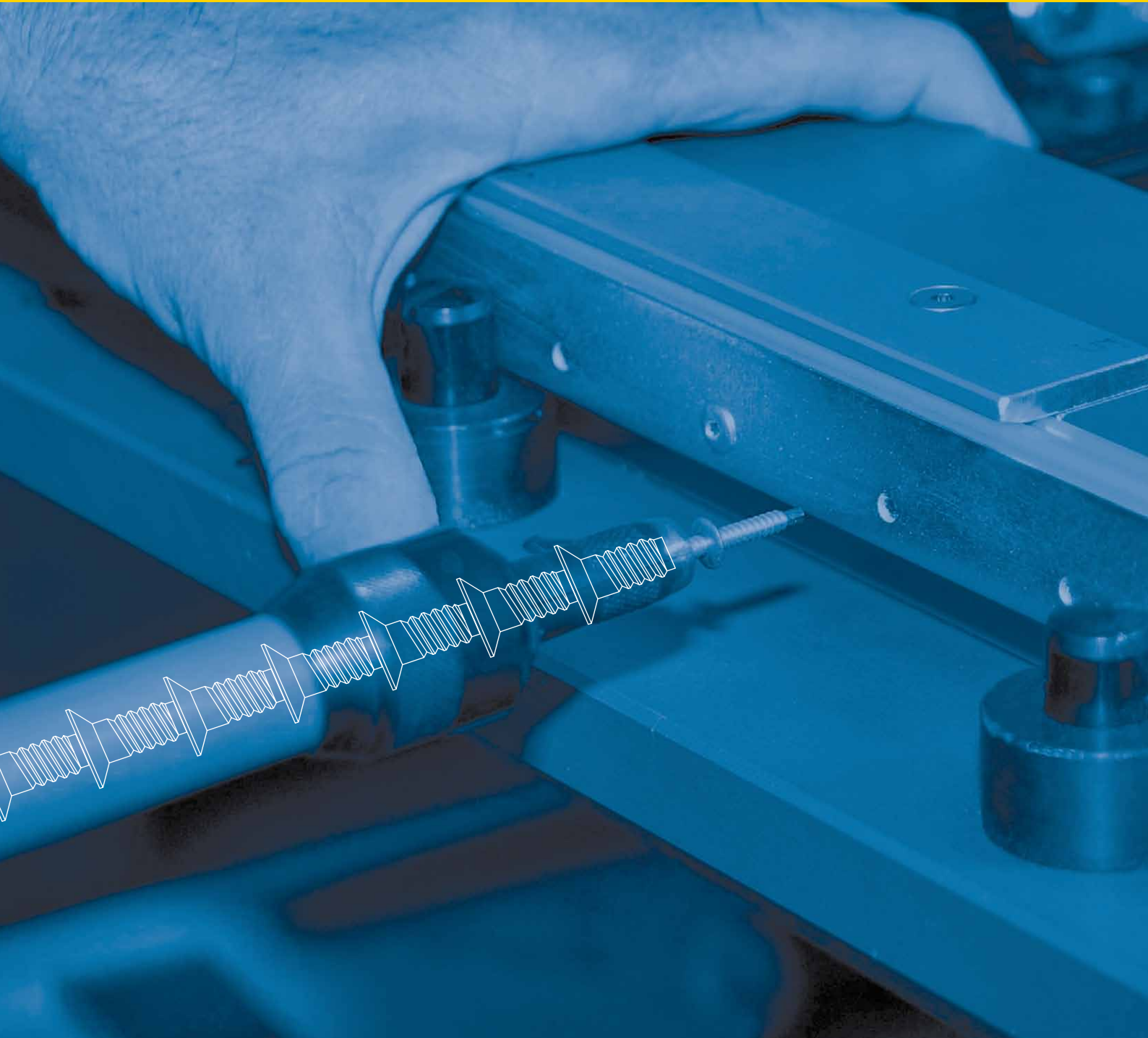


**STANLEY**<sup>®</sup>  
Engineered Fastening



**Rivscrew<sup>®</sup> & Rivscrew<sup>®</sup> PL**  
Threaded, Removable Speed Fasteners

**POP<sup>®</sup>**  **Avdel<sup>®</sup>**

# Rivscrew® For alloys & selected composites

The Avdel Rivscrew® is a multi-grip blind speed fastener that creates a thread in the application material during the installation process, thus combining the speed of placement with the removability of a screw.

Rivscrew® fasteners create a vibration resistant assembly and can be removed and reused in most applications.

Most industries demand innovative fastening and assembly systems that deliver minimum weight and

maximum application performance whilst supporting cost-effective production lines.

Rivscrew® can replace costly thread-tapping operations and reduce the hardware bill of materials whilst delivering fast, ergonomic assembly, high residual clamp and vibration resistance.



## Key features and benefits

- Expands radially during installation to form a thread in host material, eliminating the risk of over torquing and strip-out
- Placed using a hexagon mandrel which expands the threaded diameter radially, adjacent to its six corners
- Removable for servicing with a hex key and reusable
- Providing a higher vibration resistant “thread lock” in the parent material compared to standard screws
- Can be used to fasten most materials up to Vickers hardness 105 Hv5
- Eliminates the need for costly tapping or thread-forming operations
- Bright tin plated steel option for ease of soldering and good electrical conductivity
- Can be bowl fed for larger volume applications using automated equipment

## Range

- Material: Steel, zinc plated. Alternative finishes are available.
- Head form: Dome\*
- Sizes:  $\varnothing 2.8$  mm,  $\varnothing 3.0$  mm,  $\varnothing 3.5$  mm,  $\varnothing 4.0$  mm and  $\varnothing 4.8$  mm
- Grip range: from 1.62 mm (minimum rear sheet thickness) up to 12 mm total material thickness depending on fastener diameter and length

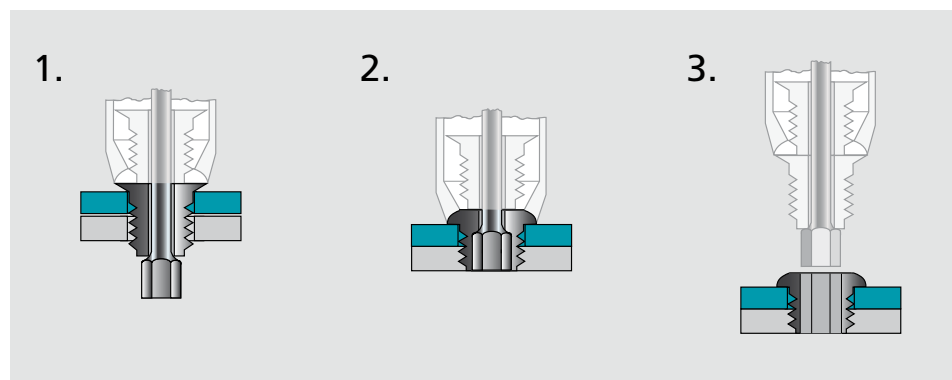
Technical data sheets can be found on our website

\* The placed head form depends on the nose equipment used, standard Rivscrew® nose equipment gives a dome head form



Rivscrew® can be removed and re-applied, making it ideal for applications requiring disassembly for repair or rework.

## Typical placing sequence



1. The mandrel with pre-loaded Rivscrew® fastener is located in the hole.
2. Tool activation pulls the hexagonal mandrel through the fastener, expanding it within the hole to provide high clamp and secure joints while forming the dome head.
3. At the end of the installation cycle, the next fastener is automatically delivered to the nose of the tool, ready to repeat the assembly process.

Please visit our website [www.StanleyEngineeredFastening.com](http://www.StanleyEngineeredFastening.com) for fastener placing animations.

# Rivcrew® PL For plastic & composite materials

Avdel Rivcrew® PL threaded, removable Speed Fastening® System is designed for use in thermoplastic materials including ABS, Nylon, Polycarbonate, Polypropylene, etc.

Rivcrew® PL thread pitch design is optimized to create a unique thread form during installation. It is recommended for use in thermoplastics with a flexural modulus between 340,000 and 1,400,000 p.s.i. and delivers a vibration resistant joint without the need for drive or seating torque control.

Industries rely on a vast array of fastener and assembly systems to ensure hi-speed production lines can deliver cost-effective, quality and precision products.

Rivcrew® PL delivers fast, ergonomic assembly, multi-grip performance and vibration resistance in thermoplastic host materials. For servicing Rivcrew® PL can be easily removed and reused with a standard hexagon key.



## Key features and benefits

Rivcrew® PL fasteners have the same features and benefits as the standard Rivcrew® fastener plus:

- Especially designed for soft and hard plastics
- Special thread design for a wide range of plastics with a flexural modulus between 340,000 and 1,400,000 p.s.i (2,000 to 10,000 N/mm<sup>2</sup>)
- Wide grip range from 3.0 to 11.8 mm covered by one fastener
- Avdel Patent Protected

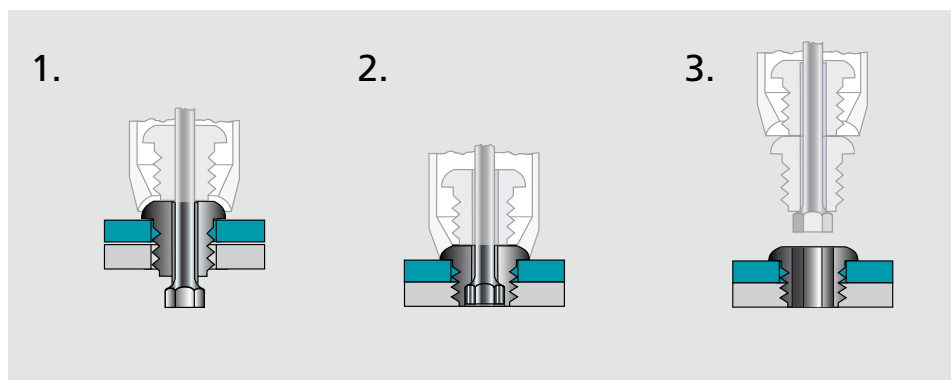
## Range

- Material: Steel, zinc plated. Alternative finishes are available.
- Head form: Dome
- Sizes:  $\varnothing$ 3.0 mm,  $\varnothing$ 3.5 mm,  $\varnothing$ 4.0 mm and  $\varnothing$ 4.5 mm
- Grip range: from 2.79 mm (minimum rear sheet thickness) up to 11.8 mm total material thickness depending on fastener diameter and length

Technical data sheets can be found on our website



## Typical placing sequence



1. The mandrel with pre-loaded Rivcrew® PL fastener is located in the hole.
2. Tool activation pulls the hexagonal mandrel through the fastener, expanding it within the hole to provide high clamp and secure joints.
3. At the end of the installation cycle, the next fastener is automatically delivered to the nose of the tool, ready to repeat the assembly process.

Please visit our website [www.StanleyEngineeredFastening.com](http://www.StanleyEngineeredFastening.com) for fastener placing animations.

# Rivcrew® & Rivcrew® PL

## Installation tools

The Rivcrew® and Rivcrew® PL fasteners can be placed with the Avdel installation tools type 7530, 7537 and 7271. Single-head or Multi-head workstations can make assembly even faster. For further information please check our website or contact your local Avdel representative.

7530 Standard tool



7537



7271



7535 Pantograph workstation



## Assembly applications

### Rivcrew®

- Aluminium die-cast boxes
- Cast magnesium
- Semi-conductors to thin wall and extruded heatsinks
- Semi-conductors to PCBs
- PCBs to chassis assemblies
- Fastening into injection moulded plastic bosses
- General engineering

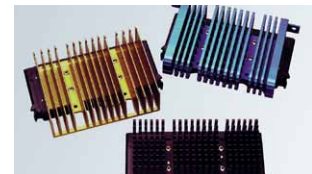
Rivcrew® is removable and reusable



Automotive die-cast chassis with PCB



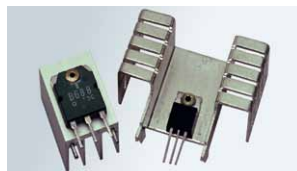
Heatsinks to processor cartridges



Alternator diode plate to nylon moulding



Semi-conductors to heatsinks and printed circuit boards



Seat belt tensioner



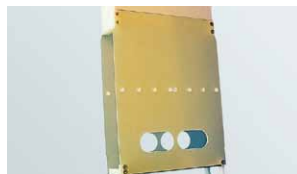
### Rivcrew® PL

- Automotive components
- Lighting
- Plastic trim
- Home electronics
- Domestic appliances
- Toys
- Plastic enclosures

Dust cleaner



Electric components



Head lamps



Printer & copiers



Power tools



Fender attachment



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