

**Carlson Engineering & Manufacturing:
Driving the Industry Forward for Over 30 Years.**

Automatic Screwdriving Heads / Vibratory Bowl Feeders / Automatic Step Feeders / Nut Running Equipment / Specialized Fastener Driving Equipment / Tool Stands / Fastener Dispensers



Carlson Engineering & Manufacturing, Inc.

Designing & Manufacturing Superior Quality Vibratory Screw Bowl Feeders For Over 30 Years.

What drives us?

**30 years of engineering high-speed Automatic Screwdrivers and
Vibratory Screw Bowl Feeders & Screw Presenters. That's what
drives us.**

Carlson's innovative, cutting-edge automatic screwdriver & screw feeder systems are the industry standard for virtually all manufacturing industries. Our extensive line of automated robotic-mounted screwdriving systems can be fitted with any air or electric screwdriver on the market today! Our automated fastening system component packages make Carlson Automatic Screwdrivers and Screw Feeders easy to integrate into your simple or complex assembly application. With over 40 different automatic screwdriver machine models, our product line is virtually unmatched in performance, value, durability, and versatility!



3-Step Fastener Alignment Verification

Carlson Engineering has been designing and manufacturing cutting edge automatic screwdriver and screw feeder systems and systems for over 30+ years. We have consistently met and exceeded the demands and expectations of our customer base by bringing a refreshing “Can-do” approach to a traditionally reserved industry.

We have engineered a 3 Step Fastener Alignment Verification into each of our automated screwfeeders & screw presenters.

One of the most frustrating challenges caused by modern vibratory feeder bowls is the frequency of fastener jams. To solve this, we have engineered a unique 3-step fastener alignment verification process into our automatic screw feeder machines.



Non-Adjustable Sorting Air Jet

The first step in our 3-step fastener verification is our Non-Adjustable Sorting Air jet – a highly pressurized stream of air that ejects misaligned fasteners from the track.

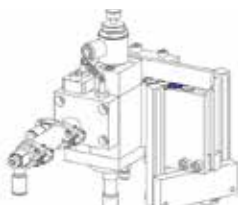
This is our first line of defense in the prevention of feeding misaligned fasteners into the automated screw feeder machine’s blow-feed tube, or from reaching the screw presenter pickup area.



Non-Adjustable Qualifying Track Cover:

The second step is a Non-Adjustable Bowl Track Qualifying Cover, which prevents misaligned fasteners from entering the escapement.

The simple construction of this feature, coupled with there being no need for adjustment, makes it a powerful addition.

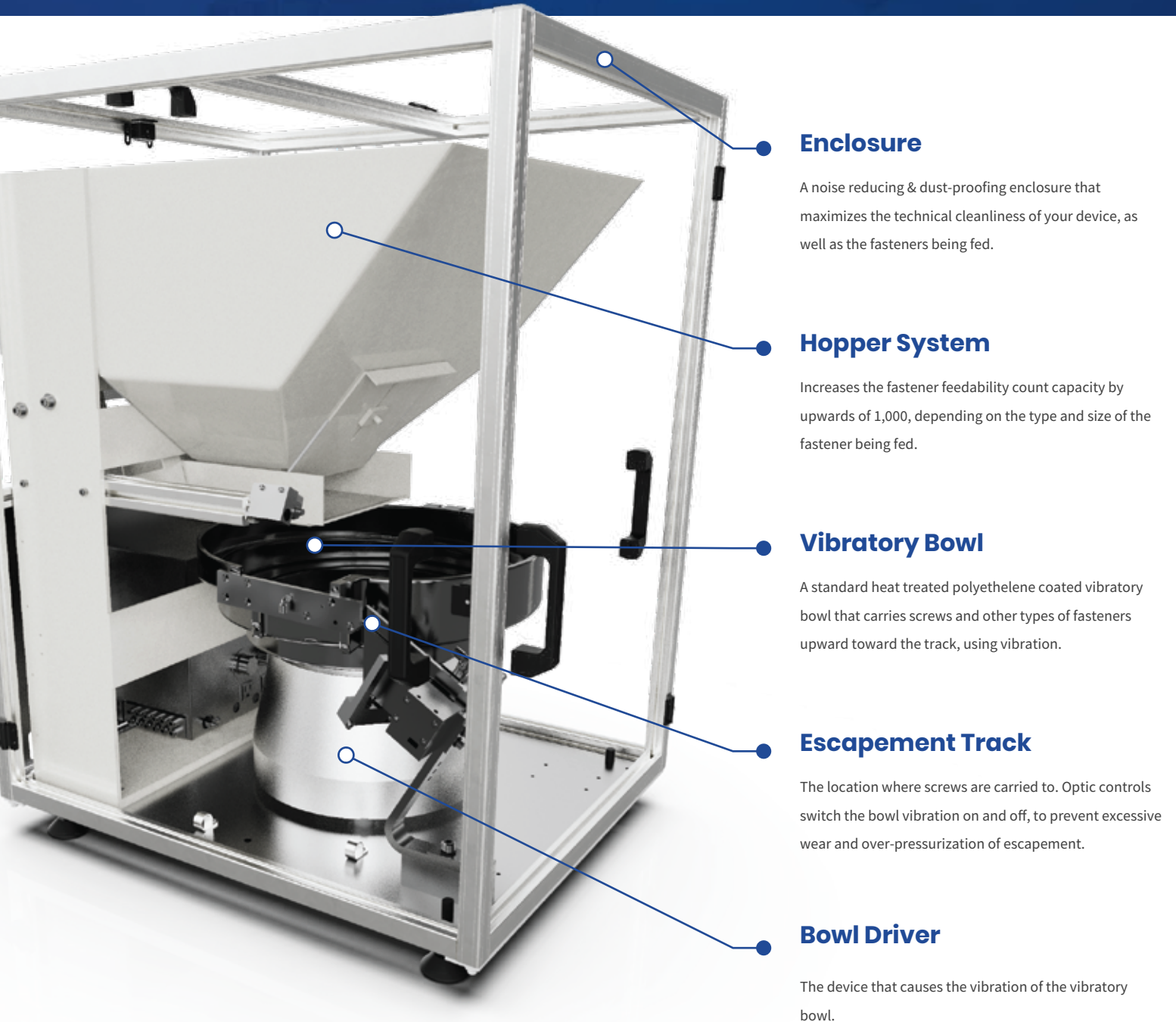


Escapement-Level U-Bracket Optic Sensor

The third step is our U-Bracket Optic Sensor – a laser-accurate sensor which controls the escapement track level, effectively preventing fasteners from being vibrated towards an already-fully-loaded track. When the escapement is full, the bowl will cease vibration, stopping the flow of fasteners to the escapement, which prevents back pressure in the bowl and escapement track, that can cause jamming.

Vibratory Screw Bowl Feeder Features & Anatomy

Carlson Engineering's manufacturing process of automatic screw feeders and screw presenters, ensures that minimal fastener jams occur, due to our unique 3-step fastener alignment verification method.



Enclosure

A noise reducing & dust-proofing enclosure that maximizes the technical cleanliness of your device, as well as the fasteners being fed.

Hopper System

Increases the fastener feedability count capacity by upwards of 1,000, depending on the type and size of the fastener being fed.

Vibratory Bowl

A standard heat treated polyethelene coated vibratory bowl that carries screws and other types of fasteners upward toward the track, using vibration.

Escapement Track

The location where screws are carried to. Optic controls switch the bowl vibration on and off, to prevent excessive wear and over-pressurization of escapement.

Bowl Driver

The device that causes the vibration of the vibratory bowl.

Product Appearance & Technical Information May Vary

Each drive head, bowl feeder, presenter, dispenser, and diverter may vary, depending on factors such as fastener type, tool type, available space, available vertical movement area, and more. For more accurate images, please see our website: www.carlsoneng.com.



Anatomy & Features

The A10 Series of vibratory bowl feeders come complete with hardened tool steel and stainless steel escapements. Optic controls switch the bowl vibration on and off, to prevent excessive wear and over-pressurization of escapement and tooling areas.

The unique Carlson Fastener Hopper design sits snugly above the vibratory bowl, unlike competing manufacturer models that sit adjacent to the device, which creates less footprint, leaving more valuable floor or table space available.

- ✓ Resistant to wear & tear damage
- ✓ Standard polyethylene bowl coating
- ✓ Optional hard anodize or urethane bowl coating
- ✓ 3-Step fastener alignment verification prevents jams
- ✓ Hardened & heat-treated durable tool steel composition
- ✓ Longer run time between feeds, due to less track level fastener jams
- ✓ Less pinch points & no mechanical adjustments for enhanced safety

Product Technical Data

Bowl Size	10" (254mm)
Fastener Delivery Method	Blow Feed Delivery
Max. Fastener Head Ø	11mm
Max. Fastener Length	38mm
Max. Fastener Shaft Ø	5mm
Fastener Type	Screw, Set Screw, Nut, Bolt, Pin, Stud, Rivet



Anatomy & Features

The A18 Series of vibratory bowl feeders come complete with hardened tool steel and stainless steel escapements. Optic controls switch the bowl vibration on and off, to prevent excessive wear and over-pressurization of escapement and tooling areas.

The unique Carlson Fastener Hopper design sits snugly above the vibratory bowl, unlike competing manufacturer models that site adjacent to the device. This causes less footprint, leaving more valuable floor or table space available.

- ✓ Resistant to wear & tear damage
- ✓ Standard polyethylene bowl coating
- ✓ Optional hard anodize or urethane bowl coating
- ✓ 3-Step fastener alignment verification prevents jams
- ✓ Hardened & heat-treated durable tool steel composition
- ✓ Longer run time between feeds, due to less track level fastener jams
- ✓ Less pinch points & no mechanical adjustments for enhanced safety

Product Technical Data

Bowl Size	18" (457mm)
Fastener Delivery Method	Blow Feed Delivery
Max. Fastener Head Ø	19mm
Max. Fastener Length	76mm
Max. Fastener Shaft Ø	8mm
Fastener Type	Screw, Set Screw, Nut, Bolt, Pin, Stud, Rivet





Anatomy & Features

The A24 Series of vibratory bowl feeders come complete with hardened tool steel and stainless steel escapements. Optic controls switch the bowl vibration on and off, to prevent excessive wear and over-pressurization of escapement and tooling areas.

The unique Carlson Fastener Hopper design sits snugly above the vibratory bowl, unlike competing manufacturer models that site adjacent to the device. This causes less footprint, leaving more valuable floor or table space available.

- ✓ Resistant to wear & tear damage
- ✓ Standard polyethylene bowl coating
- ✓ Optional hard anodize or urethane bowl coating
- ✓ 3-Step fastener alignment verification prevents jams
- ✓ Hardened & heat-treated durable tool steel composition
- ✓ Longer run time between feeds, due to less track level fastener jams
- ✓ Less pinch points & no mechanical adjustments for enhanced safety

Product Technical Data

Bowl Size	24" (610mm)
Fastener Delivery Method	Blow Feed Delivery
Max. Fastener Head Ø	26mm
Max. Fastener Length	102mm
Max. Fastener Shaft Ø	12mm
Fastener Type	Screw, Set Screw, Nut, Bolt, Pin, Stud, Rivet

