Providing
Tomorrow’s
Automatic
Screw Driving
Solutions
Today!
Carlson Engineering has the solution to your automatic screw driving and assembly needs. We know high-speed automated screw driving and screw feeding, with twenty plus years of application experience. We know your application and we'll work together to make your assembly process easier and more productive.

Our rugged, reliable, and low-maintenance line of high-performance automatic screw driving systems and equipment consistently outperform and result in lower cost of operation than other competitive products available today.

Carlson’s line of automated screw driving and screw feeding products are better designed to offer higher torque in more compact units. These better design concepts make the Carlson line the “Right Choice” for industry’s toughest and most challenging applications.

Our innovative System Component Packages make it easy to integrate precision/high-speed capabilities on your simple or complex assembly application. Our extensive product line can be fitted with any air or electric screw driver on the market today. With 40 different single to multiple screw driving models, our product line is unmatched in performance and value and is positioned to become an industry standard.
Carlson’s Hand-Held Suredrive and Telescoping Have Become an Industry Standard!

Carlson’s line of hand-held automatic and ergonomic screwdrivers offers single or multiple spindle usage. Their compact ergonomic design provides high-torque and accuracy and work with a screwfeeder. Whether your application is a circuit board or a dashboard these durable drivers can install fasteners when and where you need them.

Carlson’s Manufactured Automatic Vibratory Bowl Screwfeeding Systems

The Carlson Engineering Automatic Screwfeeders are available using vibratory bowls or Stepfeeders/Ladder feeders. They can work stand alone or with any of our automatic screwdriving heads.
Experience Industry’s Most Powerful and Exciting Line of Fixtured Screwdrivers From Carlson Engineering

Carlson Engineering has the deepest product offering of Fixtured Screwdriving Heads on the market today. These versatile drive heads can be mounted to: Fixtures, Indexing Stations, Transfer Lines, Work Cells, Cartesian and Scara Type Robots.

Custom Engineered Screwdriving and Assembly Cells Built to Your Spec!

Leverage our vast application experience to design, spec and build a custom drive cell to your assembly specifications. Turn-key, PC and PLC based controls available for superior control and productivity.
Packaged Screwdriving & Screwfeeding Solutions
Turn-Key Systems Available in Many Combinations

Carlson's innovative system component packages provides integrated screwdriving and screwfeeding components designed to perform and produce. Experience speed, accuracy and true plug-and-play capability with one of Carlson's packaged systems.

Choose from twelve system configurations

Customize your system with the many options available

Integration components available to extend the systems capabilities

Tool Support Stands
Tool Balancers
Torque Reaction Arms
Tool Holders

Our stands absorb torque while keeping the tool in place, perpendicular to the work piece. The Down-Assist option provides constant downward pressure that reduces operator fatigue and bit chatter while increasing bit life and overall thread quality.
The TeleSCOPING Hand-Held Automatic Screwdriver Fits Into Small Places and Works Well for Either a Right or Left Handed Operator

Features

- High Torque Capacity
- Simple Design
- Small Size and Weight
- Works Well With Self-Drilling Screws
- Low Cost
- Very Narrow Profile
- Left/Right-Hand Operator Adaptability
- Easy Maintenance
- Very Durable

About the TeleSCOPING Screwdriver...

The Carlson Engineering TeleSCOPING screwdriver can be fitted with almost any brand of screwdriver on the market today. This durable, light-weight and easily maintained unit needs minimal push down force to drive screws to a specific depth or torque. Driving screws to depth is especially useful with wood products with varying torque requirements.
Drive More Fasteners in Less Time with this Compact, Ergonomic and Easy-to-Use Screwdriver Head

Features

- Simple Design with Long Life
- Small Size and Weight
- Mates to Any Screw Driver
- Automatic Bit Advance
- Reversible
- 3 Bit Stroke Lengths Available
- Head-Lock Screw Retention
- 10 nm Torque Capacity

About the SureDRIVE...
The Carlson SureDRIVE hand-piece is a standard power screwdriver tool that is ergonomically designed to reduce the effort needed to install fasteners. Starting pressure is light, and no follow through motion is required to “chase” the screw in. The SureDRIVE locks the bit behind the screw allowing for positive “feel” for the user and keeps the screw extended. Automatic bit advance, reversibility, and simple design makes the SureDRIVE one of the most advanced hand-held drive heads available.

SureDRIVE is a small, lightweight driver that works well with self-drilling screws.
• Works well for left or right handed operators.
• Easy bit replacement (*simply un-thread the jaw assembly and bit is exposed*).

**KEY LIMITATIONS**
• Maximum of 40 pounds of downward force that can be applied to screw.
• Force limitation make it less ideal for self drilling screws, which require high thrust.

**SCREWDRIVING SEQUENCE**

**Sequence 1** - The screw is blown into position inside the jaws.
**Sequence 2** - The bit locks the screw in place.
**Sequence 3** - The screw is driven into the assembly (*Operator push down travel less than 1/8"*).

**BIT REPLACEMENT**
HEAD WEIGHT: 4.3#2
MOUNTING BRKT: .4#S

LINES REQ'D:
1 FEEDTUBE
2 1/4" AIR LINES TO HEAD
1 AIR LINE TO TOOL

HEAD THRUST: APPROX. 40#S
The Very Narrow and Versatile SlimDRIVE is Designed for Many Assembly Requirements and Can be Used in Any Position Including Upside Down!

High-Torque, Self-Advancing, Precision Modular Drive-Head

Features

- Easy Stroke Adjustment
- Low Maintenance
- Offset Head Option
- Jaw Stop - Prevents Scuffing
- Long Life Liner Guide Bearings
- Cylinder Speed Controls and Limit Switches
- Shock Absorbers at All Ends of Travel Points
- Stroke Length From 4” to 10” Available

About the SlimDRIVE...
Carlson Engineering has been selling this drive head since 1990 and at 1-1/2 inches wide the SlimDRIVE allows close center-to-center mounting on a tool stand, automatic machine or robot. The Type 1 SlimDRIVE is designed to be used with a blow-feed type of screw feeder. This small but durable unit offers up to 80 lbs. of downward force, active screw depth control, torque control, and easy bit replacement.
About the XMOD...
The Carlson Engineering XMOD features high-torque and thrust capacity in a clean compact modular package that fits into small spaces. Many combinations are available including single and dual stage movement, to suit a variety of applications. Independent cylinders for each stroke allow full control of the screwdriving process. Air connections, stroke adjustments and speed controls are easily accessible.

Features

- Fully Adjustable Stroke Length and Jaw Stop Positions
- Flow Controls Fitted as Standard
- Quick Release Tool Adapters With Q/R Window
- Easy Stroke Adjustment
- Can Install Screws Upside Down
- Lightweight - Ideal for Robotic Applications
- Easy Bit Replacement
GENERAL DESCRIPTION

The X-MOD is a family of compact, single spindle, modular drive heads. The X-MOD features 2 primary stroke modules:

The DRIVE STROKE module is a pneumatically powered slide that actuates the tool and the drive spindle. This stroke can be used alone, or it can be mounted to any one of a variety of Transport strokes. Several drive strokes may also be mounted to a common transport stroke for multi-spindle applications.

The TRANSPORT STROKE module is used to move the drive stroke to the parts to be fastened. The standard transport stroke is a pneumatic slide equal in width to the drive stroke. The transport stroke may also be a robot axis, a programmable electric actuator, or a wide variety of standard or custom pneumatic slides.

DESIGN FEATURES

NARROW WIDTH. The X-MOD is only 40 mm (1.57") wide, allowing it to fit into tight spaces. The cylinder fittings can mount in 1 of 3 orientations to accommodate various space restrictions.

SHORT LENGTH. The 100-75 two stroke X-MOD has 75 mm (3") of stroke to part, and 100 mm (4") of stroke through jaws in an overall slide length of less than 406 mm (16"). Stroke for stroke this is likely the shortest unit on the market (with an equivalent torque and thrust capacity). It’s a perfect choice for under table applications.

HIGH TORQUE CAPACITY. The two-stroke X-MOD has a torque capacity of up to 200 in. lbs.

LIGHT WEIGHT. The 100 mm drive stroke weighs 4.3#s less tool and screw jaws, making it ideal for robotic applications. The 100-75 two stroke X-MOD weighs just under 8#s less tool and screw jaws.

TOOLS. A wide variety of pneumatic or DC electric tools can be accommodated. The maximum diameter tool that will fit is 57 mm (2.25"). The maximum tool weight should be less than 4#s.

INDEPENDENT STROKES. Both strokes of the two stroke X-MOD operate independently, allowing a wide range of programmable sequences. Both stroke modules be fine tuned for optimal cycle speeds and to fit each unique application. If required, screws can be “purged” from the screw jaws on demand.

CONSTRUCTION. The X-MOD is ruggedly built, using high capacity, precision ball type linear bearings and shock absorbers at all impact positions for long life and higher cycle speeds. Structural parts are dowel pinned for strength and precision.

MINIMUM CENTERS. Two units can mount side by side on 1.59" centers. If the tool diameter exceeds 1.562" diameter, then the maximum tool diameter plus .03" clearance determines the minimum centers. Closer centers may be achievable with different mounting orientations (depending on tool diameter).
STROKE. There are 2 drive stroke modules: 100 mm (3.93") and 150 mm (5.90"). Both share a common base plate. The standard transport stroke has a maximum stroke of 75 mm (2.95"). The drive stroke can mount to other types of transport slides (pneumatic or electric) to achieve longer strokes.

STANDARD THRUST. The drive stroke can use either a 20mm bore cylinder (.48 x psi) or a 25 mm bore cylinder (.76 x psi.) The mounting for both is identical and only requires changing the cylinder. The pneumatic transport stroke is equipped with a 25mm bore cylinder (.76 x psi.)

CYLINDERS AND LIMIT SWITCHES. The cylinders are compact cylinders equipped with magnets on the pistons. The limit switches mount to slots on the cylinder sides. They are available as DC reed switches or PNP Hall Effect sensors. Speed controls are fitted as standard.

MODULAR DESIGN. Only order the strokes you need. The drive and transport strokes can be joined or separated in the field to adapt to future applications. The drive stroke can easily change from 100 to 150 mm if required.

NO PART CONTACT. The screw jaws can be set to stop just above the parts to be fastened, thus avoiding any chance of damaging the part surface.

PRECISION DEPTH. The Drive stroke has its own limit switch so this feature is always available as standard.

CAD DATA. 3D solid models in many formats are available as well as 2D DWG files drawings. Movable native Solidworks models are available with operable strokes.

Many combinations available to suit a wide variety of applications.

Modular design for greatest flexibility.
**DRIVE HEAD TYPES**

**Type 1**
For screwdriving applications using a blowfeed style screwfeeder. Includes drive and transport (stroke to part) strokes.

**Type 2**
For pick and place screwdriving or nut-running with a vacuum finder tube.

**Type 3**
For driving pre-placed screws, nutrunning, tapping, bottlecapping or torque inspection applications. Available with 100 or 150 mm stroke. Can be added to transport stroke for additional travel.

**Type 4**
Same drive head as a Type 1, but without a transport stroke. Can be used alone, or mounted to a wide variety of slides or robots to provide stroke-to-part.

**SEQUENCE EXAMPLES:**

1. Ready to drive
2. Screw jaws move to part
3. Screw driven
4. Screw purge (on demand)
**Position sensors** are easily set in cylinder grooves. Magnetic proximity style is standard.

**Independent cylinders** for each stroke allow full control of the screwdriving process. Screw purge is standard with this design.

**Air connections** and **speed controls** are easily accessible and can be placed in 3 different orientations for maximum mounting flexibility.

**Transport stroke** moves screw jaws to part.

**Drive stroke** drives the screw.

**Shock absorbers** are standard on all impact points.

**Screwdriver tool** can be pneumatic or DC electric. Many styles can be mounted to match tools already in use in your plant.

**Tool clamp screws** allow quick removal of tool.

**Stroke adjustments** are easily accessible.

**Mounting holes** also include dowel holes for alignment.

**Screw jaws** can be easily re-oriented and removed. Shoulder and clamp diameter assure quick, accurate replacement.

**Precision, high capacity linear bearings** are used in all strokes.

**Bit quick change adapter** allows no-tool changout of many standard bits and sockets. Simply pull sleeve to release or engage.

The **XMOD** features high torque and thrust capacity in a clean, truly compact package.
APPLICATION EXAMPLES

- DS 150 mounted to rodless cylinder equipped with precision linear bearing. 200 MM stroke to part.

- DST 100-75 with 2 position stroke to part and wide flange mount.

- DST 100-75 drive head equipped with headlock for inverted driving. The screw cannot fall back down the feedtube.

- DST 100-75 fitted with custom offset head for close clearance application.

- DST 100-75 fitted with a vacuum finder for pick and place driving.

- DST 100-75 with screw presence sensor.

- DST 100-75 with screw presence sensor.

- DST 100-75 fitted with wide flange equipped with headlock for mount. Inverted driving. The screw cannot fall back down the feedtube.

- 2 DS 100 drive heads mounted to a common slide.
**XMOD DS 100** (SINGLE STROKE TYPE 4)

<table>
<thead>
<tr>
<th>Specification</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Max. Jaw Stroke to Part (Transport Stroke)</td>
<td>Add this slide to unit of choice or omit</td>
</tr>
<tr>
<td>Max. Stroke Through Jaws (Drive Stroke)</td>
<td>100 mm (3.94&quot;) Std, 150 mm (5.99&quot;) Optional</td>
</tr>
<tr>
<td>Number of Air Cylinders</td>
<td>1</td>
</tr>
<tr>
<td>Independent Control of Strokes?</td>
<td>Yes</td>
</tr>
<tr>
<td>Maximum Tool Torque</td>
<td>22.5 Nm (200 in. lbs.)</td>
</tr>
<tr>
<td>Max. Thrust (Std.)</td>
<td>330 N (75 lbs.) @100 PSI</td>
</tr>
<tr>
<td>Min. Mounting Centers</td>
<td>40.3 mm (1.59&quot;) Depending on Tool Dia.</td>
</tr>
<tr>
<td>Max. Tool Weight</td>
<td>1.8 Kg (4 lbs.)</td>
</tr>
<tr>
<td>Max. Tool Diameter</td>
<td>57 mm (2.25&quot;)</td>
</tr>
<tr>
<td>Slide Weight (Less Tool and Jaw Tooling)</td>
<td>1.99 Kg (4.4 lbs.)</td>
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</tbody>
</table>

Rev. 9-21-06 Specifications subject to change without notice
**XMOD DST 100-75 (Dual Stroke Type 1)**

<table>
<thead>
<tr>
<th>Specification</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>Max. Jaw Stroke to Part (Transport Stroke)</td>
<td>75 mm (2.953&quot;)</td>
</tr>
<tr>
<td>Max. Stroke Through Jaws (Drive Stroke)</td>
<td>100 mm (3.937&quot;) Std. 150 mm (5.90&quot;) Optional</td>
</tr>
<tr>
<td>Number of Air Cylinders</td>
<td>2</td>
</tr>
<tr>
<td>Independent Control of Strokes?</td>
<td>Yes</td>
</tr>
<tr>
<td>Maximum Tool Torque</td>
<td>22.5 Nm (200 in. lbs.)</td>
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<td>1.8 Kg (4 lbs.)</td>
</tr>
<tr>
<td>Max. Tool Diameter</td>
<td>57 mm (2.25&quot;)</td>
</tr>
<tr>
<td>Slide Weight (Less Tool and Jaw Tooling)</td>
<td>3.85 Kg (8.5 lbs.)</td>
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</tbody>
</table>

Rev. 9-21-06 Specifications Subject to Change Without Notice
XMOD DST 75-75 (DUAL STROKE TYPE 1)

MAX. JAW STROKE TO PART (TRANSPORT STROKE) 75 MM (2.953")
MAX. STROKE THROUGH JAWS (DRIVE STROKE) 75 MM (2.953")
NUMBER OF AIR CYLINDERS 1
INDEPENDENT CONTROL OF STROKES? NO
MAXIMUM TOOL TORQUE 22.5 Nm (200 in. lbs.)
MAX. THRUST (STD.) 330 N (75 lbs.) @ 100 PSI
MIN. MOUNTING CENTERS 40.3 MM (1.59") DEPENDING ON TOOL DIA.
MAX. TOOL WEIGHT 1.8 Kg (4 lbs.)
MAX. TOOL DIAMETER 57 MM (2.25")
SLIDE WEIGHT (LESS TOOL AND JAW TOOLING) 4.0 Kg (9 lbs.)

SINGLE CYLINDER PROVIDES TWO STAGES OF MOTION.
ONLY REQUIRES ONE VALVE TO OPERATE
CAN BE USED FOR "ACTIVE DEPTH" WHEN THERE ARE MULTIPLE PART HEIGHTS, AND IT IS PERMISSIBLE TO STOP THE JAWS ON THE PART.
The TwinSLIM is the Right Choice for High-Thrust Applications

Features

- Narrow Design Allows for Close Mounting
- Up to 150 Lbs. of Downward Thrust
- Stroke Length of 4” to 10” Available
- Cylinder Speed Controls and Limit Switches
- Can be Tooled as a Dual Spindle
- Shock Absorbers at All End of Travel Points
- Depth or Torque Control
- Low Maintenance

About the TwinSLIM...
The Carlson Engineering TwinSLIM’s modular design makes it possible to optimize the unit to meet many different assembly requirements. This light-weight, low-maintenance unit provides easy stroke control and bit replacement as it protects your painted or finished parts from marring. The TwinSLIM accurately delivers your fastener where you want it with depth control and up to 30nm torque capacity.
- No part contact – the jaws can be positioned to stop just above the part surface, thus avoiding the possibility of marring painted and finished surfaces.
- 2.5” screw head diameter.
- Easy bit replacement.

**MIDDRIVE DIMENSIONS**
The MidDRIVE is the Work Horse of Our Multi-Spindle Drive Head Family

High-Thrust, Low Maintenance, Lightweight Head, No Part Contact

Features

- Easy Stroke Adjustment
- Easy Bit Replacement
- Can Accommodate up to 6 Spindles
- 300 Lbs. of Downward Force
- Heavy Duty Liner Guide Bearings For Long Life
- Can Install Screws Upside Down
- Low Maintenance
- Depth or Torque Control
- Shock Absorbers at All Ends of Travel Points

About the MidDRIVE...

Automate your screw driving process with Carlson Engineering’s MidDRIVE Screwdriving head. It’s great for self-drilling applications needing high thrust and low maintenance. This simply constructed, lightweight head can be fit to almost any screwdriver and easily mounts on a toolstand, automatic machine or a robot. Cylinder speed controls and limit switches are included and with no part contact there’s no marring of painted or finished surfaces.
- Great for self drilling screw and applications requiring high thrust.
- No part contact – the jaws can be positioned to stop just above the part surface, thus avoiding the possibility of marring painted and finished surfaces.
- 4” screw head diameter.
- Easy bit replacement.

MULTIDRIVE DIMENSIONS
The MultiDRIVE is the Heavy-Weight of the Carlson Multi-Spindle Drive Head Family

Features

- 200 nm Torque Capacity
- 1 to 18 Spindle Option
- Dual Heavy Duty Guide Bearings
- 350 Lbs. of Downward Force
- Easy Stroke Adjustment
- Simple Construction
- Depth or Torque Control
- Shock Absorbers at All Ends of Travel Points

About the MultiDRIVE...
The MultiDRIVE auto feed drive-head is an easily maintained, self-advancing powered screw driver for use in automatic screw driving applications. This high-capacity unit has shock-absorbers on all impact points as well as no part contact which eliminates finished surface marring. Cylinder speed controls, flow controls and stroke limit sensors are standard.
Decades of Experience Have Allowed Us to Design Reliable and Easily Maintained Vibratory Bowl Feeding Systems

Features

- Hard Anodized Bowls
- Optical Sensors
- Efficient Bowl Operation
- Less Wear on Fasteners
- Reliable Feedability
- 10”, 18” or 24” Diameter Bowls
- Stainless Steel Bowls Available

About the BOWL SCREWFEEDERS...
The evolution of Carlson’s successful line of vibratory bowl feeding systems has been based on years of sound engineering and customer feedback. A variety of bowl sizes allows fasteners up to 3.5” in length. Optic controls switch the bowl on and off to prevent excessive wear. We offer hopper feeders as large as 6 cu. ft. that can be fitted with conventional paddle level switches or optical non-contact bowl level sensors. Optional hopper enclosures prevent contamination, reduce noise levels, and offer greater operator safety.
The OpASSIST NLE Tool Stand Provides Flexibility and Wide Operating Area

Features

- Up to 36” of Linear Reach
- Inward Reach Capabilities
- Smooth Yet Safe
- Low Inertia
- True Vertical Movement

All Carlson Tool Stands are Available with the DownASSIST Option Kit

DownASSIST enhancement applies adjustable downward force of 1 - 60 lbs. on demand. The operator can let go of the lever at anytime and the screwdriver will gently retract to the home position.

About the NLE Stand...

The Carlson NLE Tool Stand has a unique elbow feature that allows the arm to move from the innermost to outermost reach without adjustment. Fitted with two 5 lb spring balancers, our stand holds power tools without dropping them while vertically providing assistance in keeping the proper bit/fastener head engagement - preventing screw head damage in most applications. All units are equipped with lightweight arms making them easy to operate. With no reaction torque being transmitted back to the operator’s wrist and reduced vibration, they provide the ideal ergonomic solution to tool mounting problems.
Our Heavy Duty NLE Pro Tool Stand was Developed for Higher Torque and Reach Requirements

Features

• Up to 42” of Reach
• Smooth Axis Motion
• Rigid Linear Bearings
• Spring Balancers
• Create Consistent Results
• Free Moving

All Carlson Tool Stands are Available with the DownASSIST Option Kit

DownASSIST enhancement applies adjustable downward force of 1 - 60 lbs. on demand. The operator can let go of the lever at anytime and the screwdriver will gently retract to the home position.

About the NLE Pro...

The NLE Pro has a unique “elbow” feature that allows the arm to reach from the innermost to outermost reach without adjustment. The system uses high quality rigid linear bearings for smooth axis motions, while maintaining the strength and rigidity required for a solid, quality feel. The center “running rod” is supported at top and bottom by steel plates braced on aluminum extruded sections. Spring balancers provide a smooth yet safe means of load balancing on the stand. Single or dual units can be used to offset any heavy tool payload.
About the NLL Stand…
The Carlson NLL Tool Stand offers wide operating areas and two 5 lb spring balancers that hold the tool up and prevent it from dropping. Our stands hold power tools vertically providing assistance in keeping the proper bit/fastener head engagement—preventing screw head damage in most applications. All units are equipped with lightweight arms making them easy to move and operate. With no reaction torque being transmitted back to the operator’s wrist and reduced vibration, they provide the ideal ergonomic solution to tool mounting problems.

Features
• Up to 36” of Linear Reach
• Smooth Yet Safe
• Low Inertia
• Lightweight and Easy to Maneuver
• True Vertical Movement

All Carlson Tool Stands are Available with the DownASSIST Option Kit
DownASSIST enhancement applies adjustable downward force of 1-60 lbs. on demand. The operator can let go of the lever at anytime and the screwdriver will gently retract to the home position.
CARLSON
D53 OP-ASSIST TOOL STAND

Table 1.1

<table>
<thead>
<tr>
<th>Setup Positions</th>
<th>Max. Reach &quot;Y&quot;</th>
<th>Min. Reach &quot;X&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Setup Position 1</td>
<td>18.85&quot;</td>
<td>8.6&quot;</td>
</tr>
<tr>
<td>Setup Position 2</td>
<td>21.25&quot;</td>
<td>11.0&quot;</td>
</tr>
<tr>
<td>Setup Position 3</td>
<td>23.65&quot;</td>
<td>13.4&quot;</td>
</tr>
</tbody>
</table>

(See the table above)
Our Heavy Duty NLL Pro Tool Stand Handles Higher Torque Requirements in Tight Spaces

All Carlson Tool Stands are Available with the DownASSIST Option Kit

DownASSIST enhancement applies adjustable downward force of 1-60 lbs. on demand. The operator can let go of the lever at anytime and the screwdriver will gently retract to the home position.

About the NLL Pro…
The NLL Pro was developed to offer longer reach and higher torque than other tool stands available. The system uses high quality rigid linear bearings for smooth axis motions, while maintaining the strength and rigidity required for a solid, quality feel. The center “running rod” is supported at top and bottom by steel plates braced on aluminum extruded sections. Spring balancers provide a smooth yet safe means of load balancing on the stand. Single or dual units can be used to offset any heavy tool payload.

Features
• Up to 42” of Reach
• Smooth Axis Motion
• Rigid Linear Bearings
• Spring Balancers
• Create Consistent Results
• Free Moving
DIVERTERS

EXAMPLES OF STANDARD ESCAPEMENTS AND DIVERTERS USED ON BLOW FEED STYLE SCREWFEEDERS