PACIFIC
R-SERIES HYDRAULIC PLATE SHEARS

1/4" THRU 2" CAPACITIES
## contents

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standard R-Series Features</td>
<td>5</td>
</tr>
<tr>
<td>Design and Construction</td>
<td>8</td>
</tr>
<tr>
<td>Hydraulic Power System</td>
<td>10</td>
</tr>
<tr>
<td>Controls and Operation</td>
<td>12</td>
</tr>
<tr>
<td>Optional Features and Accessories</td>
<td>16</td>
</tr>
<tr>
<td>Specifications and Dimensions</td>
<td>22</td>
</tr>
</tbody>
</table>

© PACIFIC PRESS & SHEAR COMPANY, 1973
A DIVISION OF BARRON, INC.
the Pacific Shear... industry's pacesetter for hydraulic plate shears.

With the introduction of the first Pacific hydraulic plate shear in 1953, the metalworking industry experienced a major breakthrough in controlled shearing. The new Pacific shear was unique in that all the shearing variables including rake angle, knife clearance, stroke and holdowns could be independently adjusted and controlled. In addition, the revolutionary shear had a completely different shearing action which was noiseless and shockless and seemed to "part" the metal at a uniform optimum speed. Moreover, the edge condition of the sheared metal was vastly improved over material cut on conventional shears.

Over the years, the Pacific hydraulic plate shear is still the industry's pacesetter. The R-Series shear of today is a modern, thoroughly tested and proven, sophisticated machine embodying all the advanced engineering and construction skills that can be designed into the product. As a result, the R-Series has the widest range of shearing capacity of any shear on the market — from steel to aluminum sheet to titanium. Its system of controls for separate and independent adjustment of each of the shearing parameters, together with the most rigid construction available, ensures accuracy and optimum edge condition time after time.

The most versatile, accurate and reliable shear you can buy is the pacesetting Pacific Hydraulic R-Series Shear.
standard features

- **Cylinders**: Heavy, cast, one-piece cylinders. Large area under pistons enables shock-free shearing.
- **Cylinder Mounting**: Integral key-type, mounted on large backing plates, interlocked to side housings.
- **True Centerline Loading**: Cylinder and bed connections are mounted accurately on side housing centerline, eliminating left-to-right deflection of side housings. Force is transmitted directly downward.
- **Holddown Beam**: Mounted between the cylinders and connected by large flanges. Provides additional rigidity and stability for capacity shearing operations.
- **Pistons**: Oil retaining surface of one-piece, cast pistons assures long rod packing life.
- **Piston/Ram Connection**: Provides a large bearing area with low stress concentration. Piston force is transmitted to ram through self-aligning spherical surface “pressure discs”. Pivot type suspension permits full rake adjustment with no binding of the slideways.
- **Back Gauge Indicator**: Direct reading indicator in 1/64 inch.
- **Adjustable Rake Angle** (Patented): Operator can change the rake in seconds to suit the material being sheared, or to minimize bow and twist when shearing narrow parts. Hydraulic system automatically maintains the selected rake angle regardless of the position or the thickness of material.
- **Holddowns**: Separated holddown pumps maintain constant tonnage throughout the cut. Separate holddown advance selection feature enables operator to hold and re-check material position prior to cut. Hardened steel holddown feet are pivoted to reduce marking of material. Extra cylinder on right end facilitates shearing of narrow pieces.
- **Rod Type Knife and Hold Down Guard**: Side gauge
- **Table**: Provides rigid, full length support for heavy plate. Equipped with dovetail slots for mounting of gauges and hand grooves for plate handling.
- **Ball Transfers**: Two rows of adjustable ball transfers staggered in shear table for ease of positioning plate.
- **Rigid Vee Bed Construction**: The strongest and most rigid structure to resist the tremendous forces of shearing. Main resisting member is on the diagonal to counteract the direction of cutting force.
- **Adjustable Knife Clearance** (Patented): Wedge type design enables operator to quickly and easily adjust proper knife clearance for thick plate or thin sheets. Conveniently located and provided with either direct reading dial or scale indicators, depending on shear model.
- **Portable Electric Foot Switch**: Two position, guarded foot switch on long, heavy neoprene cable gives operator full control of ram at all times.
NO IMPACT LOADS
Pacific's smooth hydraulic shearing action eliminates shock and impact loads.

HIGH SPEED HYDRAULIC SYSTEM
Low heat power unit is self-contained and mounted high between the side housings to provide maximum work area.

MODULAR STACKED VALVES
Minimizes piping and special manifolding.

10 MICRON OIL FILTRATION
Full-flow oil filter that filters out impurities to 10 microns. A visual indicator shows when "throw-away" replacement is necessary.

LARGE CAPACITY OIL RESERVOIR

TWO SPEED SHEARING (Patented)
An exclusive feature that allows the shear to proceed 50% faster on the advance stroke if the material is 2/3 or less the rated thickness.

WEDGE KEYS
Pre-loaded, wedge-type keys provide zero clearance between cylinders and side housings. Permits greater shear accuracy during operation.

RAM GUIDING SYSTEM
Rigid, extra-long, non-binding guide system allows full rake adjustment with gibs in perfect vertical alignment. Slide surfaces designed for high pressure grease lubrication. Running clearances are externally adjustable.

FULLBACK SYSTEM
Keeps ram guides in full contact with hardened and ground steel slideways while cut progresses.

STROKE ADJUSTMENT
Long, full power stroke is completely adjustable. Top and bottom stroke settings permit short stroke adjustments to cut only the length required.

OPERATING CONTROLS
All operating controls are conveniently located on right-hand end of shear. Can be easily set by the operator.

INCHING CONTROL
Operator has choice of inching for faster set-ups.

ADJUSTABLE RAM STIFFENER
May be easily adjusted for alignment of upper knife.

HYDRAULIC LIFT BACK GAUGE
A hydraulic cylinder automatically swings the entire gauge up out of the way during cut to eliminate wedging of material.

BACK GAUGE
Heavy duty powered back gauge with rigid one piece gauging surface.

PRE-SET LEVELING BUTTONS
Permanently mounted on side housings. Enables quick level check for slideway alignment.

NON-FIXED CYCLE
Ram may be returned to top at any point in the down stroke by releasing footswitch.
rigid construction reduces deflection and increases accuracy

The process of shearing heavy plate creates conditions and requirements that are unique to the design and construction of plate shears. One condition constitutes the cutting load traveling from one end of the shear to the other as the material is cut. This moving load requires a stiff, rigid and stable structure to resist torsional forces as well as vertical and horizontal forces that develop during the cut. Rigid construction is necessary to minimize deflection and maintain accuracy.

Every aspect of shearing technology has been carefully considered from design concept, through engineering to the finished product, assuring each R-Series of all the ruggedness, reliability and accuracy that can be built into a shear. As a result, every Pacific has the capability of accurately shearing a full range of material thickness, from very thin sheet to maximum capacity, with minimum distortion and optimum edge condition.

INTERLOCKED CONSTRUCTION

Heavy rolled steel plates are utilized for the ram, bed and extra deep side housings of the R-Series to provide the maximum rigidity and resistance to deflection that is so necessary for accuracy and optimum edge condition of the sheared metal. Main frame members are designed to assure that each R-Series more than adequately absorbs and uniformly distributes the tremendous forces inherent to plate shearing.

Interlocked construction is a further contribution to the extreme rigidity of the R-Series. The deep side housings are interlocked with the bed so that forces are exerted on parent metal throughout the frame. Cylinders are keyed to large backing plates which, in turn, are interlocked to the side housings to provide true centerline loading. Tapered, preloaded, wedge-type keys are set in place with the shear under full load to ensure "zero clearance" between these major components and to prevent any operational movement. Forces are transferred by means of keys and interlocks through parent metal to the side housings. The deep R-Series side housings provide maximum stiffness where it is needed, in the front-to-back direction.

RIGID VEE DESIGN

When a shear cuts metal, the forces exerted are not only vertical but also horizontal as the metal being sheared resists parting. To offset these forces, Pacific has designed the bed of the R-Series with its main resisting member on the diagonal to counteract the direction of the cutting force. This unique rigid vee design is a Pacific exclusive and is an important feature that provides maximum resistance to deflection for the lower knife. The success of the rigid vee bed design can best be demonstrated by the many plate shears built by Pacific with lengths of 30', and longer, where extreme rigidity is an absolute necessity in maintaining consistent knife clearance over the extra long shear length.
ADJUSTABLE RAM STIFFENER

The heavy-duty triangular ram stiffener of the R-Series is designed in a similar manner to the rigid vee bed design and serves to minimize deflection of the ram during shearing. The adjusting studs along the lower edge of the stiffener permit initial alignment of the upper knife. The rigid vee configuration of the R-Series ram stiffener also allows access to the back gauge and the rear area of the shear.

RAM GUIDING SYSTEM

The heavy-duty, non-binding guides of an R-Series maintain maximum contact with extra long, hardened steel slideways throughout the stroke. Pullbacks keep the ram guides in full contact with the slideways while the cut progresses. Pullbacks are designed to provide a constant load on the slideways and eliminate guide clearances, which could be added to the pre-set knife clearance during the cut. They also allow very close knife clearance settings for shearing thin materials without the risk of "crossing" the knives. Ram slide surfaces have been designed for high-pressure grease lubrication. Clearances can be easily adjusted externally. The pivot type guiding system of the R-Series allows rake angle adjustments without binding the gibs against the slideways. When the ram is tilted to change rake angle, spherical pressure discs transmit the force of the piston concentrically above the pivot point, while the gibs remain in perfect vertical alignment. Force is transmitted directly downward with no cocking action or horizontal movement of the piston against the packing.

2° SHEARING ANGLE

The knives used on R-Series Shears have large rectangular cross sections and four cutting edges for maximum life. The upper knife is placed at a two degree angle with relation to the table to concentrate the shearing force on the knife edge instead of dissipating the force across the flat width of the knife. This shearing angle also causes the knives to move away from one another after cutting to minimize the possibility of the knives scoring.

CYLINDER ASSEMBLY

The cylinders of an R-Series Shear are heavy cast, single-piece, domed-head cylinders that eliminate high stresses and potential oil leakage areas on the high pressure side of the cylinder. Bores are honed and polished to 15 micro-inches. The cylinders are double-acting, with a large area under the piston to provide shock-free shearing.

Pistons and rods are one-piece, wear-resistant castings, honed and polished to 10 microinches. Rods are bronze guided to ensure long life with minimum packing wear. The oil retaining rod surfaces are an aid to proper packing lubrication.
two-speed shearing with the industry's most advanced hydraulic system

COMPACT, HIGH SPEED HYDRAULIC SYSTEM

The latest and most advanced hydraulic technology is reflected in the functional design of every R-Series power unit. These units provide high speed performance with overload protection, two-speed shearing and many built in features that assure reliability and production efficiency.

The compact, self-contained power unit is mounted high between the side housings to allow maximum space for the back gauge and material handling. High volume, vane-type pumps are direct-mounted to the motor for trouble-free performance. The large capacity reservoir, together with Pacific's modular valve system, means cooler operation and assures trouble-free operation.

MODULAR STACKED VALVES

Because the valve system is the heart of a hydraulic shear, all valves on the R-Series are designed and built by Pacific to assure their operating characteristics of being completely compatible with the shear itself. Pacific valves, unlike most other commercial valves, provide improved accuracy and special characteristics necessary for two cylinder hydraulic shear design.

Pacific-built, heavy duty valves are specifically designed for long, rugged service with a minimum of maintenance. They are "stacked" in modular form to eliminate inter-connecting piping and to avoid the necessity of a massive, heat producing and heat retaining manifold block.

NON-OVERLOAD SYSTEM

Overloading of the shear due to higher tensile or over capacity material is prevented by the R-Series hydraulic relief valve system. And should the tonnage requirements
FORCE follows load for constant shearing speed.

TWO-SPEED SHEARING

Material less than 2/3 capacity

Material greater than 2/3 capacity

of a job exceed the shearing capacity, the ram will stop. Upon releasing the footswitch, the ram will return to the top of the stroke.

10 MICRON OIL FILTRATION

To assure trouble-free performance of the hydraulic system, every R-Series shear is equipped with a Pacific oil filter mounted on the tank top for easy inspection. Contaminants as small as 10 microns are removed from the oil. An indicator shows when to replace the throw-away element.

TWO-SPEED SHEARING (Patented)

The R-Series shear has, as standard, two advance speeds and a fast return speed. With Pacific’s exclusive two-speed shearing, the shear starts each cut in fast speed, which is approximately 50% faster than its normal shearing speed. If the shear encounters a shearing requirement of 2/3 or less its rated capacity, it will continue to make the cut in fast speed. If the shearing requirement is greater than 2/3 of capacity, the shear will then automatically shift down to its normal shearing speed for the cut. This is especially valuable to a customer who does not use the shear to its full rated capacity at all times. The reduced handling time for lighter material plus faster shearing time can be a time-saving benefit for numerous production jobs. A selector switch gives the operator a choice between normal and two speed operation.

UNIFORM SPEEDS

The R-Series hydraulic system automatically transfers force from one cylinder to the other as the cut progresses. During shearing the rake control valve automatically maintains the pre-set rake angle. The smooth, full power stroke is made at constant speed and provides a cushioned shearing action that is noiseless and shock-free. This is important for longer knife life.
the controllability of shearing variables provides optimum edge condition

Every R-Series shear features complete control of all the variables of shearing. Knife Clearance, Rake Angle, and Stroke Length can all be quickly and easily adjusted by the operator to accommodate the requirements of almost any shearing operation and assure maximum production efficiency. What is more, each of these adjustments can be made independently of the others. This enables the greatest possible flexibility for shearing the most diversified variety of materials on the same shear.

Material ranging from light gauge sheet through heavy plate; from mild steel through titanium — all can be sheared on a Pacific with accuracy and optimum edge condition of the sheared metal assured cut after cut by means of simplified adjustment controls.

KNIFE CLEARANCE ADJUSTMENT

The edge condition of the cut and the range of metal thickness that can be cut on the shear is directly related to knife clearance. Excessive clearance may produce a deformed and burred edge. Insufficient clearance can result in "secondary shear" of the edge. Depending on the subsequent use of the sheared part, either of these conditions may be undesirable. Optimum knife clearance setting can produce a clean, square edge that is usable in an "as is" condition.

The R-Series shear has the power and rigidity to shear its full range of material thickness without changing knife clearance. However, Pacific's patented knife clearance adjustment provides the operator with the means to adjust knife clearance for optimum settings specific to the thickness of the material being sheared. The clearance can be quickly adjusted for shearing extremely thin sheets or increased for shearing heavy plate — obtaining clean, square cuts on every part.

The convenient knife clearance adjustment is infinitely adjustable within its range and can be independently adjusted at each end of the shear. As standard, all models are equipped with the manual adjustment. Smaller shear models are provided with direct reading dial indicators and larger models with scale indicators. The adjustment consists of a wedge that is screwed in or out. This moves the table in or out in relation to the upper knife to close or open the clearance.

RAKE ANGLE ADJUSTMENT (Patented)

Pacific pioneered the first adjustable rake shear and has the most simple and most reliable unit available. Pacific's adjustable rake feature greatly simplifies the problem of correcting distortion of the part which may occur on some
shearing operations. Bow and twist on narrow drops can be minimized or practically eliminated by lowering the rake angle. Camber, caused by locked-in stresses within the metal itself, can sometimes be reduced by lowering the rake angle.

One of the principle advantages of the R-Series rake adjustment is that it is possible to change the rake angle independently of the knife clearance. These two important adjustments can then be set at optimum to allow the widest range of shearing potential possible with the operator in complete control of the cut. Because of this great flexibility, a greater range of metal thickness can be sheared. Lowering the rake angle and reducing the knife clearance permits cutting of very thin steel or ductile sheets. Increasing the rake angle to a higher slope permits the shearing of a wide range of extra heavy or extra hard material.

Unlike the average plate shear, the added tonnage and stroke built into a Pacific allows full length over capacity material to be cut at the maximum rake angle. A ½” R-Series, for example, can shear full length ¼” plate. Many plate shears, on the other hand, are restricted to less than full length over capacity shearing because the upper knife, at maximum rake, extends below the shear table, thereby reducing the shearing length.

The rake angle adjustment on the R-Series is simple to operate. The operator selects the desired rake angle (or blade slope) to suit the material being sheared. By pushing a button on the control box, the shear adjusts the upper knife automatically to the preselected rake angle without the necessity of mechanical adjustments. Once set, Pacific's hydraulic system automatically maintains the selected rake angle regardless of the thickness or position of the material being sheared. The built-in monitoring system instantly corrects any tendency to deviate from the pre-selected rake angle setting. This assures an extremely stable and accurate shearing operation.

STROKE ADJUSTMENT

Pacific's stroke control adjustment allows the operator to quickly adjust the cutting stroke length, and consequently the cycling speed of the shear. This, together with two-speed shearing capability, enables the Pacific shear to give optimum high speed operation.

Settings can be adjusted instantaneously by simplified slide-type stops conveniently mounted at the right end of the ram. Both top and bottom stroke settings are completely adjustable to allow short stroke operations at any point along the full length of the shear and to permit full length shearing at the maximum rake angle setting. This flexibility of stroke length adjustment allows precision slitting and notching operations.
POWERED BACK GAUGE
(Patented)
The heavy duty back gauge of an R-Series has been designed for rugged service and is unlike any available on other plate shears. It is equipped with a rigid one-piece stop extending across the full distance between the housings. The full length stop can also be used as a convenient knife changing fixture when removing the upper shear knife.

HYDRAULIC LIFT BACK GAUGE
(Patented)
When the cut is made, a hydraulic cylinder automatically pivots the entire back gauge unit up out of the way with every stroke, thereby eliminating wedging action by the drop-piece. The same hydraulic cylinder can hold the back gauge assembly up out of the way when not needed, such as when shearing pieces which are beyond the back gauge range. The diagram above illustrates the back gauge in both positions, in place and lifted up out of the way. Also shown is the extra heavy fabricated, adjustable ram stiffener which minimizes front-to-back deflection of the upper knife holder. Powered back gauges are standard on shears 12' and longer.

BACK GAUGE INDICATOR
The back gauge has two-speed push button controls with an indicator calibrated in 1/64" conveniently mounted on the front of the shear. The full stroke of the "IN" and "OUT" push buttons moves the back gauge in either direction at fast speed. Releasing the buttons to a half-way position reduces the speed to a creeping speed for accurate settings. Manual back gauges, standard on 6, 8 and 10' shears, have a handwheel adjustment and indicator that is mounted at the rear of the shear.

SIDE GAUGE
The heavy duty side gauge enables the squaring and positioning of the plate on the shear table prior to being sheared. Gauge may be mounted on either end of the shear table.

FRONT GAUGES
Easy to read, corrosion resistant scales are embedded in each end of the shear table for accurate gauging from the lower knife edge. Support arms can be attached at any point along the front face of the table. Dovetail slots in the center of the support arms coincide with dovetail slots in the table to allow for positioning of gauge blocks. Two support arms are standard on shears up to 14' in length. Four arms are standard on 16' and longer.
HYDRAULIC HOLDDOWNS
The Pacific holddown system allows the holddowns to be advanced independently of the shear knife. By setting the "holddown advance" switch, the operator can advance or release the holddowns and clamp the work without shearing. This is an important advantage when shearing to a scribed line since the material may be checked prior to making the cut.

The hydraulic holddowns of the R-Series shear are powered from the main power unit. In comparison to accumulator designs, which allow a reduced holddown force during shearing, the R-Series system has a separate holddown pump which provides constant holddown tonnage throughout the shearing cut.

When shearing, it is desirable to grip the work piece by as many holddowns as possible. An extra holddown cylinder on the right end accomplishes this purpose and assures that a minimum of two holddowns are always available for shearing narrow parts. Since the holddowns are independently operated they can easily hold two or more plates of different thickness for simultaneous shearing on the same stroke. Hardened steel holddown feet are pivoted to reduce marking of material.

BALL TRANSFERS
Two rows of ball transfers are standard on every R-Series shear. These are located in the shear table to facilitate the positioning of plate. Standard spacing is on 32" centers along the length of the shear table. 16" spacing and air actuated balls are available as optional extra features. Balls can be easily removed for clean out.

CONVENIENT RIGHT-HAND CONTROLS
Since R-Series shears are designed to shear in the right-to-left direction, the low end of the upper knife is on the right-hand end of the shear. Operating controls, therefore, are grouped in a convenient cluster on the right end where the majority of the shearing operations occur. Push buttons, selector switches, indicators, rake angle, knife clearance and stroke adjustments can all be very easily reached by the operator.

PORTABLE ELECTRIC FOOTSWITCH
A two-position portable footswitch, equipped with side guards and long electric cable, provides the flexibility of operating the shear from the operator's most convenient location.

When the footswitch is released, the ram automatically returns to its top position.

INCHING CONTROL
A selector switch is provided with every R-Series to permit the operator to "inch" the ram. The inching feature allows the ram to hold its position when the footswitch is released, thereby allowing the ram to be "inched" down in increments. This is an important advantage when installing knives and initially setting knife clearance.
Pacific offers high quality knives designed specifically for hydraulic shearing operations. Knives have large rectangular cross sections and four cutting edges for more regrinds and longer knife life. These are the most efficient blades furnished for shears since the cutting edges may be rotated and reground for maximum use. When necessary, they may be removed, re-ground and rotated again. Three grades are available: Grade I, Standard Tool Steel Knives for low production applications; Grade II, Intermediate Alloy shock resistant knives for most shearing applications; Grade III, High Carbon-High Alloy for special applications.
MOTOR STARTERS
Starters are of the magnetic, non-reversing, across-the-line type with overload and low voltage protection. Completely wired to the motor with heaters, push button station, control transformer, main circuit breaker, control power switch and fuses. All elements mounted and wired in a single main control box having a NEMA 12 (oil-tight) enclosure. The “start-stop” push buttons for the motor power unit are mounted on the main control box. Main motor circuit breakers are included; providing controls as per JIC Standards for General Purpose Machine Tools, EGP1-1967.

AUTOMATIC CENTRALIZED GREASE LUBRICATION SYSTEM
Grease lubrication is recommended for the heavy pressures of plate shearing. The automatic lubrication system is equipped with a timer to lubricate the slideways from a single station. Can be preset to automatically perform the lubricating job whenever necessary.

SQUARING ARMS
R-Series shears can be equipped with squaring arms for squaring plate for two consecutive cuts. An added feature is that the squaring arm may be mounted at either end of the shear or at any intermediate position. Included is an outboard support, steel scale, dovetail slot and one swing stop which can be positioned along the full length of the arm. A cantilevered squaring arm is also available. This is the same as the squaring arm but does not have an outboard support.

CUT LIGHTING
Cut lighting is a necessity for shearing to scribed lines or punch marks. A strong, intense light illuminates the immediate area directly on the cut line. Enables the operator to see the line of cut prior to shearing.
AIR OPERATED BALL TRANSFERS

Air activated ball transfers are strongly recommended for handling heavy plate due to the positive action of providing more height above the table than standard ball transfers. When positioning plate, the air operated ball transfers support the plate above the table top for ease in movement. When the holddowns are activated, the ball transfers recede into the table top leaving the plate firmly in position for shearing. These are supplied in two rows on 16" centers.

DEEP THROATS

For slitting wider parts deeper throats are available.

DUAL FOOTSWITCHES

A Pacific R-Series shear can be equipped with two footswitches for two man operation. A keyed selector switch allows operation by one or both footswitches. For dual operation, both footswitches must be depressed to advance the ram. Releasing either footswitch will instantly stop the ram. Releasing both footswitches returns the ram to the top of the stroke.

SLITTING ATTACHMENT

The deep throat and adjustable stroke of an R-Series makes it possible for slitting material longer than the length of the shear. The slitting gauge allows the progressive alignment of the plate. It consists of a stop mounted on a cantilevered arm extending beyond the end of the shear. The sheared edge of the plate rides against the stop to align the plate.
POWERED BACK GAUGE CONTROL & INDICATOR

POWERED KNIFE CLEARANCE ADJUSTMENT

POWERED BACK GAUGE

Powered back gauges are standard on shears 12' and longer. For smaller shears the addition of a powered front operated back gauge is a valuable labor saving device that can increase production efficiency. The powered back gauge is equipped with front mounted two speed push button controls, calibrated indicator and Pacific's patented hydraulic lift feature.

INCREASED RANGE FOR BACK GAUGES

The powered front operated back gauge can be supplied, with increased ranges in 6" increments.

SHEAR LOAD INDICATOR

The indicator shows the percentage of maximum shear capacity being used.

DISAPPEARING STOPS

Disappearing stops are a convenient and time saving feature that can be mounted in the slots of the table or the support arm for front gauging. The sheet or plate can be moved forward over the stops without restraint to allow for multiple gauging positions.

POWERED KNIFE CLEARANCE ADJUSTMENT

The powered knife clearance adjustment is a labor saving convenience for the operator of a large or very long shear. The adjustment is fitted with hydraulic cylinders that move the adjustment assembly, which in turn, moves the lower knife holder to its desired position.
INCREASED OPEN HEIGHT UNDER HOLDDOWNS

HOLDDOWN TONNAGE CONTROL

Enables the holddown tonnage to be adjusted within a range of 30% to 100% of capacity. Soft or polished surfaces, which would normally be marred by maximum holddown tonnage, can be protected. An adjustable valve and indicator are mounted on the control end of the shear for operator convenience.

PLATE TURN-OVER

Eliminates the time consuming problem of turning heavy plate. The operator, by lever control, activates a hydraulic cylinder to turn the plate over, for shearing the trailing edge. Support arms in the table elevate to meet the plate and lower it to the table top. Mounted to the front of the shear table with controls located at the right hand end of the table for operator convenience.

OIL COOLER

Under most conditions an oil cooler is not required for R-Series shears, however, special situations such as very high ambient temperatures or extreme high duty cycle operations may make it necessary for the addition of an oil cooler. Pacific's oil cooler is a water-cooled type equipped with a temperature control valve, piping and fittings, and is mounted on the power unit tank. Air cooled types are also available.
OIL HEATER
A 2500 watt external tank-mounted electrical heat system keeps oil temperature above operating minimums for starting up under very low ambient temperature conditions. The oil heater consists of insulation strip heaters mounted externally on the oil tank. Oil temperature is thermostatically controlled.

BALL STANDS
A time-saving feature to material handling. These are individual, free standing pipes with ball transfers mounted on the top. Mounting cups are provided as retainers for the ball transfers. Can be embedded in the floor for a permanent installation. Pipes are removable.

POWERED FRONT ROLLS
Powered front rolls simplify the positioning of heavy plate for shearing. Mounted on the front of the shear table, the hydraulically operated front rolls move the plate forward into position against the back gauge, preparatory to shearing. Dual powered rolls can also skewer the plate for multiple shearing. Controls are conveniently located on the right-hand end of the shear table.

BEVEL ATTACHMENT
The Pacific bevel attachment eliminates the excessive time and expense of beveling heavy plate by means of a special planer or torch. The attachment enables the plate to be clamped at a 30° angle to the table for bevel shearing. Moveable triangular wedges that hold the plate can be hydraulically positioned to accommodate variations in material width and to permit normal right angle shearing.
specifications & dimensions
<table>
<thead>
<tr>
<th>MODEL</th>
<th>Power Unit</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>F</th>
<th>G</th>
</tr>
</thead>
<tbody>
<tr>
<td>39010</td>
<td>1/4&quot; x 14&quot;</td>
<td>3/8&quot; x 16&quot;</td>
<td>1/2&quot; x 18&quot;</td>
<td>21&quot; x 18&quot;</td>
<td>72&quot; x 18&quot;</td>
<td>92&quot; x 18&quot;</td>
<td></td>
</tr>
<tr>
<td>25010</td>
<td>1/4&quot; x 16&quot;</td>
<td>3/8&quot; x 16&quot;</td>
<td>1/2&quot; x 18&quot;</td>
<td>21&quot; x 16&quot;</td>
<td>72&quot; x 18&quot;</td>
<td>92&quot; x 18&quot;</td>
<td></td>
</tr>
<tr>
<td>25015</td>
<td>1/4&quot; x 18&quot;</td>
<td>3/8&quot; x 18&quot;</td>
<td>1/2&quot; x 20&quot;</td>
<td>21&quot; x 18&quot;</td>
<td>72&quot; x 20&quot;</td>
<td>92&quot; x 20&quot;</td>
<td></td>
</tr>
<tr>
<td>375H10</td>
<td>1/4&quot; x 20&quot;</td>
<td>3/8&quot; x 20&quot;</td>
<td>1/2&quot; x 22&quot;</td>
<td>21&quot; x 20&quot;</td>
<td>72&quot; x 22&quot;</td>
<td>92&quot; x 22&quot;</td>
<td></td>
</tr>
<tr>
<td>500H10</td>
<td>1/4&quot; x 22&quot;</td>
<td>3/8&quot; x 22&quot;</td>
<td>1/2&quot; x 24&quot;</td>
<td>21&quot; x 22&quot;</td>
<td>72&quot; x 24&quot;</td>
<td>92&quot; x 24&quot;</td>
<td></td>
</tr>
</tbody>
</table>

* Based on sharp knives — optimum knife clearance.
** 18" throat depth standard on all models. Consult factory for "C," "D" and "E" dimensions for other throat depths.
*** Power unit will extend above top of cylinders on most models. If exact overall height is critical, consult factory.

1. Dimension does not include back gauge projection at rear.
2. Zero minimum rake standard on all models.
3. Consult factory for models, dimensions and specifications not shown.
4. Specifications and dimensions subject to change without notice.
the Pacific hydraulic production line:

PACIFIC HYDRAULIC K-SERIES PRESS BRAKES
100 thru 1000 ton capacities and larger, 6 to 40 feet in length.

PACIFIC HYDRAULIC J-SERIES PRESS BRAKES
40 thru 165 ton capacities. Each in three lengths from 6 to 12 feet.

PACIFIC HYDRAULIC R-SERIES SHEARS
1/4" thru 2" capacities, 6 to 40 feet in length.

PACIFIC HYDRAULIC B-SERIES SHEARS
1/4" thru 2/8" capacities. 8, 10 and 12 feet in length.

PACIFIC HYDRAULIC TWO-CYLINDER STRAIGHTSIDE PRESSES, MODEL D
150 thru 2000 ton capacities.

PACIFIC HYDRAULIC SINGLE CYLINDER STRAIGHTSIDE PRESSES, MODEL M
100 thru 1000 ton capacities.

DIES
A full line of thru-hardened steel dies are available for almost any application.

PACIFIC HYDRAULIC RAMDOZERS
50 thru 1000 ton capacities.

PACIFIC SELECT-A-FORM AUTOMATIC MULTIPLE GAUGING SYSTEMS
Enables automatic progressive forming of parts having different bend dimensions and bend angles. Standard and heavy duty models available.

PACIFIC HYDRAULIC BULLDOZERS
50 thru 1000 ton capacities.

PACIFIC PRESS & SHEAR COMPANY
A DIVISION OF MANRON, INC.

714 Walnut Street, Mt. Carmel, Ill. 62863, Phone (618) 262-8666 (Plant)
421 Pendleton Way, Oakland, Calif. 94621, Phone (415) 635-7900 (Headquarters)

Licensee: Built, sold and serviced in Europe by:
Ateliers HEUZE, MALEVEZ & SIMON Reunis, S.A.
5700 Auvelais, Belgium

Represented By:

LITHO IN U.S.A. CAT. NO. R5000-73 10M