

ACCUR SHEAR



TRUE TO CUT

Shearing machine

Standard Features

- ✓ Pendant control of TN2000.
- ✓ 36" (915mm) backgauge travel with automatic swing up backstop at full extension.
- ✓ 4- edged blades, top and bottom modified high carbon, high chrome.
- ✓ 3 position footswitch control.
- ✓ 1500mm squaring arm c/w steel rule with 1mm increments.
- ✓ Hand slots in table.
- ✓ Shadow light and line.
- ✓ Oil cooler.



TN2000C CNC System

- ✓ 10.2" LED Touch Screen
- ✓ Main Frequency: 1GHz
- ✓ Four-core Processon
- ✓ Ram: 256M
- ✓ Storage: 4G
- ✓ USB Interface: x1
- ✓ Automatic Calculation of Shear Width
- ✓ Automatic Calculation of Blade Clearance
- ✓ Automatic Backstop and Retreat
- ✓ 1 axis control as standard, 2 axes as option
- ✓ Up to 1000 steps for one product programming
- ✓ Up to 10000 products programming
- ✓ Automation access and robot linkage as option
- ✓ Metric/Inch Conversion
- ✓ Chinese/English Conversion



Basic functions

- ✓ Can store 10000 products.
- ✓ A single product can be programmed in 1000 steps.
- ✓ Cut count, maximum support 9999 steps.
- ✓ Actual value and target value positions are displayed simultaneously.
- ✓ Rear material button flip up.
- ✓ Continuous cutting function.
- ✓ Each axis can be manually moved.
- ✓ Retreat, selection of conveyor belt.
- ✓ Selection of Material Storage Location.
- ✓ Available in both Chinese and English languages.
- ✓ C i f t i b t t i d i i l t



1.Unique Hydra-Mechanical Rocker Arm Drive System

This unique design of the Accurshear, delivers the strength, power and rigidity of the guillotine system and provides the ease of blade clearance adjustment afforded by the swing beam design. The hydra-mechanical design utilizes two hydraulic cylinders, interconnected by a thick-walled torque tube, to provide the shearing force of the ram.

Like the guillotine design, the Accurshear provides a shearing motion through the material that allows the use of 4-edged blades and a 1-degree relief angle.

2.Ultra-Heavy Frame Structure

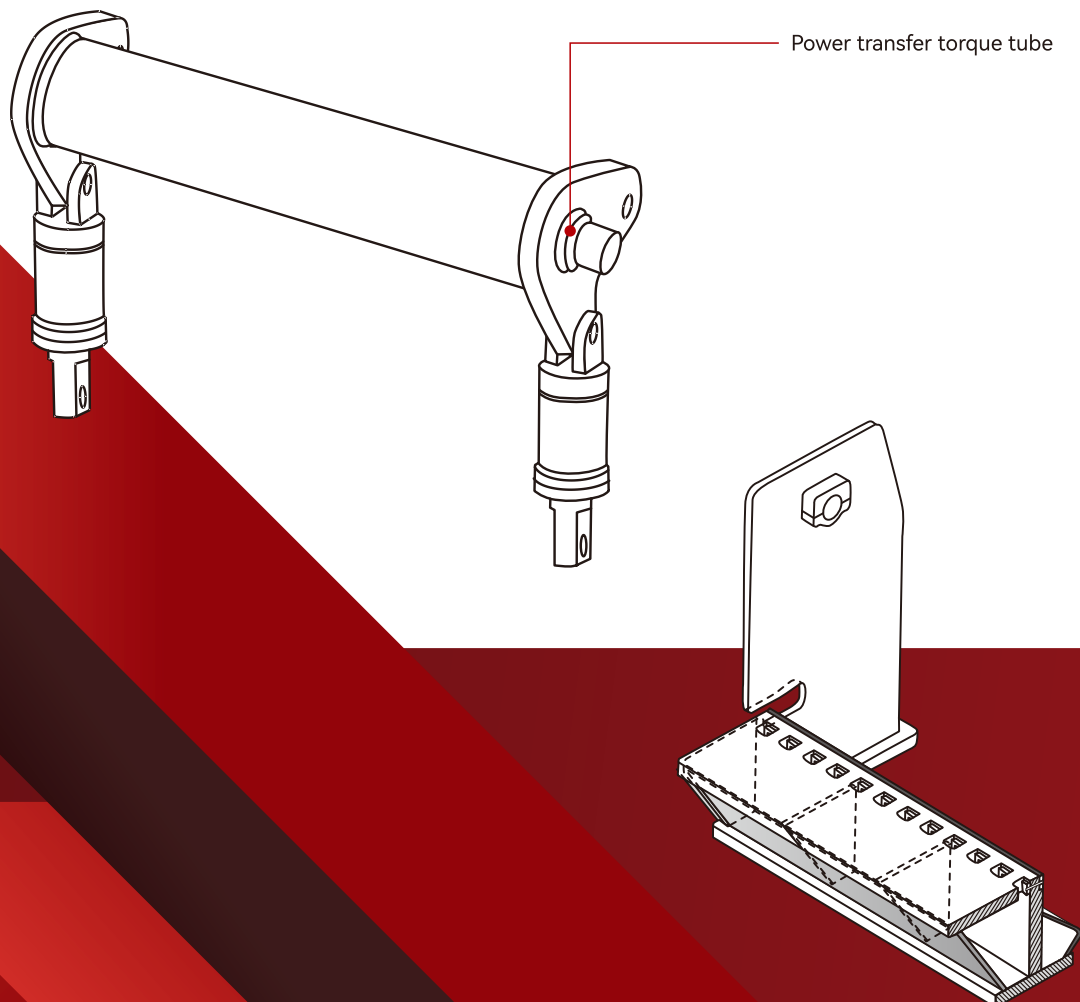
The Accurshear is designed with a fully welded boxed-in bed table structure that has a high torsion stiffness to balance the torsion load from the cutting force.

The maximum rigidity of the unique design, combined with the massive table design, ensures constant blade clearance during the shearing cycle. Blade clearances as low as 0.002" (0.05mm) can be maintained through the entire cut, producing quality shearing on light gauge material.

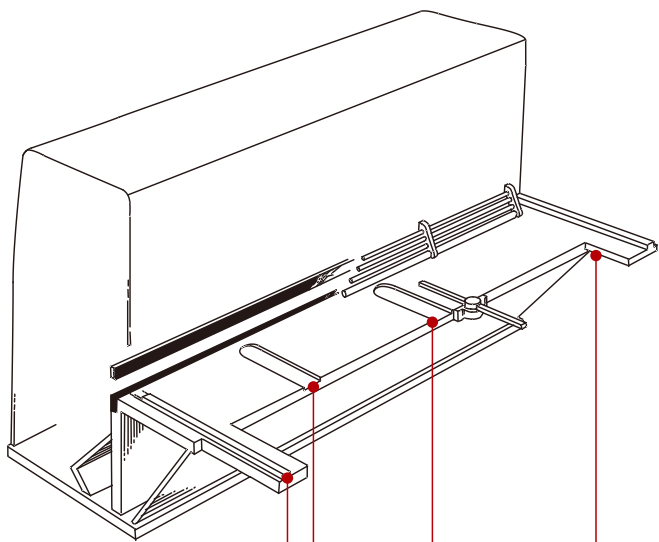
A machined table surface provides a generous, flat work area, and features finger wells to aid in lifting sheets.

3.Highest Shearing Rating Capacities

All Accurshear models are rated to shear structural quality steel with typical mechanical properties up to 520MPa tensile and 250MPa yield strengths.



Standard Features



Right hand squaring arm is optional

Recessed finger wells aid lifting sheets

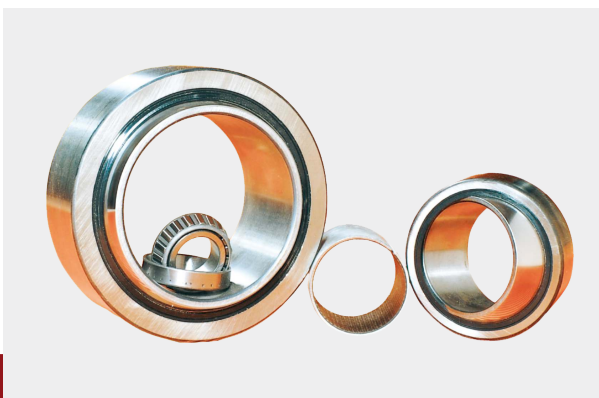
Squaring arm assists accurate cutting

Model	Rake Angle
6135	0.89°
6250	1.19°
6375	1.49°
6500	1.79°
6625	1.79°
6750	2.09°
61000	2.38°

4.Lowest Fixed Rake Angles

The direct cause of twisting and bowing in shearing process is related to the rake angle. The greater angle is, the greater deformation would be.

Accurshears are manufactured with extremely low rake angles to ensure optimum shearing quality with minimum distortions in all gauges of metal.



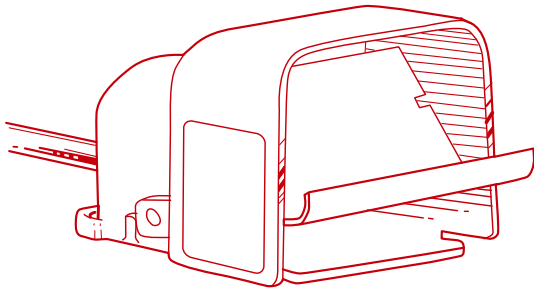
5.World-Class Bearings

For 50 years, the unique Accurshear design coupled with high precision, spherical, self-aligning, maintenance free bearings, zero clearance fitted on hard chrome shafts have served to shear millions of pieces of metals in all types of shops from precision sheet metal to heavy plate fabricators.



6.Quality Shearing Knives

Only the highest quality shear knives are used to provide maximum longevity and to minimize resharpening. Depending on the shear capacity, either high carbon, high chrome, or high carbon/shock resisting knives are used for shearing a wide range of metals such as aluminum, A36 plate, stainless, and titanium.



A footswitch is used to control movement of the ram cycle. The footswitch enables the operator to stop ram movement at any point up or down, and reverse travel.



Automatic swing-up backstop

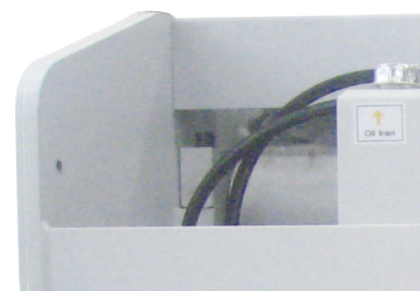
The Accurshear also features an automatic swing-up backstop. When the backstop is run back to the full travel distance it will mechanically lift up, enabling the shearing of longer pieces.



Heavy duty backgauge design

Strength, rigidity and accuracy combine to produce a solid backgauge with a 36" (915mm) travel. 48" (1220mm) travel as option.

High accuracies are achieved via precision ball screws, running on roller bearings, producing longevity and low friction.



Standard Features



Holddown Clamps

The First Class Hydraulic Components

The hydraulic reservoir fitted with motor, pump, valves and cooler is installed above the ram stiffener to be highly accessible. For safe operation, the shearing cycle is controlled by a double solenoid valve, while a single solenoid valve controls the holddown clamps. An automatic sequence valve will not allow the shear to cycle until holddown pressure is applied.

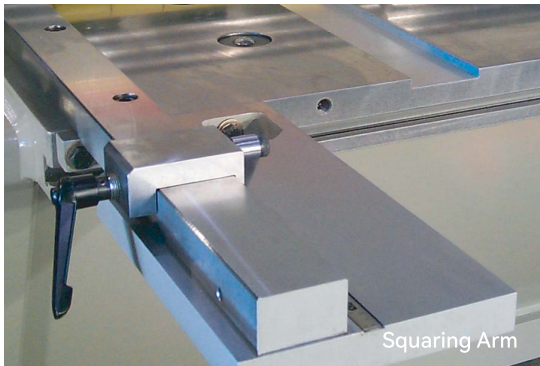
In addition, the system has a safety hydraulic relief valve in the manifold which protects the shear against overload. The valve is set at 3,000 or 4,000 p.s.i. and shunts hydraulic fluid to the tank if the knife is unable to shear the plate.

When the shear is running, the fluid is filtered through a suction screen inside the reservoir and through a micron filter mounted on the tank top giving continuous filtration. The two main hydraulic cylinders are made of honed seamless tubing, and mated with high quality chrome plated cylinder rods for minimum service.

Hydraulically powered holddown clamps, made of induction hardened and chrome plated cylinder rods, are spaced on 8" (203mm) centers along the entire cutting length of the shear.



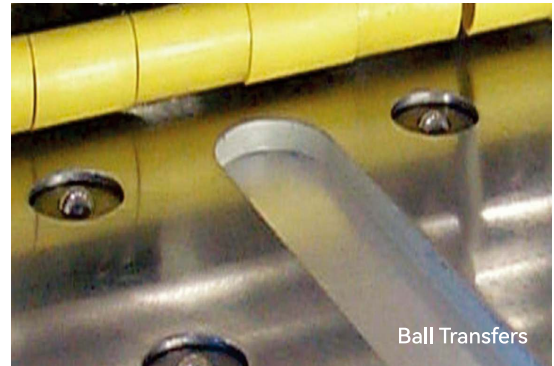
Standard Features



Squaring Arm

Squaring arm assists accurate cutting

Located on the left end of the table is the 1500mm squaring arm with a steel rule measuring in 1 mm. The squaring arm has a fine adjustment for squareness to the knife, which can be locked to regain the position if the arm is temporarily removed for slitting. An adjustable sliding stop is mounted on the squaring arm for front gauging short lengths.



Ball Transfers

Ball transfers

Ball transfers mounted in the table are a standard feature on all Accurshear models. They assist the movement of heavy materials over the table surface.



Recessed Scale

Quick blade adjustment

Blade clearance adjustment is an excellent and necessary feature to obtain high shearing quality.

Powered blade clearance adjustment is as standard.



Front Support Arms

Front support arms

These are available in 1500mm as standard. And simply mount to the front of the table. A steel ruler reading 1mm can also be recessed into the arms. For an additional charge, ball transfers may be mounted into the front arms, and the longer arms can be offered.

Pneumatic sheet support

A sheet support system is a recommended option for providing an accurate dimension when supporting lighter gauge material parallel with the shear table and gauge bar. Light gauge material will quickly droop once it is pushed very far from the shear knife edge and consequently, the dimension on the drop off piece will not be consistent with the backgauge readout.

Type (A) is recommended when support is necessary for very light gauge material. It consists of a table which rises parallel to the bottom of the backstop bar to support the material for accurate measurements. Once the holddowns clamp the metal, just prior to the shear cycle, the table automatically lowers itself, allowing the material to slide off. Once this is complete, the table rises to the up position again in preparation for the next cut.

Type (B) is recommended when shearing material 20 gauge and heavier. Material lighter than 20 gauge will still droop between the rows of arms resulting in an inaccurate backgauge measurement. This system incorporates three rows of arms which are in the up position prior to the shear cycle. They support the material parallel to the gauge bar for an accurate measurement.

The backgauge dimension determines the number of rows required to support the material. For an example, at the full 36" (915mm) backgauge setting, all three rows of support arms will be up. At the 15" (381mm) setting, only one row of arms will be engaged. Once the holddowns clamp the material, just prior to the shear cycle, the arms fall, allowing the material to slide off the table. After the cut is completed, the arms immediately rise to the up position in preparation for the next cut. Either support system can be turned on or off at any time by using the select switch on the control console.

Optional Features



Type B sheet Support



Type A sheet Support



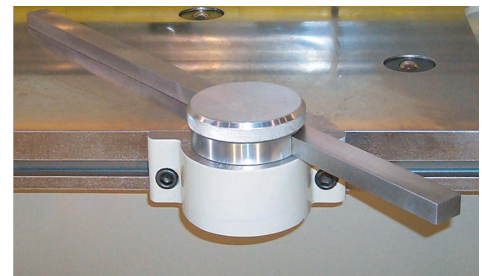
CNC Front Gauging System

The system is equipped with servo motor, precise ball screw, linear guides and pneumatic clamps.

- ✓ Positioning Accuracy: $\pm 0.10\text{mm}$
- ✓ Feeding Speed: 450mm/s
- ✓ Stroke: 2500/3000/3500mm
- ✓ Qty.of Clamps: 3 or 4
- ✓ Pressure of Air-supply: 0.6mpa
- ✓ Customized design for big machines



Optional Features



Protractor allows specific angle cuts

The protractor simply bolts to the face of the table and can be positioned anywhere along its length. This versatility greatly assists in accurately cutting specific angles. It also serves as a mobile squaring arm extending blade life by using full blade length for narrow stock shearing.



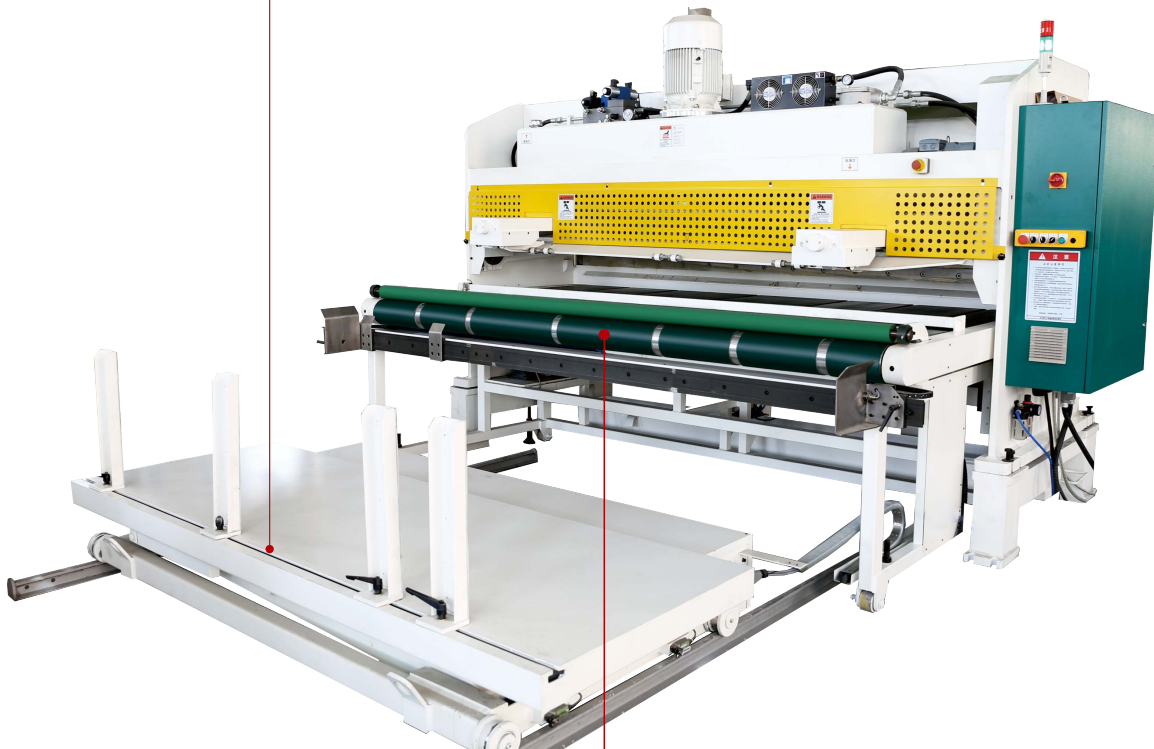
Rear Conveyor and Stacker System

Operator Efficiency

It is estimated that material handling consumes up to 90% of a shear operator's time. The Accurshear conveyor / stacker helps to eliminate much of this time by efficiently separating the trim cuts from the finished pieces, and then stacking them neatly at the rear of the machine. The payback time on this system is fast. Take a moment and consider some of the many benefits described below.

Stacker

- ✓ Eliminates the need for a person behind the shear to do the stacking
- ✓ Stacks the material neatly for removal by an overhead crane, fork truck or pallet jack



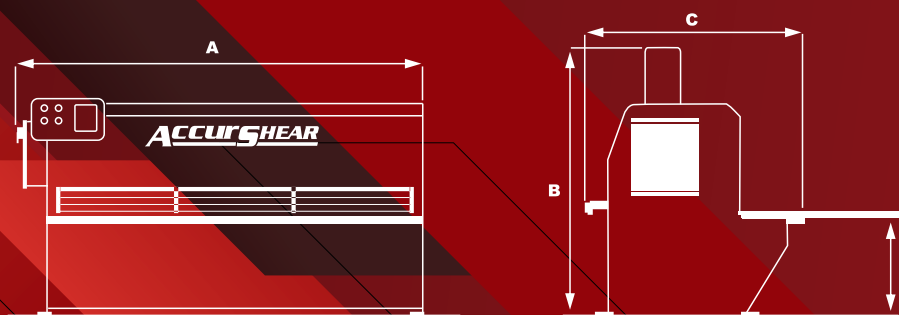
Conveyor

- ✓ Provides safer working conditions for operators and helpers
- ✓ Eliminates production slowdown due to fatigue
- ✓ Reduces backgauge damage from cut material
- ✓ The conveyor supports material between the bed and the backgauge by pneumatic cylinders at the shear table level. As the shear begins to stroke, the material support arms drop out of the way, allowing the sheared material to fall on to the conveyor belts. After the material moves out of the shear housing, the support arms return to the up position.

Rear Conveyor and Stacker System

Model Number	Capacity (mm)	Cutting Length (mm)	Knife Size (Inches)	Rake Angle (Degrees)	Cycles Per Minute		Number Of Hold Downs	Holding Force (Kg)	Back Gauge Travel (mm)	Main Motor (Kw)	Overall Dimensions				Approx Weight (Kg)
					Full Stroke (Per Min)	Short Stroke (Per Min)					LengthA (mm)	heightB (mm)	widthC (mm)	Table Height (mm)	
61354	4.00	1200	1×3×52	0.89°	54	70	7	4000	915	7.5	2040	2065	1900	813	3700
61355	4.00	1600	1×3×68	0.89°	45	66	9	5100	915	7.5	2440	2065	2095	813	4200
61356	4.00	1830	1×3×76	0.89°	40	64	10	5700	915	7.5	2590	2065	2095	813	4400
61358	4.00	2500	1×3×100	0.89°	32	60	13	7400	915	7.5	3290	2065	2145	813	5500
613510	4.00	3050	1×3×124	0.89°	28	58	16	9100	915	7.5	3800	2090	2170	813	6400
613514	4.00	4000	1×3×164	0.89°	23	52	21	12000	915	7.5	4820	2090	2170	813	9100
62504	6.35	1200	1×3×52	1.19°	42	64	7	5400	915	11	2050	2250	2020	813	3800
62506	6.35	1830	1×3×76	1.19°	35	60	10	7700	915	11	2655	2145	2095	813	5000
62508	6.35	2500	1×3×100	1.19°	30	56	13	10000	915	11	3290	2130	2145	813	6800
625010	6.35	3050	1×3×124	1.19°	26	52	16	12300	915	11	3800	2130	2170	813	7700
625014	6.35	4060	1×3×164	1.19°	21	48	21	16100	915	11	4830	2210	2170	838	12000
625016	6.35	5000	1×3×200	1.19°	18	45	25	19200	915	11	5750	2220	2350	838	16500
625020	6.35	6000	1×3×240	1.19°	11	35	30	23100	915	11	6780	2420	2400	838	23400
63755	10.0	1600	1×3×68	1.49°	25	45	9	8100	915	22	2480	2375	2150	813	6600
63756	10.0	1830	1×3×76	1.49°	23	44	10	9100	915	22	2680	2375	2150	813	7000
63758	10.0	2500	1×3×100	1.49°	20	42	13	11800	915	22	3320	2410	2170	813	8500
637510	10.0	3050	1×3×124	1.49°	17	40	16	14500	915	22	3840	2410	2220	813	10600
637514	10.0	4270	1×3×172	1.49°	13	33	22	20000	915	22	5080	2480	2350	838	16800
637516	10.0	5000	1×3×200	1.49°	11	29	25	22700	915	22	5790	2500	2400	863	20500
637520	10.0	6000	1×3×248	1.49°	8	22	31	28200	915	22	7030	2580	2450	914	30000
650008	13.0	2500	1×4×100	1.79°	17	37	13	14500	915	30	3350	2510	2235	863	11900
650010	13.0	3050	1×4×124	1.79°	15	35	16	18200	915	30	3860	2510	2320	863	13200
650014	13.0	4270	1×4×172	1.79°	11	32	22	25500	915	30	5180	2510	2400	863	20500
650016	13.0	5000	1×4×200	1.79°	9	32	25	28200	915	30	5900	2630	2460	914	26500
650020	13.0	6000	1×4×248	1.79°	7	29	31	35500	915	30	7040	2795	2460	914	35000
66258	16.0	2500	1.125×5×102	1.79°	14	27	13	23400	915	37	3560	2660	2310	914	15800
662510	16.0	3050	1.125×5×124	1.79°	12	26	16	28800	915	37	4030	2660	2350	914	18800
662514	16.0	4270	1.125×5×172	1.79°	9	24	22	39600	915	37	5290	2810	2460	938	26000
662516	16.0	5000	1.125×5×200	1.79°	7	23	25	45000	915	37	6010	2900	2490	938	31000
662520	16.0	6100	1.125×5×240	1.79°	6	21	31	54600	915	37	7230	2980	2590	965	43200
67508	20.0	2500	1.125×5.5×102	2.38°	11	21	13	28100	915	45	3560	2810	2440	914	16500
675010	20.0	3050	1.125×5.5×124	2.38°	9	21	16	34600	915	45	4120	2810	2340	914	20600
675014	20.0	4270	1.125×5.5×172	2.38°	7	20	22	47600	915	45	5340	2950	2460	965	29500
675016	20.0	5000	1.125×5.5×200	2.38°	6	19	25	54200	915	45	6120	2980	2490	965	35500
675020	20.0	6000	1.125×5.5×240	2.38°	5	18	31	67100	915	45	7340	3050	2590	990	52300
610008	25.0	2500	1.50×5.5×102	2.98°	5	12	13	36800	915	55	3600	2980	2740	965	26000
6100010	25.0	3050	1.50×5.5×125	2.98°	4.5	10	16	45300	915	55	4100	3020	2790	965	32600
6100016	25.0	5000	1.50×5.5×201	2.98°	3.5	9	25	57500	915	55	6230	3080	2840	990	54500

NOTE: Specifications are subject to change without notice.



Solutions of Shearing Automation



Automatic loading and feeding system



Conveyor, Unloading and Stacker system



Accurshear Shearing Center

Accurshear shearing center is the very powerful and flexible shearing system in the industry, which is unique designed by Accurpress to meet the various shearing application like strip shearing, angle shearing and scrap shearing so on. This system is not only integrated with the smart automation, but also can reach the top accuracy to satisfy the very strict laser welding requirements.

Global market distribution



U.S.A., Canada, Mexico, China, India, Russia, Japan, Korea, Singapore, Malaysia, Vietnam, Australia...

Partnership for mutual development





Accurpress uses the advanced machining centers like FPT, MAZAK, DMG, DROOP & REIN to produce the parts and the frames. These high precise and high performance machines can ensure Accurpress every machine to get good accuracy and quality.





Accurpress (Suzhou) Machinery Co.,Ltd

Address: No.1 Aike Road, Shaxi Industrial Park, Taicang District,
Jiangsu Province 215421 PR. China

Tel: +86-(0) 512 53212588 53375686 Fax: +86-(0) 51253223910

Sales Hotline: 4009002117

Service Hotline: 4008563118

Web: www.accurpress-china.com