# **KRRASS**<sup>®</sup>

## Hydraulic Shearing Machine QC12K-12x3200



### **Main Features:**

1. Streamlined design originated from EU (European Union), using overall frame welding and annealing treatment.

2. Germany Rexroth integrated hydraulic system, hydraulic drive, stable and reliable, integrated hydraulic system design, effectively reduce the hydraulic oil leakage problems.

3. Hydraulic swing beam shear is one kind of equipment through swinging the upper blade to shear plate, smaller shear angle, reducing distortion, improving shearing quality.

4. Motor adjusts the Backgauge through high precision ball screw, frequency convertor controls the position to prevent horizontal swinging.

Light align device, convenient for manual operation, pressure cylinder with built-in spring mechanism and completed with special material gasket under bottom end in case generating imprint on aluminum or other sensitive materials.

5. Made by high-quality alloy tool steel, the machine can meet the impacting load and high wear resistance requirements when working.

Light and practical suspension arm, reference man-machine engineering design, easy to operate the numerical control interface, high precision and more comfortable.

6. The worktable adopts the rolling steel ball to reduce the frictional resistance to protect the surface of workpieces, the novel protective devices all in line with the safety specifications, protects the operator' s personal safety, ingenious design, and petty material cutting can be done easily.

7. Vertical alignment of the front bracket and front positioning device ensure the cutting accuracy, easy operation, practical and efficient.

8. Rapid adjustment mechanism of Blade clearance, easy and quick stepless adjustment.

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## WHY BUY A KRRASS BETTER CUTTING SYSTEM?

> We are a true technological partner.

We recommend balanced solutions to our client; solutions based on a realistic needs analysis.

> We are CNC machines specialists. We offer an efficient and proven working process.

> As sheet metal machinery pioneers, we have more than a decade of experience and installations.

KRRASS <sup>®</sup>Smart Series swing beam shears with its high technology standards and design, we also have reduced the cutting angle to achieve straight precision and minimum twist tolerance. these highly accurate swing-cut shears are precisely coordinated with your needs and demands and add value to your company.

## **MACHINE BLOCK:**

KRRASS<sup>®</sup> Shears features a rigid frame for min deflection under the load. The frame steels are German origin and designed using SOLIDWORKS 3D programming and made with quality steel Improved Q235 using the latest technology.

### Feature:

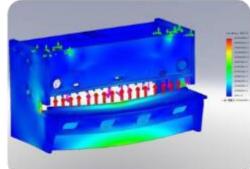
•The machine welding is made by welding aparatus and welding robots.

•After the welding, we make stress relief process by vibration system.

•After the stress relief process machine frame goes to CNC 5 axes machining centers for accuracy.

•All reference surfaces and connection holesare machined.

• By all this processes machine frame sensivity is protected for a long life time.





### **SHEARING PROCESS:**



Schneider Electrics - France



Sunny Oil Pump-GermanyUSA



**KRRASS** Pedal switch



Backgauge use Ball Scrwe



Siemens-Wannan Motor



Bosch Rexroth Valve -Germany



#### Working Table



Back safety net

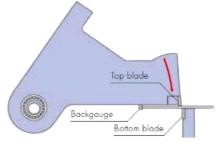


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### **SHEARING PROCESS:**

#### Perfect design in every aspect;

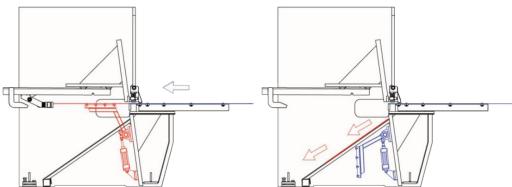
By To perform a perfect KRRASS<sup>®</sup> shearing you need a perfect swing cut that minimizes the effects that take place in the metal sheet during cutting action due to its inner composition, its accumulated inner stresses, its geometry. These natural effects, if not corrected and compensated, become defects in your sheet metal products, reducing their quality. Common shearing effects are: the torsion effect, the straightness effect, the bending effect and the cut edge defect.



## **PNEUMATIC SHEET SUPPORT SYSTEM(OPTIONAL):**

#### Lever Type Sheet Support

Avoids hanging down the wide and thin sheets via pneumatic arms support and provides more precise cuts



## NC CONTROL UNIT:

KRRASS<sup>®</sup> has chosen the very powerful Estun E21 NC System, which has been specially designed for cutting.Some of the features are:

### ESTUN E21s NC Control Unit:

- Wide, bright, colorful to program easily
- Easy control pages Bright LCD screen
- Back / front gauge control
- Retract function
- Stroke length limitation
- Manual movement of all axes
- Sheet thickness measurement
- Contextual help and warning pup-up.
- •Complete part programming in seconds.



## **Specification Parameters:**

No.	Name	Configuration Parameter		12x3200
1-	Max Cutting Thickness	<450N/mm2	mm	12
		<700N/mm2	mm	8
2-	Max Cutting Length	(A)	mm	3200
3-	Throat Depth	mm		300
4-	Cutting Angle	°(Degree)		2°
5-	Blade Length	mm.		3300
6-	Cutting Speed	cuts/min		9~11
_	Backgauge Specification	Travel	mm	600
7-		Speed	mm / sec	180
8-	Front Holder Quantity	Number	Pcs.	3
0-		Length	mm	800
9-	Motor Power	Kw		18. 5
10-	Oil Tank Capacity	L		500
11-	Length	(A)	mm	3880
12-	Width	(B)	mm	2150
13-	Height	(H)	mm	2000
14-	Weight	Кд		10800

## Standard Configuration List:

No.0	Accessory Name	Model / Manufacturer	Other	
1-	NC System	E21s NC System Estun		
2-	Electrics	Germany Schneider Electric	Travel switch & Limit switch	
3-	Main Motor	Siemens Motor - Germany/wANNAN CHINA		
4-	Backgauge, Timing Belt, Timing Pulley	Taiwan	Positioning controlGuaranteed	
5-	Frequency Converter	JRACDRIVE	Precision	
6-	Foot Switch	KACON - South Korea		
7-	Hydraulic System	Bosch Rexroth - Germany		
8-	Oil Pump	Sunny - USA		
9-	Sealing Ring	PARKER - America/NOK-Japan		
10-	Tube Connector	EMB - Germany		
11-	Front Safety Guard	Produced by KRRASS		
12-	Back Safety Guard	Produced by KRRASS		
13-	Back Blanking Plate	Produced by KRRASS		
14-	Backgauge	Ball Screw HIWIN -Taiwan		