

## HGR - Excellence in vertical cut

A unique system providing the best cut on the market.



## HGR VERTICAL CUT

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**dm**  
DELAHENTY  
MACHINERY

MACHINE TOOL MERCHANTS SINCE 1964

**RICO**<sup>®</sup>  
*Precision Ideas*

*HGR hydraulic shears are vertical cutting machines in which the blade holder is supported on bearing along its entire length.*

*The system enables the user to change the corresponding angle as a function of plate thickness, performance unavailable when using swing beam cut machinery provided with fixed angle.*

**HGR is the best  
guarantee of  
quality**



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**ADVANTAGES**

/ Featuring a properly designed welded monoblock frame, this system distributes the load homogeneously by the structure and eliminates vibration during the cutting process without the need to be fixed to the ground;

/ The variable angle is vital to reduce the "helix" effect of the plate;

/ Requires very little maintenance due to the fact that system operates with loads distributed on bearings;

/ Durability: mechanical and hydraulic operating principles guarantees unequalled durability when compared with other conventional cutting systems.



*Precision, Versatility and Productivity*

**HOW DOES HGR MAKE A DIFFERENCE?**



**/ VERTICAL CUT: BLADE HOLDER SUPPORTED ON BEARINGS**  
- This system ensures the homogeneous distribution of the load along the entire length of the machine, resulting in a smooth cut, free of vibration.



**/ ANGLE VARIATION : EXTRA VERSATILITY**  
- As a means of minimising the "helix" effect, the HGR guillotine allows the corresponding angle variation as a function of the plate thickness. This variation is performed automatically.

**/ ENERGY EFFICIENCY: EFFECTIVE SAVINGS**  
- *Standby Function*: the energy saving function is activated automatically whenever the machine is not working at least during 5 consecutive minutes, even if it is being programmed.



**/ RAE SYSTEM:**  
- While cutting, back gauge retracts automatically preventing collision with the plate.



**RANGE**

HGR is fully configurable following the customer requirements.

All versions of the HGR range guarantee the same mechanical and uniform performance.

Range HRG					
Capacity \ Length	2050	2550	3050	4050	6100
4 mm	•	•	•	•	•
6 mm	•	•	•	•	•
8 mm	•	•	•	•	•
10 mm	••	••	•	•	•
13 mm	••	••	•	•	•
16 mm			•	•	••
20 mm			•	•	••
25 mm			•		
30 mm			••		

- Standard equipment
- Upon order

**/ AFTER-SALE SERVICE**

RICO's policy is based on an accurate selection of its components in accordance with the huge experience acquired over the years. All the company's components are certified in accordance with European Standards. RICO enriches its service by means of quality and proximity to the customer. The competence and experience acquired as manufacturer are key factors for the solutions provided and results achieved.

Being RICO's customer is to have a service of excellence on previous and after-sale counseling and support. We believe that technical assistance is vital to the best equipment performance and, as such, we decided to provide free lifelong training to all our customers since 2007.

We guarantee immediate intervention for all emergencies, both regarding mechanical failure as well as training or clarification of doubts. We employ highly skilled and experienced technicians to provide customers with the best advice, searching for the best metal plate cutting and shaping solutions. We provide our customers with a qualified technical service, working in line with the following goals:

- Problems solution at the first contact;
- Quick answer;
- Assured quality.



The HGR hydraulic shears are a vertical cutting machine in which the blade holder is supported on bearings along the entire length of the machine.

This system enables the user to change the corresponding angle as a function of the plate thickness, performance unavailable when using swing beam cut machinery with a fixed angle.





STANDARD EQUIPMENT



- / Vertical cut
- / Variable cutting angle
- / CNC Elgo P40 control panel
- / Back gauge equipped with ball screws and linear guides
- / Retractable back gauge
- / Variable cutting length
- / 1000 mm squaring arm
- / Frontal LED lighting
- / Hold down jacks performing progressive load, provided with Teflon tip
- / Clearance mechanism between blades allowing easy regulation
- / RAE system: automatic retraction of the back gauge during the cutting process
- / Lighting cutting line
- / Continuous or cycle-by-cycle cut
- / Independent ramming (*pre-selected*)
- / Front table with ball joints
- / Hour counter
- / Rear cover with photoelectric barriers (*Category IV*)
- / Hanging swivel control panel
- / Easy purge system for the hydraulic circuit
- / Standby function

Control panel

LED lighting

Squaring arm support





Simple support

FSE System

Tilting front cover

**OPTIONAL EQUIPMENT**

. Controls

		ELGO P40	ELGO P40T	Cybelec Cybtouch 6G	DELEM DAC-360
					
Program capacity		500 lines <i>Example: 20 programs with 25 lines</i>	1000 lines <i>Example: 50 programs with 20 lines</i>	Unlimited programs	100
Lines per program		-	-	24	25
Screen		120 x 80 Pixels	5,7" TFT TOUCH	5,7" CRT 640x840	4.7" LCD
Touch Screen		X	✓	✓	X
List of materials		✓	✓	✓	✓
Cut counter		✓	✓	✓	✓
Programmable	Retraction	✓	✓	✓	✓
	Pressure	X	○	○	○
	Length	✓	✓	✓	✓
Control of	Pneumatic table	X	✓	✓	X
	Angle	✓	✓	✓	✓
	Retraction of Blades	X	○	✓	✓

✓ Yes X No - Standard ○ Optional


. Rear plate support table and extraction systems

<p><b>MAC1</b></p> <ul style="list-style-type: none"> <li>- Pneumatic sheet support with automatic programmed speed;</li> <li>- Swing movement from the plate extraction ramp.</li> </ul>	
<p><b>MAC2</b></p> <ul style="list-style-type: none"> <li>- Pneumatic sheet support with automatic programmed speed;</li> <li>- Several cylinders installed in back gauge;</li> <li>- Linear movement parallel to the sheet to be cut.</li> </ul>	
<p><b>FSE</b></p> <ul style="list-style-type: none"> <li>- Front sheet extraction system up to 450 mm in length;</li> <li>- The FSE system can only be used with the MAC 2 sheet support;</li> <li>- Includes an extraction drawer.</li> </ul>	
<p><b>MAC3</b></p> <ul style="list-style-type: none"> <li>- Pneumatic sheet support with automatic programmed speed;</li> <li>- Vertical linear movement, perpendicular to the sheet to be cut;</li> <li>- Sheet extraction table with conveyor belts with 3 operating modes;</li> <li>- Sheet separation system.</li> </ul>	
<p><b>MACX</b></p> <ul style="list-style-type: none"> <li>- Pneumatic sheet support with automatic programmed speed;</li> <li>- Dual vertical and swing movement;</li> <li>- Guarantees the full support of the sheet during the cutting process.</li> </ul>	





. Back gauges

<p><b>BGS</b></p> <ul style="list-style-type: none"> <li>AC motor</li> <li>Ball screws</li> <li>Belt transmission</li> <li>Speed: 70 mm/s</li> <li>Accuracy: +/- 0.1 mm</li> </ul>	
<p><b>BGA</b></p> <ul style="list-style-type: none"> <li>Brushless servo motor</li> <li>Ball screws</li> <li>Belt transmission</li> <li>Speed: 250 mm/s</li> <li>Accuracy: +/- 0.05 mm</li> </ul>	



**HGR, incomparable performance**

*The frame of the HGR hydraulic guillotine is manufactured featuring a properly designed welded monoblock frame calculated using finite element method.*

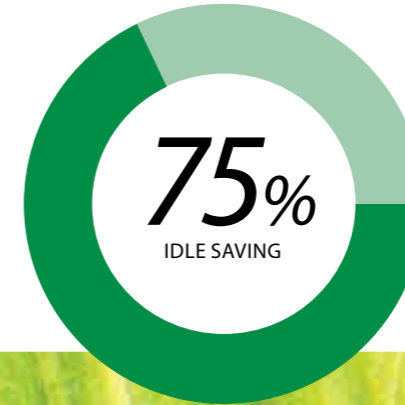
. Other optional parts

<p><b>Tilting frontal protection</b></p>	
<p><b>Laser cutting line</b></p>	



**RICO GREEN**

RICO promotes a friendly environmental policy, and, as such, all our equipment features the **Standby Function**. This function leads to the automatic stop of the power after 5 consecutive minutes of inactivity. **Standby Function** ensures an effective economy of energy on an automatic basis.

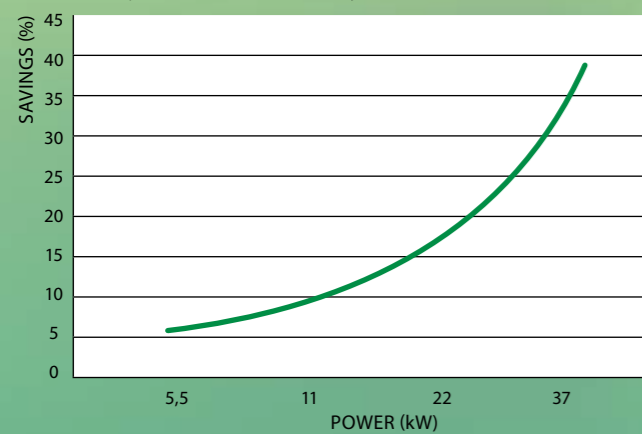


# RICO GREEN, Integrated Nature

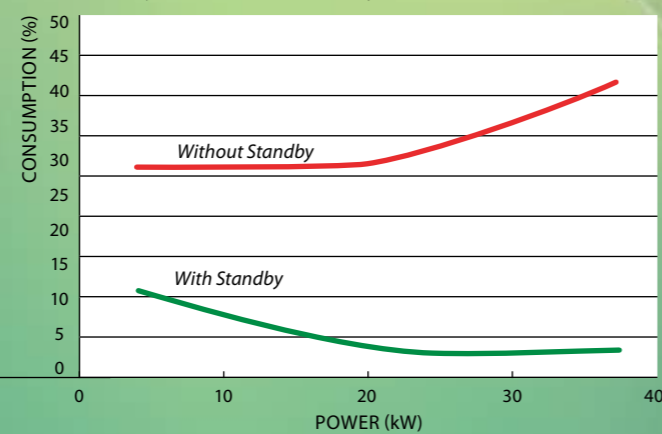
*Developing in line  
with sustainability and  
environmental concern*



Energy savings with Standby itaking into account the power



Energy savings with Standby itaking into account the power





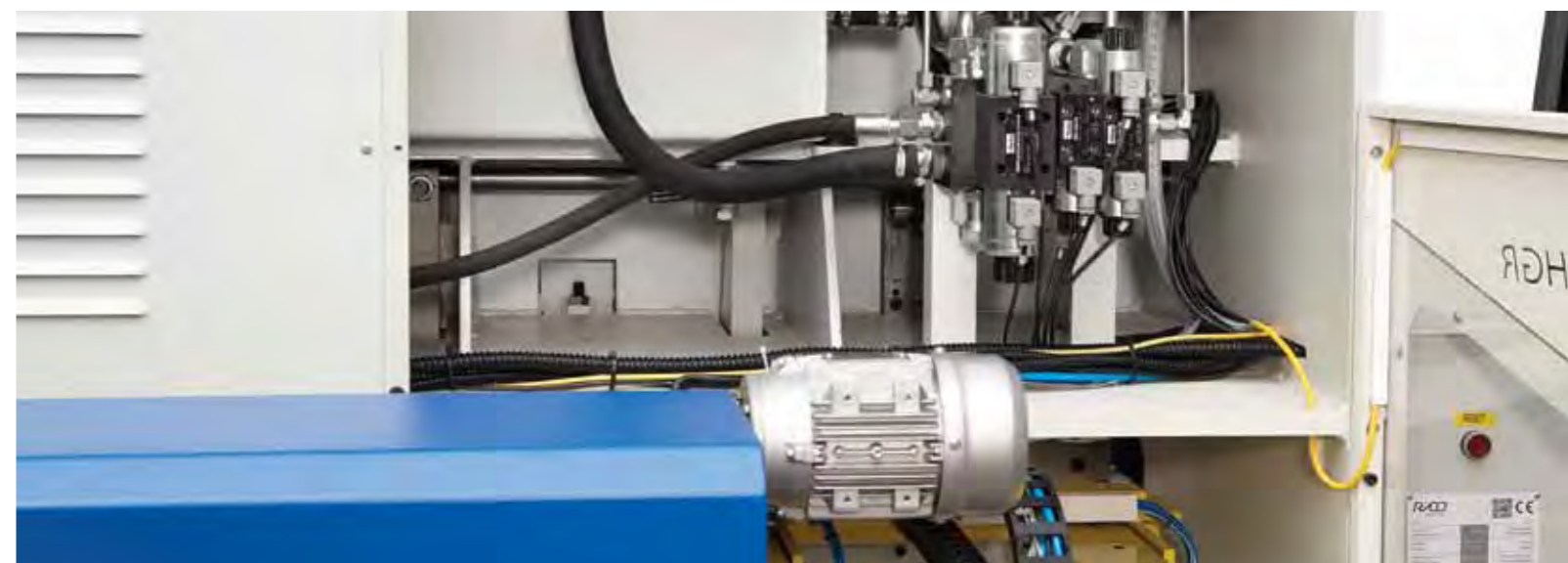
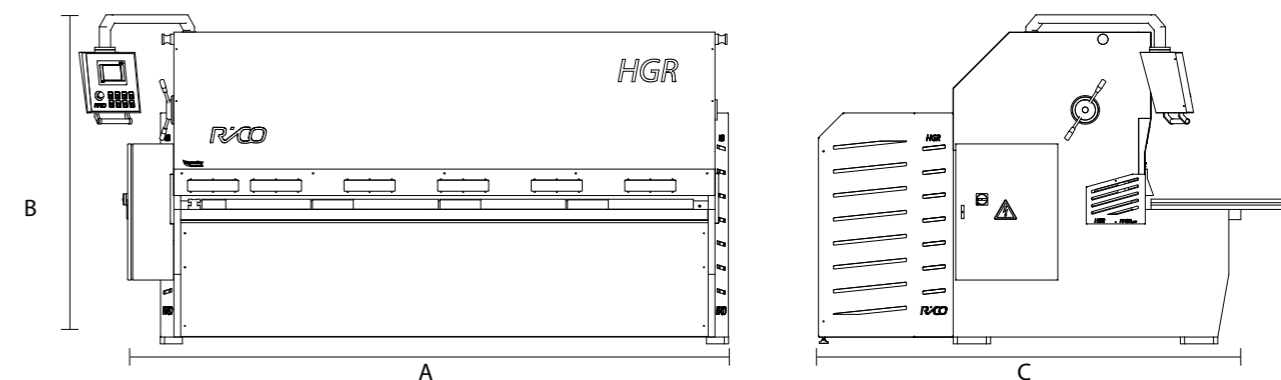


*HGR - Model of excellence  
for a perfect cut and  
without vibration*



**TECHNICAL SPECIFICATIONS**

Model	Length mm	Thickness		Rake Angle Degrees	Strokes by Min		Hold Down Jacks qt	Back Gauge Stroke mm	Throat Depth mm	Motor Power kW	Oil Capacity Lts	Dimensions			Aprox. Weight kg	
		Steel (45 Kg/mm <sup>2</sup> )	Stainless Steel (70 Kg/mm <sup>2</sup> )		Angle >	Angle <						Total Length (A)	Total Height (B)	Total Width (C)		
		mm	mm		Un	Un						mm	mm	mm		
HGR 204	2050	4	2.5	1,5 / 0,7	22	33	12	1000	135	5.5	55	2480	1720	2420	0	3750
HGR 206	2050	6	4	1,5 / 0,7	29	40	12	1000	155	11	100	2480	1790	2400	0	4500
HGR 208	2050	8	5	2 / 0,7	14	21	12	1000	205	11	130	2510	1980	2520	0	5750
HGR 254	2550	4	2.5	1,5 / 0,7	17	27	14	1000	135	5.5	55	2980	1720	2420	0	4600
HGR 256	2550	6	4	1,5 / 0,7	17	25	14	1000	155	11	110	2980	1790	2400	0	5140
HGR 258	2550	8	5	2 / 1	13	20	14	1000	205	11	130	3000	1980	2520	0	6500
HGR 304	3050	4	2.5	1,3 / 0,6	16	27	17	1000	135	5.5	55	3480	1720	2420	0	5200
HGR 306	3050	6	4	1,5 / 0,6	17	25	17	1000	155	11	110	3480	1790	2400	0	6000
HGR 308	3050	8	5	2 / 1	10	16	17	1000	205	11	130	3510	1980	2520	0	7760
HGR 310	3050	10	7	2 / 1	12	19	17	1000	205	15	130	3520	1980	2520	0	8700
HGR 313	3050	13	8	2 / 1	10	15	17	1000	210	18.5	210	3530	2190	2600	0	11150
HGR 316	3050	16	12	3 / 1,5	7	14	17	1000	220	22	225	3600	2280	2650	0	12360
HGR 320	3050	20	14	3 / 1,5	6	9	17	1200	215	37	430	3650	2660	3240	0	19200
HGR 325	3050	25	17	3 / 1,5	5	7	17	1200	215	37	430	3650	2660	3290	0	21500
HGR 404	4050	4	2.5	1,5 / 0,7	11	18	22	1000	155	7.5	110	4480	1770	2450	0	7350
HGR 406	4050	6	4	1,5 / 0,7	12	18	22	1000	155	11	145	4510	1980	2550	0	9640
HGR 408	4050	8	5	2 / 1	7	12	22	1000	205	11	150	4520	2050	2570	0	12300
HGR 410	4050	10	7	2 / 1	7	11	22	1000	210	15	205	4540	2240	2710	0	13500
HGR 413	4050	13	8	2 / 1	7	11	22	1000	210	18.5	210	4540	2240	2730	0	14500
HGR 416	4050	16	12	3 / 1,5	4	8	22	1000	220	22	222	4600	2630	2800	0	19000
HGR 420	4050	20	14	3 / 1,5	4	7	22	1200	215	37	430	4670	2750	3180	0	24500
HGR 604	6100	4	2.5	1,2 / 0,6	10	16	31	1000	264	11	130	6560	2210	2800	0	17300
HGR 606	6100	6	4	1,5 / 0,7	9	14	31	1000	272	11	150	6560	2270	2830	0	23000
HGR 608	6100	8	5	2 / 0,7	6	12	31	1000	265	15	190	6640	2480	2880	0	28700
HGR 610	6100	10	7	2,3 / 1,1	4	7	31	1000	277	15	190	6640	2600	3220	0	33800
HGR 613	6100	13	8	2,3 / 1,1	4	7	31	1200	277	18.5	235	6730	3000	3270	910	49500





AGENT/

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