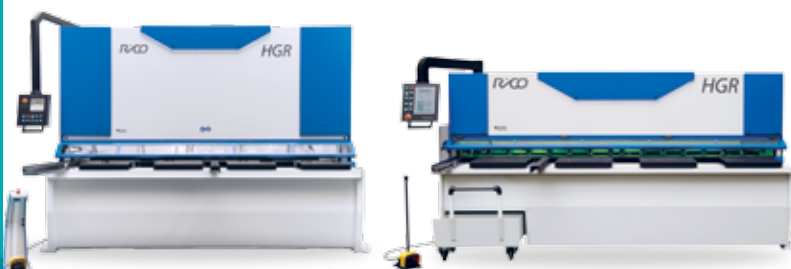

THE BEST VERTICAL CUT

With a unique operating principle, **HGR shear's** are differentiated by the **dynamic performance** and the **cutting result**.

FU- TURE IS NOW

HGR

HIGH CUT PERFORMANCE



RICO[®]
Precision Ideas

WWW.RICO

The best cut with the best performance and durability.

Vertical cut is the most effective and accurate system compared to alternative systems in guillotine cutting. With this system it is possible to vary the cutting angle depending on the type of material and thickness of the sheet.

HGR THE EXCELLENCE

HGR shears have a unique cutting system that offers a vibration-free cut, greatly reducing cutting noise and increasing cutting quality.



MAK- ING FUTU RE

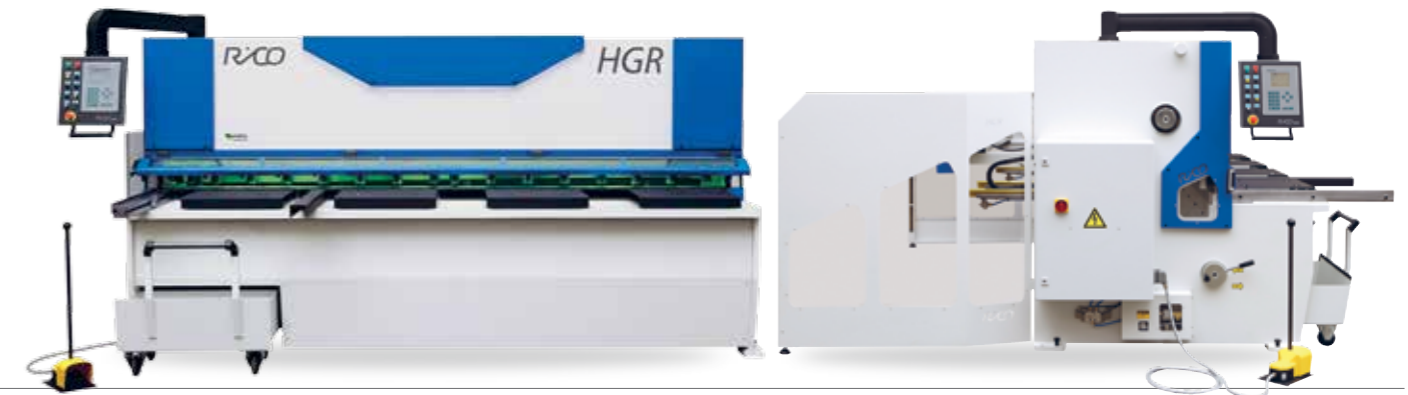


TABLE OF CONTENTS

	PAGE
.01 Top features	4
.02 HGR Range	7
.03 Equipment	10
.04 RICO Green	16
.05 RICO Product range	18
.06 Technical specifications	20



MAIN ADVANTAGES

- .01 / Vertical cut
- .02 / Variable rake angle
- .03 / Unique structure
- .04 / Customizable
- .05 / Low vibration
- .06 / 2 years warranty

TOP FEATURES

RICO's policy is based on an accurate selection of its components in accordance with the huge experience acquired over the years.

All the machine components are **certified** in accordance with **European standards**.

/ VERTICAL CUT

BLADE HOLDER ON BEARINGS

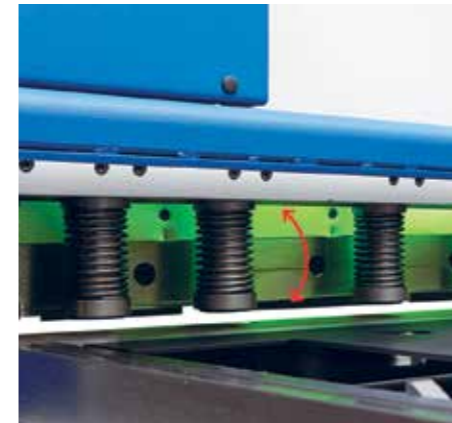
This system ensures the homogeneous distribution of the load along the entire length of the machine, resulting in a smooth cut, free of vibration.



/ ANGLE VARIATION

VERSATILITY

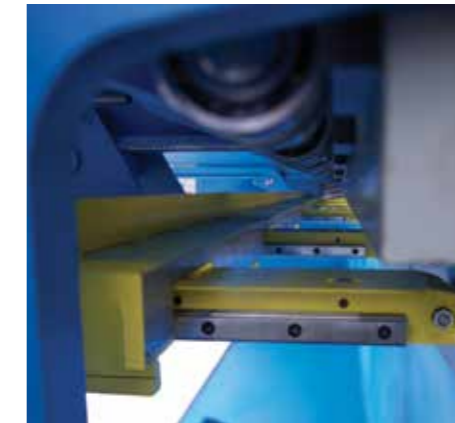
As a means of minimising the "helix" effect, the HGR guillotine allows the corresponding angle variation as a function of the plate thickness. This rake variation is performed automatically.



/ RAE SYSTEM

COMFORT

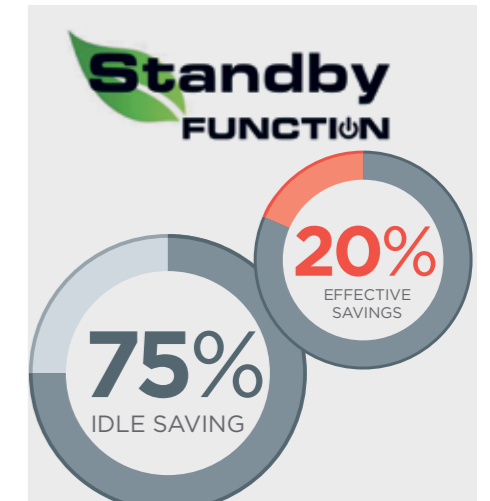
While cutting, back gauge retracts automatically preventing collision with the plate.



/ STANDBY FUNCTION

EFFECTIVE SAVINGS

This function is activated automatically whenever the machine didn't make a cut in the last 5 minutes, even if it is being programmed.



MAK- ING



HGR

FULLY CONFIGURABLE

HGR range is fully configurable following the customer's need. The standard range features models with capacities varying from 4 to 30 mm. Furthermore, RICO is capable of building machinery with different configurations upon customer's request.

HGR RANGE

LENGTH (mm) CAPACITY	1050	1550	2050	2550	3050	4050	6050
4 mm	○	○	●	●	●	●	●
6 mm		○	●	●	●	●	●
8 mm			●	●	●	●	●
10 mm			●	●	●	●	●
13 mm			●	●	●	●	●
16 mm			○		●	●	○
20 mm					●	●	○
25 mm					●	○	
30 mm					○		

● Standard ○ Under Request

AFTER SALES SERVICE

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 customer's 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 customer's with the best advice, searching for the best metal plate cutting and shaping solutions.

We provide our customer's with qualified technical service, always working with the following goals:

- PROBLEMS SOLUTION AT THE FIRST CONTACT;
- QUICK ANSWER;
- ASSURED QUALITY.



HGR

A UNIQUE SYSTEM

The movement of the blade holder on bearings provides **constant and permanent support without regular lubrication**. All support points are adjustable to ensure a perfect cut.

BEST SUITED CUTTING

Vertical cut machines consist in a system **which the blade holder is supported on bearing along its entire length**.

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

HGR shears are a certainty of dimensionally accurate cuts with **no burr, no helix, no bow and no twisting in any thickness and in any type of plate**. The design is based on the vertical cutting principle with angle variation and a robust structure in which the blade beam is supported on adjustable bearings along its entire length. This technology, developed over decades of experience, **allows to adjust the best suited cutting angle according to the characteristics of the plate** and therefore the cut is smooth and balanced throughout its length.

EQUIPMENT

The right machine configuration is essential to achieve maximum efficiency taking into account the type of intended use.

CHOOSING IS IMPORTANT

The purpose of each option is to **get the return that is higher than its cost**. For this, it's important to evaluate the return that will be obtained taking into account the work that is intended to accomplish in the future.

We make proposals with **detailed configuration** and based on **customer requirements**

TYPE		PAGE
Control	Elgo P40	● 11
	Elgo P40T	○ 11
	Delem DAC-360	○ 11
	Cybelec CybTouch 6G	○ 11
Systems	Vertical cut	● 4
	Automatic variable rake angle	● 5
	Automatic cutting length	● 5
	RAE - automatic retraction	● 5
	Standby function	● 5
Front supports	1000 mm squaring arm	● -
	1000 mm single support	● -
	Front gauges FG1/FG2	○ -
	Single square support	○ -
	Support with 2 guides and scale	○ -
	Support with 1 guide and transfer balls	○ -
Rear supports	MAC1	○ 12
	MAC2	○ 12
	MAC3	○ 13
	MACX	○ 13
Front safety	Mechanical finger protection	● -
	Tilting finger protection	○ 14
	Safety barriers (Level IV)	○ -
Rear safety	Safety barriers (Level IV)	● -
Back gauge	BGA	● -
	BGA-S servo-motorized	○ 14
Others	Hanging swivel control panel	● -
	Cutting lighting shadow line	● -
	LED table lighting	● -
	Hold down jacks performig progressive load with Fibroflex tip	● -
	2 operating modes: Continuous or cycle-by-cycle cut	● -
	Independent ramming (pre-selected)	● -
	Front table with ball joints	● -
	Hour counter	● -
	Front table in stainless steel	○ -
	Laser cutting line	○ 14
	FSE - Front extraction	○ 12
	RTS - Return to sender	- 13
	Angle measurer	○ -

● Standard ○ Optional



. CONTROLS

	ELGO	CYBELEC	DELEM	
	P 40 ^S	P40 T	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	LCD 120x80 px	5.7" TFT	5.7" CRT	4.7" LCD
Touch Screen	-	●	●	-
List of materials	●	●	●	●
Cut counter	●	●	●	●
Programmable				
Retraction	●	●	●	●
Pressure	-	○	○	○
Length	●	●	●	●
Control of...				
Pneumatic table	-	●	●	-
Angle	●	●	●	●
Blade gap	○	○	●	●

● Standard ○ Optional



REAR SHEET SUPPORT TABLE AND EXTRATION SYSTEMS

The rear sheet support is fundamental particularly in thin material.

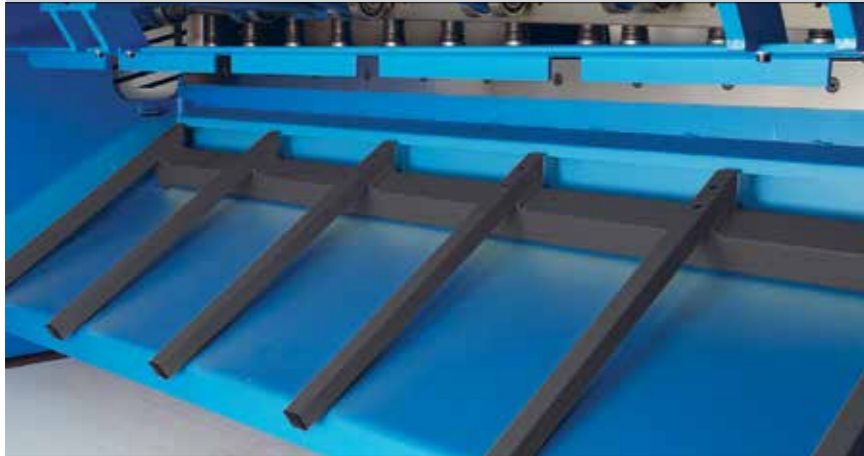
The system ensures that the plate is aligned with the back gauge without changing the measurement. Sheet extraction systems can be added depending on the sheet support selected.



HGR structure is designed to ensure the best balance and less deformation during cutting.

It is a single unit welded construction and reinforced sheet-quality and certified, properly dimensioned.

MAC1



- . Pneumatic sheet support with automatic programmed speed;
- . Swing movement from the plate extraction ramp.

MAC3



- . Pneumatic sheet support with automatic programmed speed;
- . Vertical linear movement, perpendicular to the sheet to be cut;
- . Sheet extraction table with conveyor belts with 3 operating modes;
- . Sheet separation system.

MAC2



- . Pneumatic sheet support with automatic programmed speed;
- . Several cylinders installed in back gauge;
- . Linear movement parallel to the sheet to be cut.

MACX



- . Pneumatic sheet support with automatic programmed speed;
- . Dual vertical and swing movement;
- . Guarantees the full support of the sheet during the cutting process.

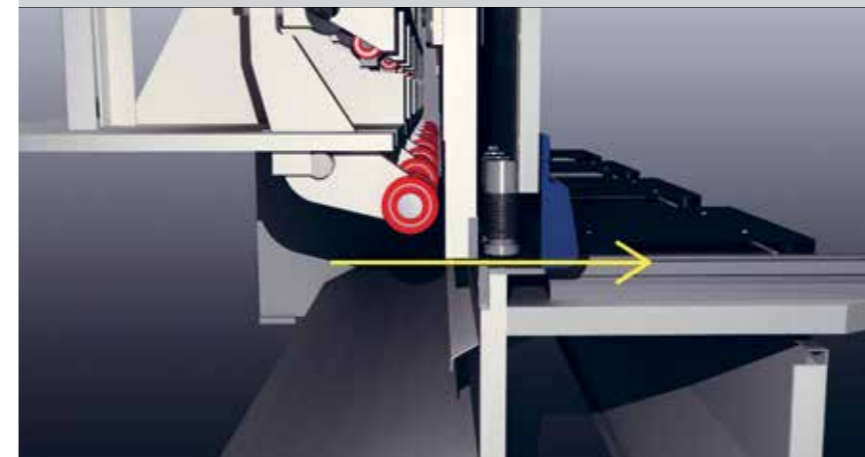
FSE



- . Front sheet extraction system up to 450 mm in length;
- . Includes one extraction drawer.

FSE system is only available with MAC2 or without pneumatic support.

RTS - Return to sender



The RTS system (return to sender) allows to send the cut sheet back to the operator via the entry area.

This system is only available with MACX support.

. BACK GAUGES

BGS^S

AC motor
Ball screws
Belt transmission
Speed: 70 mm/s
Accuracy: $\pm 0,10$ mm

BGA

Brushless servo motor
Ball screws
Belt transmission
Speed: 250 mm/s
Accuracy: $\pm 0,05$ mm

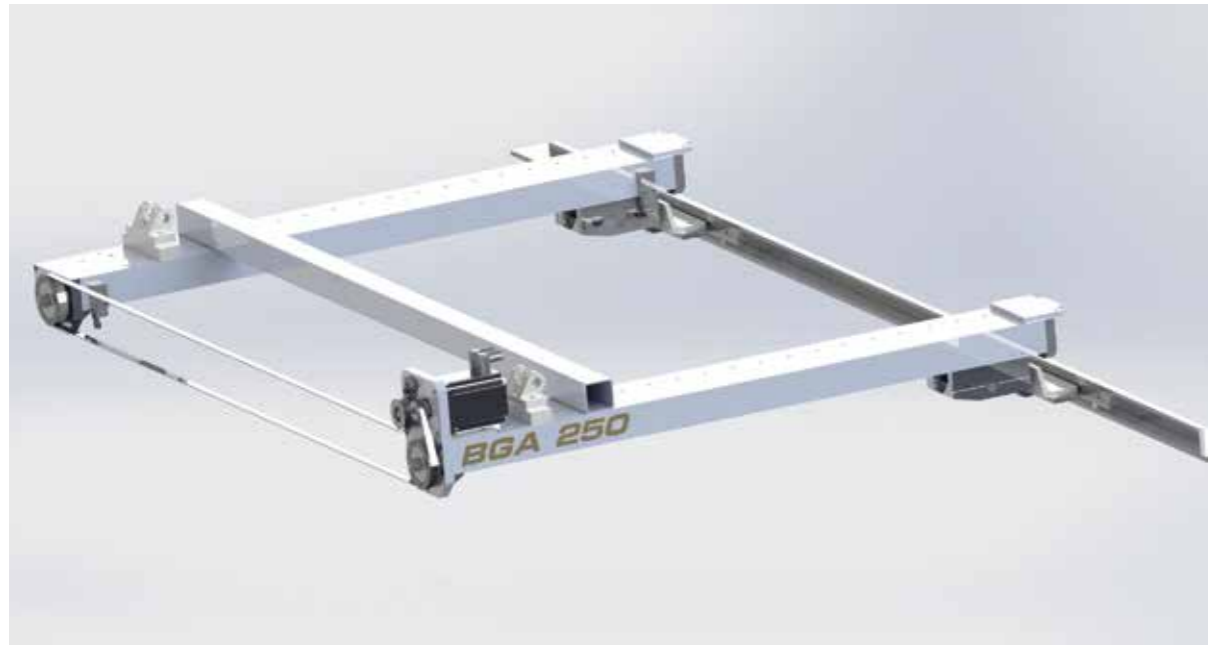


TABLE SETTING

The front table can be equipped with several supports with different configurations:

- SQUARE SUPPORTS;
- FRONT GAUGES;
- TABLE IN STAINLESS STEEL;
- TABLE COVER IN SUSTAMID.

. OTHER OPTIONAL PARTS

TILTING FINGER PROTECTION



LASER CUTTING LINE



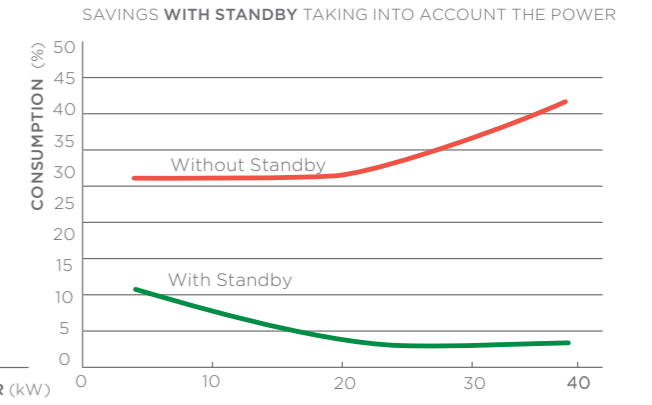
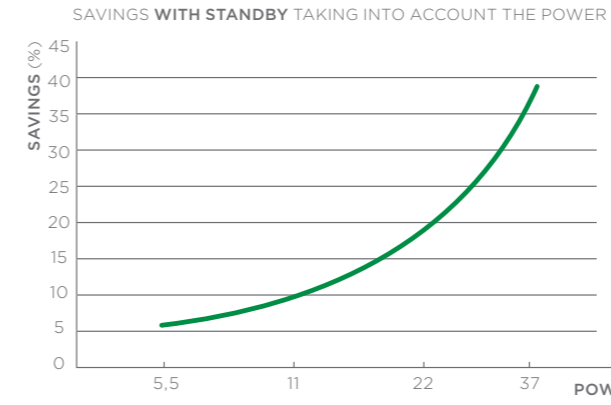
HGR

VARIABLE RAKE ANGLE

All HGR shears have **variable rake angle automatically adjusted** by the control depending on the thickness and type of sheet material.

RICO GREEN

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



RICO PRODUCT RANGE

PRCN / PRCB / HGR
SMALL SIZES



MEDIUM SIZES



HEAVY DUTY SIZES



WHERE DO YOU

FUTURE FORWARD

Embrace future challenges, and give our contribution to help industries getting prepared to the next step, is RICO's main commitment.

Day-to-day operations are important, but long-term business strategy will determine the ongoing and further success. Building a reliable board of principles will help to ensure that our **vision for the future will be carried forward.**

KNOW-HOW

Nearly 50 years of expertise in the manufacture of press brakes and guillotines machines give us the security that is needed for future challenges.

TRUST + RELIABILITY

High standards of quality and a team with the best training and knowledge are a major condition for our success. Our products are the result of a continued focus on improving internal processes underpinned by high quality levels, that result in the recognition of RICO's machines as quality guarantee equipment.

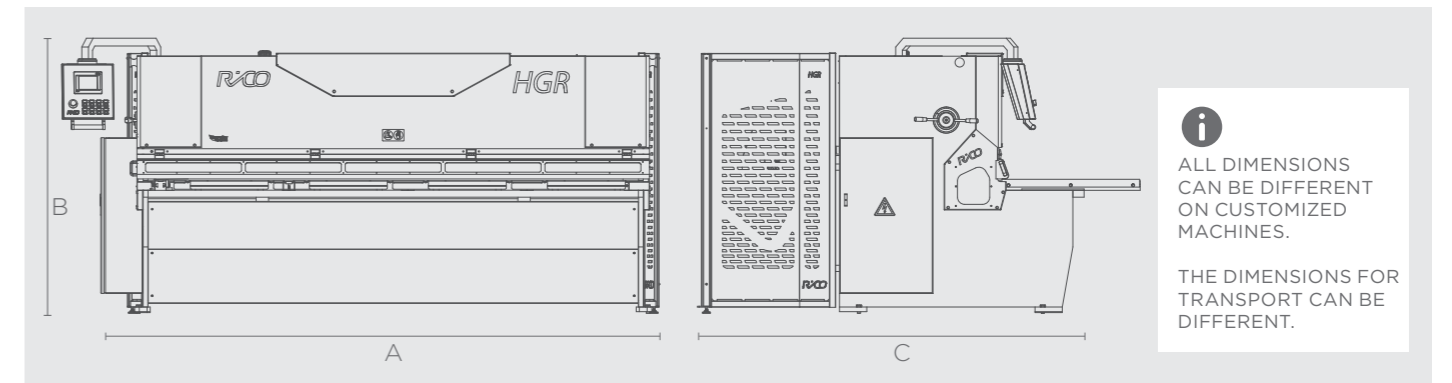
SUSTAINABLE GROWTH

The purpose of RICO strategy is sustainable growth that can ensure a constant investment in innovation, which results in added value for the customer, to create good conditions for its employees and respects the environment.

TECHNICAL SPECIFICATIONS

Model	Length	Thickness		Rake Angle	Stroke/min		Hold Down Jacks	Back Gauge Stroke	Throat Depth	Motor Power	Oil Capacity	Dimensions				Aprox. weight
		Mild steel (420 N/mm ²)	Stainless steel (700 N/mm ²)		Angle >	Angle <						Total Length (A)	Total Height (B)	Width (C)	Height Under the Floor	
	mm	mm		°	qt	qt	qt	mm	mm	kW	Lts	mm				Kg
HGR 204	2050	4	2,5	1,5/0,7	22	33	12	1000	135	5,5	55	2600	1720	2330	0	3750
HGR 2504	2550				17	27	14					3100	1720	2330	0	4600
HGR 304	3050				16	27	17					3600	1720	2400	0	5200
HGR 404	4050				11	18	22					4600	1790	2550	0	7350
HGR 604	6050				10	16	31					264	11	150	6600	2220
HGR 206	2050	6	4	1,5/0,7	29	40	12	1000	155	11	110	2600	1800	2500	0	4500
HGR 2506	2550				17	25	14					3100	1800	2500	0	5140
HGR 306	3050				17	25	17					3600	1800	2500	0	6000
HGR 406	4050				12	18	22					4600	1950	2710	0	9640
HGR 606	6050				9	14	31					272	150	150	6600	2220
HGR 208	2050	8	5	2/0,7	14	21	12	1000	205	11	130	2620	1950	2610	0	5750
HGR 2508	2550				13	20	14					3120	1950	2600	0	6500
HGR 308	3050				10	16	17					3610	1950	2620	0	7760
HGR 408	4050				7	12	22					4610	2010	2710	0	12300
HGR 608	6050				6	12	31					265	15	190	6610	2480
HGR 210	2050	10	7	2/1	16	24	12	1000	205	15	130	2620	1950	2610	0	6300
HGR 2510	2550				15	23	14					3120	1950	2620	0	7050
HGR 310	3050				12	19	17					3610	1950	2620	0	8700
HGR 410	4050				8	13	22					4610	2250	2520	0	13500
HGR 610	6050				4	7	31					277	190	190	6620	2810
HGR 213	2050	13	8	2/1	14	20	12	1000	210	18,5	210	2630	2200	2500	0	8300
HGR 2513	2550				13	19	14					3130	2200	2500	0	9720
HGR 313	3050				10	15	17					3620	2200	2500	0	11150
HGR 413	4050				8	13	22					4660	2250	2580	0	14500
HGR 613	6050				4	7	31					1200	277	235	6780	3000
HGR 316	3050	16	12	3/1,5	7	14	17	1000	220	22	225	3720	2300	2550	0	12360
HGR 416	4050				4	8	22	1200				4700	2630	2800	0	19000
HGR 320	3050	20	14	3/1,5	6	9	17	1200	215	37	430	3850	2660	2880	0	19200
HGR 420	4050				4	7	22	1200				4760	2530	2880	0	24500
HGR 325	3050				5	7	17	1200				215	37	430	3870	2660

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AGENT\



V. 031712

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