

- The latest addition to the *HONMA BERES* series -

## Releasing the New 03-Series *HONMA BERES* Clubs

Redesigned three *HONMA BERES* models (S/E/U) equipped with a newly developed **ARMRQ8** shaft in which our uniquely developed latest carbon fiber sheet is used

HONMA GOLF CO., LTD.

Honma Golf Co., Ltd., (35F Roppongi Hills Mori Tower, 6-10-1, Roppongi, Minato-ku, Tokyo Japan, President: Koji Nishitani) is proud to release the new *S/IS-03* and *U-03* series *HONMA BERES* clubs on January 15, 2014, and *E/IE-03* series in the middle of February 2014 (expected) through HONMA GOLF company stores and Honma golf product distributors nationwide.

The New 03 series *HONMA BERES* clubs were developed to realize the ambition of golfers for *longer carry*. We especially focused on the shaft and improved not only the carry but also the directional stability by combining the *latest carbon fiber sheet* with *eight-axis braided fabric*. In addition, using the head designed by the *master craftsmen* of our Sakata plant where our *master model*, which determines the shape of product is fabricated as a base, the centroid of the product was designed according to the target users for respective models. The fusion of handcrafted master design and the latest digital technology with an emphasis on the sensibility of people achieved the optimized centroid design which makes setup easy. These products offer a *superiority feeling of longer carry* you have never experienced before.

Our new model S driver achieved very long carry with high trajectory and appropriate spin while focusing on the *stability*, and the irons of the same model achieved superior carry and directionality. For the model E driver, the optimum crown and face designs according to the head speed as well as a large-sized head was adopted to pursue further user-friendliness. The irons of the same model also pursued it. Based on the concept of hitting the green as if using an iron, the model U series adopted the unified load position for all numbers. This enabled low centroid and creation of a trajectory that runs against the wind, resulting in a reduction of the loss of carry.

In addition, a newly developed the ARMRQ8 shaft used in these new clubs for the first time adopted the eight-axis braided fabric, which was made by adding the fabric braided in the direction of 45 degrees to the six-axis braided fabric whose braiding angle is closer to a round shape so that it can correspond to the stresses from all directions. This enhanced the torsional rigidity while keeping the rigidity against flexion. Furthermore, by adopting our uniquely developed latest carbon fiber sheet, we succeeded in improving both the elasticity and the toughness of resin simultaneously and also achieved stable impact and sufficient strength which can withstand the hitting force while maintaining torque and flexibility.

For details on S/IS-03, E/IE-03 and U-03 series HONMA BERES clubs, please refer to the following pages.

## Summary of HONMA BERES S/IS-03 Series

### <S-03 Driver>

#### *A superiority feeling of longer carry*

The fusion of new manufacturing process and new material achieved more effective deflection and higher resilience, leading to a world of longer carry.

#### [Target users]

are those who

- are sure to have the ability to drive balls much farther
- consider that golf clubs need to be user-friendly
- want a golf club which stimulates sensibility

#### [Features]

- High trajectory and appropriate spin
- Effective power conduction
- Achievement of both efficient hugging of ball and superior operability
- 



#### High-trajectory and optimum-spin design

Our new **forged mesh and rib structure** technology that changes the material thickness at the forging phase achieved strong deflection and return of the crown area. For the face part, we adopted the **Ti-5N**, which was a new high-strength titanium to achieve higher resilience and reduction in weight. Adopting these new technology and material enabled an increase in the initial velocity attributable to high resilience and the achievement of high trajectory and optimum spin attributable to the optimization of centroid depth.

#### Forged mesh and rib structures

The **3AL-2.5V titanium** with appropriate strength and high extension coefficient was adopted for the crown. The mesh part which is closer to the face generates strong deflection when hitting a ball and the rib part in the back receives the deflection and turns it into strong stress, leading to the generation of high resilience on the overall head surface including the face. In addition, we adopted high-strength G4 titanium for the sole part. Its mesh structure that generates appropriate deflection and sufficient strength that can receive high stress generated by the crown enabled an increase in the force generated when returning from the deflected state as well as efficient launch angle.

#### Adoption of new Ti-5N material

A new high-strength, lightweight **Ti-5N** material was adopted for the face. Combined with HONMA's unique partially thick design, this product achieves the longest-ever carry. The central part of the face is designed to be diamond-shaped and thick, and reducing the material thickness of the periphery of this part made the entire periphery area around the spot to be the sweet area.



■ Release date: January 15

■ Spec

■Made in Japan

Head material / Manufacturing process		Crown:3AL-2.5V Titanium Sole:G4 Titanium / Forged	
Face material		Ti - 5N(α - β titanium alloy)	
NO.		1W	
Loft (deg.)		9.5	10.5
Lie angle (deg.)		59.5	
Head volume (cm <sup>3</sup> )		460	
Distance to center of gravity (mm)		42.5	42.5
Depth to center of gravity (mm)		37.0	38.0
Length (inches)		46.0	
Swing weight •	ARMRQ8 49	R	D1•282
		SR	D2•285
		S	D2•286
Gross weight (g)	ARMRQ8 54	R	D1•291
		S	D2•295
	ARMRQ8 45	R	D1•278

### <S-03 Fairway woods>

Fairway woods focusing on high trajectory and operability which is suitable for average golfers

#### [Target users]

are those who

- want both long carry and stability
- use fairway woods frequently for second shots
- want to use fairway woods in the same way as irons
- want to fly balls easily from fair way



#### [Features]

- Hyper cross face
- Increased head project area
- Optimized centroid position
- 

#### Mesh-structured crown and forged cup face

A mesh structure that achieves both high strength and weight reduction was adopted for the crown to enable free centroid design. The forged cup face made from high-strength custom steel increased the rebound area by utilizing the hyper-cross face with optimum material thickness to have a structure which helps to achieve the targeted carry.

Pursuit of user-friendliness and straight line stability

For average golfers, the products of this series have a shallow head that provides a sense of confidence. Widening the project area enabled to provide a sense of confidence at the time of address and increase the inertia moment, resulting in an improvement in the straight advancing ability of balls.

Optimized centroid design

For all fairway wood numbers, placing the excessive weight in the position of the lowest centroid enabled to create a head that achieves high trajectory and is easy to drive balls. In addition, for the enhancement of the ease of hugging balls and face control, a weight of 5 g is attached at an effective place on all numbers.

■ Release date: January 15

■ Spec

■Made in Japan

Head material / Manufacturing process		SUS630 / Casting			
Face material		High-strength Custom Steel			
NO.		3W	5W	7W	
Loft (deg.)		15	18	21	
Lie angle (deg.)		59.5	60.0	60.5	
Head volume (cm3)		198	184	172	
Length (inches)		43.0	42.5	42.0	
Swing weight • Gross weight (g)	ARMRQ8 49	R	D0•299	D0•303	D0•307
		SR	D1•302	D1•306	D1•310
		S	D1•303	D1•307	D1•311
	ARMRQ8 54	R	D0•310	D0•314	D0•318
		S	D1•314	D1•318	D1•322
	ARMRQ8 45	R	D0•296	D0•300	D0•304

<IS-03 Irons>

*Driving with superior rebound performance*

The best irons in the history of HONMA offering excellent carry and directional property exceeding conventional models.

[Target users]

are those who

- pursue ultimately long carry
- require a club which is easy to drive
- think the face is important for irons

[Features]

- Large face structure
- Uniquely designed periphery of the head
- Increased stress distribution of the head



### Wide power face

Enlarging the face area by approximately 5% compared to conventional models enhanced the rebound performance. In addition, the area of the flange part was also increased by approximately 10% compared to conventional models by using highly durable **high-strength maraging material**. Furthermore, the adoption of the L cup face increased the deflection of the face generated when hitting a ball. The synergistic effect generated by these improvements enabled significant deflection of the entire face, resulting in an increase in carry and a reduction in loss in the event of a mishit.

### High inertia moment and deep and low centroid

Distributing the weight to the toe and heel parts increased the inertia moment, expanded the sweet area, and significantly reduced the variation of carry and directional property in the event of a mishit. In addition, the deep and low centroid design where the material thickness of the sole is distributed to the sole and back face sides respectively generated high and ball-hugging trajectory, achieving longer carry than conventional models.

### Increase in the head stress distribution, carry and strength in the event of a mishit

Enlarging the flange area of the face and L cup increased the stress distribution of the entire face. This enabled the deflection of the entire face, an increase in carry, and a reduction in loss of carry in the event of a mishit.



- Release date: January 15
- Spec

■ Made in Japan

Head material / Manufacturing process		Mild-steel / Forged (body) + ES230 (face)										
Head plating		Double-layer plating / Satin finish + Painted finish										
NO.		4	5	6	7	8	9	10	11	AW	SW	
Loft (deg.)		19.5	22.5	25.5	28.5	32.5	36.5	41.5	46.5	51.5	56	
Lie angle (deg.)		60.5	61.0	61.5	62.0	62.5	63.0	63.0	63.0	63.0	64.0	
Face progression (mm)		2.25	2.25	2.75	2.75	3.00	3.00	3.75	3.75	3.75	4.75	
Length (inches)		38.5	38.0	37.5	37.0	36.5	36.0	35.5	35.0	35.0	35.0	
Swing weight	ARMRQ8 49	R	C8-354	C8-360	C8-366	C8-373	C8-379	C8-385	C8-391	C8-398	C8-398	C9-401
		SR	C9-357	C9-363	C9-369	C9-376	C9-382	C9-388	C9-394	C9-401	C9-401	D0-404
		S	C9-358	C9-364	C9-370	C9-377	C9-383	C9-389	C9-395	C9-402	C9-402	D0-405
Gross weight (g)	ARMRQ8 54	R	D0-358	D0-364	D0-370	D0-377	D0-384	D0-390	D0-396	D0-402	D0-402	D1-405
		S	D1-362	D1-368	D1-374	D1-381	D1-388	D1-394	D1-400	D1-406	D1-406	D2-409
	ARMRQ8 45	R	C8-352	C8-357	C8-363	C8-369	C8-375	C8-381	C8-387	C8-393	C8-393	C9-396

## Summary of HONMA BERES E/IE-03 Series

### <E-03 Driver>

*Longer carry created by user-friendliness*

A driver with beautiful head shape that provide ultimately long carry and ease of driving

#### [Target users]

are those who

- put more emphasis on carry than head speed
- want to drive and fly balls easily
- want to participate in the competitions for seniors and ladies

#### [Features]

- Optimum deflection of the crown
- Rational face structure
- High and strong trajectory



#### The crown and face designs appropriate for head speeds

Taking the deflection of the crown according to head speeds in account, this product is designed in consideration of the curve on the face side. It is made to convert the impact of ball into deflection instantaneously and transmit the stress to the face efficiently.

In addition, the face is designed to be partially thick tailored to the estimated head speed of a subject user, and a thorough impact test provides effective deflection and rebound.

#### The most effective centroid design

This is a newly designed driver combining long carry with user-friendliness. Considering the ease of flying and hugging balls, the excess weight obtained by reducing the material thickness of parts is distributed to the centroid position, which is suitable for senior golfers and competition-oriented ladies golfers.

This centroid design enables a reasonable increase in carry pursued by target golfers, resulting in higher scores.



- Release date: Middle of February
- Spec

■Made in Japan

Head material / Manufacturing process		6-4 Titanium / Casting		
Face material		6-4 Titanium		
NO.		1W		
Loft (deg.)		10.5	11.5	11.5
Lie angle (deg.)		60.0		
Head volume (cm <sup>3</sup> )		460		
Distance to center of gravity (mm)		41.5	42.0	42.0
Depth to center of gravity (mm)		39.5	40.0	40.0
Length (inches)		45.50		44.25
Swing weight • Gross weight (g)	ARMRQ8 45	R	C8•275	-
	ARMRQ8 40	L	-	C3•264

### <E-03 Fairway woods>

All numbers of the fairway woods of this series provide strong support to target golfers

**[Target users]**  
are those who

- pursue the head shape which is apparently easy to drive

**[Features]**

- Crown mesh structure
- High-strength custom steel face
- Adoption of different centroid designs depending on the number



#### Crown and face designs that generate effective rebound

The deflection control performed by the mesh structure of the crown generates effective deflection and return to the original state. Combined with the rebound on high-strength custom steel face, the maximum carry performance was achieved.

#### Different centroid designs depending on the number

The centroid for 3W was designed with emphasis on the hugging of balls, and that for numbers smaller than 3W was designed with emphasis on the ease of flying balls. All numbers of the fairway woods of this series are made to be larger in size than conventional models to provide user-friendliness and a sense of confidence.

- Release date: Middle of February
- Spec

■Made in Japan

Head material / Manufacturing process		SUS630 / Casting				
Face material		High-strength Custom Steel				
NO.		3W	5W	7W	9W	
Loft (deg.)		16	19	22	25	
Lie angle (deg.)		60.0	60.5	61.0	61.5	
Head volume (cm3)		178	167	160	151	
Length (inches)		R	43.0	42.5	42.0	41.5
		L	41.75	41.25	40.75	40.25
Swing weight • Gross weight (g)	ARMRQ8 45	R	C7•288	C7•292	C7•296	C7•300
	ARMRQ8 40	L	C1•278	C1•282	C1•286	C1•290

### <IE-03 Irons>

***The highest sense of confidence***

**Iron for seniors which has an user-friendly large-sized head as well as superior carry performance, high trajectory and straight advancing ability**

**[Target users]  
are those who**

- want long carry with irons
- want to get a high trajectory that stops on the green
- want an iron which prevents mishit
- 



**[Features]**

- **User-friendly large-sized head**
- **Enlarged rebound area**
- **A weight of 18 g attached**

#### Large head and face

The face of the large-sized head of this product is one millimeter higher and longer than that of conventional models so that further user-friendliness and a sense of confidence are provided.

An increase in the size of the head as well as the welding of the outer perimeter of the face part enabled an increase in the size of the face, achieving an enlargement of the rebound area of the face by approximately 25%. This provides a sense of confidence that a ball will surely hit somewhere on the face and more superior carry performance than ever before.

### The most effective centroid design

Increasing the size of the head to the limit and attaching two tungsten weights of 9 g we have never used to the back face side of the heel and toe enabled deep and low centroid in spite of a large-sized head. This achieved the enhancement of the ease of flying and hugging balls. The fusion of user-friendly head shape designed by our master craftsmen, and the design of centroid using the latest CAD enabled the pursuit of the ease of driving and long carry we have never experienced.



- Release date: Middle of February
- Spec

■ Made in Japan

Head material / Manufacturing process			SUS630 / Casting + Maraging stainless steel								
Head plating			Double-layer plating / Satin finish + Painted finish								
NO.			4	5	6	7	8	9	10	11	SW
Loft (deg.)			21	24	27	30	34	38	43	49	56
Lie angle (deg.)			60.5	61.0	61.5	62.0	62.5	63.0	63.0	63.0	63.5
Face progression (mm)			2.25	2.25	2.75	3.25	3.25	3.25	3.75	3.75	4.25
Length (inches)			38.5	38.0	37.5	37.0	36.5	36.0	35.5	35.0	35.0
Swing weight • Gross weight (g)	ARMRQ8 45	R	C7•335	C7•340	C7•345	C7•351	C7•356	C7•362	C7•369	C7•375	C8•376

Head material / Manufacturing process			SUS630 / Casting + Maraging stainless steel							
Head plating			Double-layer plating / Satin finish + Painted finish							
NO.			5	6	7	8	9	10	11	SW
Loft (deg.)			24	27	30	34	38	43	49	56
Lie angle (deg.)			61.0	61.5	62.0	62.5	63.0	63.0	63.0	63.5
Face progression (mm)			2.25	2.75	3.25	3.25	3.25	3.75	3.75	4.25
Length (inches)			37.0	36.5	36.0	35.5	35.0	34.5	34.0	34.0
Swing weight • Gross weight (g)	ARMRQ8 40	L	C0•326	C0•331	C0•337	C0•343	C0•349	C0•355	C1•364	C1•364

## Summary of HONMA BERES U-03 Series

### <U-03 Utilities>

#### ***Comfortable operability***

The head shape designed in consideration of user-friendliness and the ease of driving

#### **[Target users]**

are those who

- want to hit the green as if using an iron
- want to use utilities frequently even under adverse conditions
- want to put emphasis on the operability and ball-hugging property

#### **[Features]**

- A unified load for all numbers
- A weight screw of approximately 5g attached
- Round-shaped heel



#### Powerful trajectory and stability

The low centroid that was achieved by adopting the unified load position for all numbers enabled powerful trajectory which can go against the headwind, resulting in loss of carry. In addition, a tungsten weight screw of approximately 5 g attached to a place closer to the heel enhanced operability and ball-hugging property.

#### Improved ease of setup and swinging-through property

Having the project area that is slightly larger than conventional models improved the balance with face progression, resulting in a head shape which provides the ease of setup and a sense of confidence. In addition, since the head seems even shallow, it enables to imagine how easily balls fly.

Furthermore, the heel-less design facilitates smooth swing and enables users to realize that this product can pass through all kinds of lies easily.



- Release date: January 15
- Spec

■Made in Japan

Head material / Manufacturing process			SUS630 / Casting					
Face material			High-strength Custom Steel					
NO.			U19	U22	U25	U28		
Loft (deg.)			19	22	25	28		
Lie angle (deg.)			60.0					
Head volume (cm3)			137	136	133	131		
Length (inches)			40.5	40.0	39.5	39.0		
			L	39.5	39.0	38.5	38.0	
Swing weight • Gross weight (g)			ARMRQ8 54	R	D0•328	D0•332	D0•336	-
				S	D1•332	D1•336	D1•340	-
			ARMRQ8 49	R	D0•317	D0•321	D0•325	D0•329
				SR	D1•320	D1•324	D1•328	D1•332
				S	D1•321	D1•325	D1•329	D1•333
			ARMRQ8 45	R	C7•307	C7•311	C7•315	C7•319
			ARMRQ8 40	L	C1•295	C1•299	C1•303	C1•307

## Summary of HONMA BERES ARMRQ8 shaft

### <Newly developed ARMRQ8 shaft>

A shaft in which *eight-axis braided fabric* and *the latest sheet combining innovative material with technology* are used achieved longer carry and the enhancement of directional property

#### Adoption of eight-axis braided fabric

By adding the fabric braided in the direction of 45 degrees to the six-axis braided fabric whose braiding angle is closer to a round shape so that it can correspond to the stress from all directions, we succeeded in increasing the torsional rigidity only (\*increased by 7.6%) while keeping the bending rigidity (\* increased by 0.9%).  
\*Compared to our six-axis braided fabric

Laminating this eight-axis braided fabric from the shaft center toward the handgrip area provides resistance to crash and enhances the accuracy of the return from the bowed state and the effect of stable switchback.

This led to the ease of getting the right timing of swing and a reduction in the wobbling of the shaft especially in the event of a mishit, resulting in the improvement of both carry and directionality.

#### Uniquely developed latest carbon fiber sheet

We uniquely developed the *latest carbon fiber sheet* consisting of two materials that are a new carbon fiber named TORAYCA® T1100G and NANOALLOY® technology-applied new resin manufactured by Toray Industries, Inc., and adopted it for our ARMRQ8 shaft.

The TORAYCA® T1100G is a new carbon fiber manufactured by Toray Industries, Inc., and has conflicting properties, i.e., ultrahigh strength and high elasticity. This material was developed through the technological innovation of Toray Industries, Inc. for next-generation aerospace application, and HONMA GOLF adopted this material first in the sport industry.

NANOALLOY® technology-applied new resin is a cutting-edge material that improved both elasticity and toughness of resin and is effective for bending strength. Laminating the latest sheet made using these materials and substances around the tip of the shaft created a shaft that provides stable impact and has sufficient strength that can withstand the hitting force while maintaining torque and flexibility.



■ Spec:

ARMRQ8 54 2S	1W		IRON (#5)	
	R	S	R	S
Gross weight (g)	54.5	57.5	58.5	61.5
Torque (deg.)	4.00	3.90	2.96	2.86
Kick-point	Mid		Mid	
Butt diameter (mm)	15.5		15.4	
Tip diameter (mm)	8.6		9.8	

■ Made in Japan

ARMRQ8 45 2S	1W	IRON (#5)
	R	R
Gross weight (g)	45.5	49.9
Torque (deg.)	5.60	3.63
Kick-point	Low	Low
Butt diameter (mm)	15.4	14.8
Tip diameter (mm)	8.6	9.8

ARMRQ8 49 2S	1W			IRON (#5)		
	R	SR	S	R	SR	S
Gross weight (g)	49.5	51.0	52.5	54.5	56.0	57.5
Torque (deg.)	4.50	4.45	4.40	3.16	3.11	3.06
Kick-point	Low-Mid			Low-Mid		
Butt diameter (mm)	15.4			15.4		
Tip diameter (mm)	8.6			9.8		

ARMRQ8 40 2S	1W	IRON (#5)
	L	L
Gross weight (g)	40.5	43.3
Torque (deg.)	5.95	3.65
Kick-point	Low	Low
Butt diameter (mm)	15.2	14.5
Tip diameter (mm)	8.6	9.5