



CEMA[®]

CERAMIC BEARING

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ROLLING SUCCESS FOR CEMA BEARING WORLDWIDE

A Taiwan manufacturer of high-quality ceramic bearings

What started in 2005 with the idea that ceramic bearing characteristics would increase efficiency and sustainability in industrial process applications has now grown into a company producing bearing components and assembling high-quality ceramic bearings for various industries and cycling.

With years of experience building FULL ceramic and PEEK ceramic bearings for chemical, vacuum and high-temperature environments, improving drivetrain efficiency in cycling became our main focus.

CEMA's SRC (Speed Racing Ceramic) bearing for cycling was born.

Growing numbers in cycling

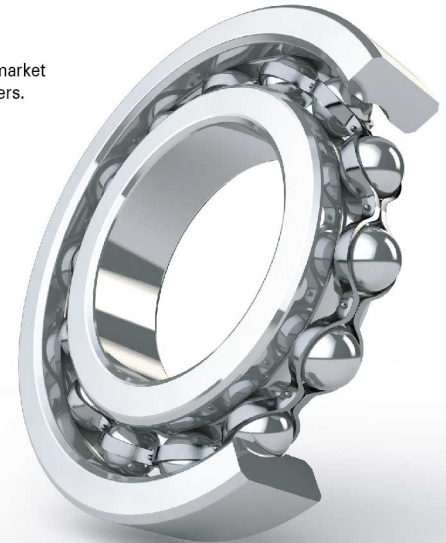
The success of CEMA's SRC bearing in the cycling industry has been growing rapidly. By participating in leading bicycle fairs worldwide, CEMA Bearing managed to increase their distribution network. With a European office in Belgium and distributors worldwide, a growing number of bike shops and cycling enthusiasts are now experiencing the quality of our high-end ceramic bearings made in Taiwan.

Cycling professionals

Our bearings and components are used by various professional cycling teams competing at the highest level of cycling, the UCI World Tour. With wins in the Classics during spring as well as in the big stage races, our bearings have proven its worth! CEMA Bearing takes on the challenge of athletes performing at the highest level and making the highest demand on their equipment!

Markets

CEMA Bearing sells their product range on the aftermarket but also provides their products to OEM manufacturers.





**“CEMA’S CERAMIC BALLS
ARE USED BY SOME OF
THE BIGGEST BEARING
MANUFACTURERS IN THE WORLD**”

READY FOR HIGH SPEED APPLICATIONS

SRC Ceramic balls

Because of excellent mechanical properties, ceramic balls are often used on high-speed applications, chemical, vacuum or high-temperature environments.

Because of their resistance to corrosion, they work well in low-lubrication applications.

Production process

Ceramic balls are manufactured in a complex process where CIP formed balls are sintered under high pressure and at high temperature. After the sintering process, balls are shaped and ground to perfect roundness. Because all these processes are highly controlled, CEMA ceramic balls meet all the demands of industrial applications and cycling.

Material properties

Ceramic balls are manufactured in different materials and various dimensions and grades. The intended use of the bearing will determine which type of ceramic material should be used. Because of excellent material properties like hardness and low thermal expansion, we use Si3N4 Ceramic balls to build our SRC bearings. Si3N4 Ceramic balls are resistant to corrosion.

TYPE	DIMENSION	PACKAGING
CB238	3/32" or 2,38 mm	50 OR 100 Pack
CB318	1/8" or 3,18 mm	50 OR 100 Pack
CB397	5/32" or 3,97 mm	50 OR 100 Pack
CB476	3/16" or 4,76 mm	50 OR 100 Pack
CB595	15/64" or 5,95 mm	50 OR 100 Pack
CB635	1/4" or 6,35 mm	50 OR 100 Pack



NEED FOR SPEED CERAMIC BEARINGS

Speed Racing Ceramic

CEMA hybrid ceramic SRC bearings are specially designed for bicycle-related applications and are dedicated to high performance. The high roundness and hardness of the ceramic balls reduce friction and increase the bearings' lifetime.

Bearing components

The combination and quality of components used to build a bearing will determine its performance and lifetime. CEMA made a selection of premium components to produce a bearing which meets all expectations of cycling. A polyamide cage holds the G5 Si3N4 Ceramic balls in place between hardened steel rings that are polished to perfection. All bearings have a double-sided seal design to prevent dust and dirt entering the bearing. Excellent low-friction lubrication guarantees a durable and longer lifetime.

Extended product range

Besides a full range of hybrid ceramic bearings, CEMA offers a range of chrome steel bearings for wheels and an all stainless steel bearing for bottom brackets. Except for the ceramic balls, CEMA's steel and stainless steel bearings use components similar to the SRC bearings.



Wheel bearing series



BEARING NO.	ID(MM)	OD(MM)	W(MM)	N/W(G)	BEARING TYPE
608	8	22	7	10.8	⊗ ⊗
699	9	20	6	6.8	⊗ ⊗
609	9	24	7	12.8	⊗
9227	9	22	7	10.4	⊗ ⊗
R6	9 525	22 225	7 142	9.8	⊗ ⊗
6000	10	26	8	17.1	⊗ ⊗
6800	10	19	5	5.1	⊗ ⊗
6900	10	22	6	8.8	⊗ ⊗
6001	12	28	8	18.8	⊗ ⊗
6801	12	21	5	5.8	⊗ ⊗
6901	12	24	6	10.0	⊗ ⊗
6802	15	24	5	6.7	⊗ ⊗
6902	15	28	7	15.0	⊗ ⊗
15267	15	26	7	11.8	⊗ ⊗
15268	15	26	8	13.5	⊗ ⊗
6803	17	26	5	7.3	⊗ ⊗
6903	17	30	7	15.3	⊗ ⊗
17287	17	28	7	12.9	⊗ ⊗
18307	18	30	7	16.7	⊗ ⊗
6804	20	32	7	16.7	⊗ ⊗

Bottom bracket bearing series



24377	24	37	7	20.8	⊗ ⊗ ⊗
6805	25	37	7	18.8	⊗ ⊗ ⊗
6805Z-N	25	37	6	15.7	⊗
6806	30	42	7	21.5	⊗ ⊗ ⊗
6810	50	65	7	48.5	⊗ ⊗

⊗ CERAMIC
 ⊗ STEEL
 ⊗ STAINLESS STEEL

LINKING BEARINGS TO COMPONENTS

Bottom bracket solutions

A Bottom Bracket is the connection between the crank set and the frame is one of the most important components of a bicycle's drivetrain. CEMA offers a wide variety of bottom brackets and adapters and is working continuously to extend the range further.

To reduce friction and increase drivetrain performance, CEMA places SRC bearings in CNC machined aluminium cups. For most bottom bracket types, an all stainless steel bearing option is available as well.

Interlock design for Press Fit

CEMA Press Fit bottom brackets are designed with an Interlock system to optimise power transfer and avoid noise issues and cracking. Both sides of the Press Fit bracket are threaded together inside the frame. This design will increase rigidity and optimise the power transfer of the rider.

CEMA bottom bracket advantages

- Interlock design for Press Fit avoids noise issues and offers extreme rigidity
- Easy to install with an external bottom bracket wrench
- Double O-ring design to prevent water from entering the frame and to create a buffer between the frame and the bottom bracket
- 24 mm bearing ID design to directly transfer pedalling power
- Aluminium seals for easily maintaining bearings and adding grease
- A wide range of 30 to 24 mm adapters
- Compatible to most cranks available in the market
- Equipped with CEMA SRC ceramic or all stainless steel bearings
- Excellent tolerance control, thanks to CNC manufacturing



INTERLOCK PRESS FIT SERIES



FRAME TYPE	BRACKET WITH	FRAME ID	TYPE	SPINDLE	COLOUR	TYPE	BEARING TYPE
BB86/92	86,5	41	Shimano	24	●	BB86CBPR	
					●	BB86CRPR	
			SRAM	24/22	●	BB86CBRPR	
					●	BB86CRRPR	
	92		CAMPA UT	25	●	BB8625UB	
			Shimano	24	●	BB86CBPR	
					●	BB86CRPR	
			SRAM	24/22	●	BB86CBRPR	
		●	BB86CRRPR				



BB30	68	42	Shimano	24	●	BB3024B	
					●	BB3024R	
			SRAM	24/22	●	BB3024BR	
					●	BB3024RR	
			3D+/FSA386	30	●	BB30386B	
					●	BB30386R	
	73		CAMPA UT	25	●	BB3025UB	
			Shimano	24	●	BB3024B	
					●	BB3024R	
			SRAM	24/22	●	BB3024BR	
					●	BB3024RR	
			Rotor	30	●	BB30386B	
		●	BB30386R				

CERAMIC
 STAINLESS STEEL

BOTTOM BRACKETS



FRAME TYPE	BRACKET WITH	FRAME ID	TYPE	SPINDLE	COLOUR	TYPE	BEARING TYPE	
PF30	68	46	PF30	30	●	PF30B	⊗	
					●	PF30R	⊗	
			Shimano	24	●	PF3024B	⊗	
					●	PF3024R	⊗	
			SRAM	24/22	●	PF3024BR	⊗	
					●	PF3024RR	⊗	
	CAMPA UT		25	●	PF3025UB	⊗		
	73		46	3D+/FSA386	30	●	PF30386B	⊗
						●	PF30386R	⊗
				PF30	30	●	PF30B	⊗
						●	PF30R	⊗
				Shimano	24	●	PF3024B	⊗
●		PF3024R				⊗		
SRAM	24/22	●	PF3024BR	⊗				
		●	PF3024RR	⊗				
Rotor	30	●	PF30386B	⊗				
		●	PF30386R	⊗				



BB386	86.5	46	Shimano	24	●	BB38624B	⊗
					●	BB38624R	⊗
			SRAM	24/22	●	BB38624BR	⊗
					●	BB38624RR	⊗
			3D+/FSA386	30	●	BB386B	⊗
					●	BB386R	⊗



OSBB	61	46	Shimano	24	●	OSPF3024B	⊗
					●	OSPF3024R	⊗
			SRAM	24/22	●	OSPF3024BR	⊗
					●	OSPF3024RR	⊗

⊗ CERAMIC
⊗ STAINLESS STEEL



FRAME TYPE	BRACKET WITH	FRAME ID	TYPE	SPINDLE	COLOUR	TYPE	BEARING TYPE
BBRIGHT BB30	79	42	Shimano	24	●	RBB3024BS	
					●	RBB3024RS	
			SRAM	24/22	●	RBB3024BR	
					●	RBB3024RR	



BBRIGHT PF30	79	46	Shimano	24	●	RPF3024BS	
					●	RPF3024RS	
			SRAM	24/22	●	RPF3024BR	
					●	RPF3024RR	



BB30A (Cannondale road)	73	42	Shimano	24	●	BB30A24B	
					●	BB30A24R	
			SRAM	24/22	●	BB30A24BR	
					●	BB30A24RR	



PF30A (Cannondale road)	73	46	Shimano	24	●	PF30A24B	
					●	PF30A24R	
			SRAM	24/22	●	PF30A24BR	
					●	PF30A24RR	

CERAMIC
 STAINLESS STEEL

PRESS FIT AND DIRECT FIT BEARING SERIES



FRAME TYPE	BRACKET WITH	FRAME ID	TYPE	SPINDLE	COLOUR	TYPE	BEARING TYPE
BB86/92	86,5	41	Shimano	24	●	86PS	⚙
			SRAM	24/22	●	86PR	⚙
	92		Shimano	24	●	86PS	⚙
			SRAM	24/22	●	86PR	⚙



FRAME TYPE	BRACKET WITH	FRAME ID	TYPE	SPINDLE	TYPE	BEARING TYPE
BB30	68	42	BB30	30	BC30	⚙
	73				BS30S	⚙
BB30A CANNONDALE	73				BS30	⚙
BB65	90	65	ZED	50	BC65	⚙
BB86	86,5	41	3D+ / FSA386	30	BB86386	⚙⚙
BB90/95	90,5	37	Shimano	24	BB90CS	⚙
					BB90SS	⚙
					BB90JS	⚙
	95		SRAM	24/22	BB90CR	⚙
					BB90SR	⚙
					BB90JR	⚙

⚙ CERAMIC
 ⚙ STEEL
 ⚙ STAINLESS STEEL

THREADED SERIES



BSA	1.37" X 24	68/73	Shimano	24	●	BSA24B	⚙️ ⚙️
					●	BSA24R	⚙️
			SRAM	24/22	●	BSA24BR	⚙️ ⚙️
					●	BSA24RR	⚙️
			3D+/FSA386	30	●	BSA386B	⚙️ ⚙️
					●	BSA386R	⚙️

ITA	36 mm x 24 T	70	Shimano	24	●	ITA24B	⚙️ ⚙️
					●	ITA24R	⚙️
			SRAM	24/22	●	ITA24BR	⚙️ ⚙️
					●	ITA24RR	⚙️
			3D+/FSA386	30	●	ITA386B	⚙️ ⚙️

T47	47 mm x 13 T	68/73	Shimano	24	●	T4724B	⚙️ ⚙️
			SRAM	24/22	●	T4724BR	⚙️ ⚙️
			BB30	30	●	T47B	⚙️ ⚙️
			3D+/FSA386	30	●	T47386B	⚙️ ⚙️

⚙️ CERAMIC
 ⚙️ STAINLESS STEEL

SMALL IN SIZE, BUT OF GREAT IMPORTANCE

Pulley upgrade

Derailleur pulleys play a big role in drivetrain performance. These small wheels have the fastest spinning bearings of a bicycle. No need to say, the quality of the bearing is key to the performance of the pulley.

TYPE	MATERIAL	COLOUR	BEARING TYPE
B001	7075 T6	Black	⚙️ ⚙️ ⚙️
R001		Red	⚙️ ⚙️ ⚙️
PR01	PA66 - GF Enhanced	Black	⚙️ ⚙️ ⚙️
PR02			⚙️ ⚙️ ⚙️

Near to frictionless

To guarantee the lowest friction possible, we installed the fastest spinning bearing we had available for industrial customers: CEMA's ZrO2 Full ceramic bearing. Because ZrO2 material properties do not require grease or seals, the bearings can spin freely and are near-frictionless with a lifetime exceeding any other bearing type.

Bearing choice

Besides the ZrO2 Full ceramic bearing option, all pulleys are available with our high-quality SRC ceramic bearing or all stainless steel bearing and come with a choice of plastic or aluminium body.



- ⚙️ STAINLESS STEEL
- ⚙️ CERAMIC
- ⚙️ FULL CERAMIC

BICYCLE PROFESSIONALS ONLY

Installation and removal

To avoid bearings and components getting damaged during installation, it is essential they are installed carefully using the right tools. CEMA offers cycling professionals a helping hand through a set of professional workshop quality bearing replacement tools.

Only a proper installation and fit of the bearings guarantees optimum performance and longest lifetime.

Professional and durable

All tools come in a high-quality box for protection and easy storage and are an asset for every bicycle mechanic.



BOTTOM BRACKET REPLACEMENT TOOL B006D

Removal and installation
of BB30/BB86/
BB386/PF30/BB90



BEARING PULLER B004

Removal of wheel bearings



HUB BEARING PRESS B008

Installation of wheel bearings



Want to become a dealer or distributor
or just need more information?
Get in touch with us!

TAIWAN Head Office:
6F-1, No.8, Taiyuan 1st St.,
Zhubei City, Hsinchu County, Taiwan
TEL: 886-3-5601270
FAX: 886-3-5601290

service@cemabearing.com
<http://www.cemabearing.com>

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