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FOR EVERY RIDER**

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**CEMA**
CERAMIC BEARING

2417



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Rolling success for CEMA Bearing Worldwide

CEMA, a Taiwanese manufacturer of high-quality ceramic bearings

What began in 2005 as an idea to harness the unique properties of ceramic bearings for enhancing efficiency and sustainability in industrial applications has evolved into a company that produces and assembles high-quality ceramic bearings for various industries and premium bearings and bearing components for 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 focus.

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

Growing numbers in cycling

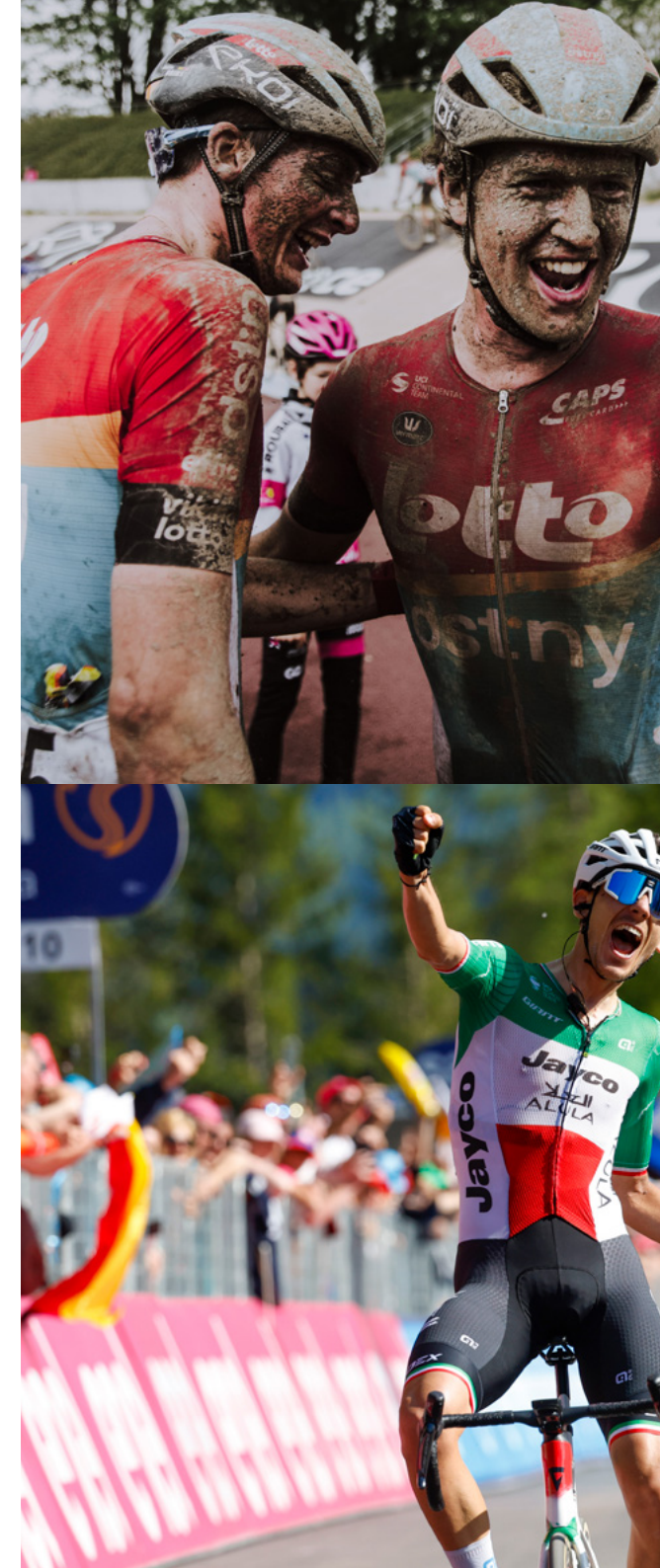
The success of CEMA's SRC bearings in the cycling industry has been rapidly gaining momentum. Through participation in leading bicycle fairs around the globe, CEMA has expanded its distribution network significantly. With a European office in Belgium and distributors worldwide, an increasing number of bike shops and cycling enthusiasts are now enjoying the exceptional quality of our high-end ceramic bearings, proudly 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 victories in the Spring Classics to triumphs in major stage races, our bearings have consistently proven their value. At CEMA, we embrace the challenge of supporting athletes who demand the absolute best from their equipment!

Markets

CEMA offers aftermarket products to bike shops and cycling enthusiasts through a global distribution network, while also supplying high-quality components directly to OEM manufacturers.







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



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 and weigh 40% less than a regular steel ball.



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



Assorted Box - Wheel bearings

CEMA offers the bicycle shop handy and firm quality workshop boxes filled with the most common used bearings. Every box includes a product sheet and handy compartments for clever bearing management. Convenient to carry out any repair or maintenance, suitable for every professional workshop.



Assorted Box Wheel bearings

Common used wheel bearings
BX001 (ceramic) - BX002 (chrome steel)

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	⚙️ ⚙️
16287	16	28	7	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	⚙️ ⚙️

⚙️ Ceramic ⚙️ Steel

ID (mm)	OD (mm)	W (mm)	Angulation	Bearing type	Bearing no.
27,1	38	6,5	36/45	⚙️	SRC-HS-JS10
27,1	38	6,5	45/45	⚙️	SRC-HS-JS06
30,1	39	6,5	45/45	⚙️	SRC-HS-JS07
30,1	41	6,5	36/45	⚙️	SRC-HS-JS08
30,1	41	6,5	45/45	⚙️	SRC-HS-JS01
30,1	41,8	6,5	45/45	⚙️	SRC-HS-JS09
30,5	41	7,7	45/45	⚙️	SRC-HS-JS11
30,5	41,8	7,7	45/45	⚙️	SRC-HS-JS13
30,5	41,8	8	45/45	⚙️	SRC-HS-JS02
32,7	41,8	6	45/45	⚙️	SRC-HS-JS12
34,1	46,9	7	45/45	⚙️	SRC-HS-JS05
35	47	8	45/45	⚙️	SRC-HS-JS15
40	51,8	8	36/45	⚙️	SRC-HS-JS16
40	51,8	8	45/45	⚙️	SRC-HS-JS03
40	52	7	36/45	⚙️	SRC-HS-JS17
40	52	7	45/45	⚙️	SRC-HS-JS04
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	⚙️ ⚙️ ⚙️ ⚙️

Bottom Bracket bearing options

Type	Ring material	Ball material
Chrome Steel	SUJ2	SUJ2
Stainless Steel	440C	440C
Ceramic	SUJ2	Si3N4
Ceramic SG3	SUJ2 (coated)	Si3N4

⚙️ Ceramic SG3-coated ⚙️ Ceramic ⚙️ Steel ⚙️ Stainless steel

Headset bearing series



Bottom bracket bearing series





Linking bearings to components

A matching bracket for every frame

A Bottom Bracket is the connection between the crank set and the frame and 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 and SG3 COATED bearings in CNC machined aluminium cups. For most bottom bracket types, an all stainless steel bearing option is available as well.

CEMA bottom bracket advantages

- Compatible to most cranks available in the market
- A wide range of 30 to 24 mm adapters
- Easy to install with an external bottom bracket wrench
- 24 and 30 mm bearing ID design to directly transfer pedaling power
- Aluminum seals for easily maintaining bearings and adding grease
- Interlock design for Press Fit avoids noise issues and offers extreme rigidity
- Double O-ring design to prevent water from entering the frame and to create a buffer between the frame and the bottom bracket
- Equipped with stainless steel, CEMA SRC ceramic or SG3 coated bearings
- Excellent tolerance control, thanks to CNC manufacturing

The advantage of coated bearings

CEMA SG3 bottom bracket bearings feature a special surface treatment of the bearing rings providing them with increased corrosion resistance.

The surface treatment enhances the hardness of the raceways, reducing friction and increasing resistance to wear.

The benefits of the INTERLOCK bottom bracket design

CEMA Interlock bottom brackets are bottom brackets for pressfit frames. The two sides of the bottom bracket are connected inside the frame by means of a thread. This connection increases rigidity and guarantees a perfect alignment of the bearings. The cups will not be able to move separately from each other leading to a stable and crack-free solution.

Spare part bearing kits

Type	Compatibility	Bearing type
S009	CEMA 24 mm	⚙️ ⚙️ ⚙️
S010	CEMA 30 mm	⚙️ ⚙️ ⚙️
S010D	CEMA DUB compatible	⚙️ ⚙️ ⚙️
S012	CEMA 86386 Interlock - 30 mm	⚙️ ⚙️
S012D	CEMA 86386 Interlock - DUB	⚙️ ⚙️

⚙️ Ceramic SG3-coated ⚙️ Ceramic ⚙️ Steel ⚙️ Stainless steel

Double O-ring design prevents water entering the frame and serves as a buffer between the frame and the bottom bracket.



Interlock design offers extreme rigidity and avoids noise issues.

Equipped with Stainless Steel, SRC Ceramic or SG3 COATED Ceramic bearings. Interchangeable bearings.

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Interlock Press Fit series

Frame type	Bracket width	Frame ID	Crank type	Spindle	Colour	Type	Bearing type
BB86/92	86,5/92	41	SHIMANO	24	●	86CBPR	⚙️ ⚙️ ⚙️
					●	86CRPR	⚙️ ⚙️ ⚙️
			SRAM GXP	24/22	●	86CBRPR	⚙️ ⚙️ ⚙️
					●	86CRRPR	⚙️ ⚙️ ⚙️
	SRAM DUB		29	●	BC86386DB	⚙️	
				●	BS86386DB	⚙️	
	ROTOR 30		30	●	BC86386	⚙️	
				●	BS86386	⚙️	
86,5	CAMPA UT	25	●	BB8625UB	⚙️		



BB30	68/73	42	SHIMANO	24	●	BB3024B	⚙️ ⚙️ ⚙️
					●	BB3024R	⚙️
			SRAM GXP	24/22	●	BB3024BR	⚙️ ⚙️ ⚙️
					●	BB3024RR	⚙️
	PRAXIS M30		28/30	●	BB30386MB	⚙️ ⚙️ ⚙️	
	SRAM DUB		29	●	BB30386DB	⚙️ ⚙️ ⚙️	
	ROTOR 30		30	●	BB30386B	⚙️ ⚙️ ⚙️	
	68		CAMPA UT	25	●	BB3025UB	⚙️



⚙️ Ceramic SG3-coated ⚙️ Ceramic ⚙️ Steel ⚙️ Stainless steel



Frame type	Bracket width	Frame ID	Crank type	Spindle	Colour	Type	Bearing type
PF30	68/73	46	SHIMANO	24	●	PF3024B	⚙️ ⚙️ ⚙️
					●	PF3024R	⚙️
	SRAM GXP		24/22	●	PF3024BR	⚙️ ⚙️ ⚙️	
				●	PF3024RR	⚙️	
	PRAXIS M30		28/30	●	PF30386MB	⚙️ ⚙️ ⚙️	
	SRAM DUB		29	●	PF30386DB	⚙️ ⚙️ ⚙️	
	ROTOR 30		30	●	PF30386B	⚙️ ⚙️ ⚙️	
	68		PF30	30	●	PF30B	⚙️ ⚙️ ⚙️
		CAMPA UT	25	●	PF3025UB	⚙️	



BB386	86,5	46	SHIMANO	24	●	BB38624B	⚙️ ⚙️ ⚙️
			SRAM GXP	24/22	●	BB38624BR	⚙️ ⚙️ ⚙️
			PRAXIS M30	28/30	●	BB386MB	⚙️ ⚙️ ⚙️
			SRAM DUB	29	●	BB386DB	⚙️ ⚙️ ⚙️
			ROTOR 30	30	●	BB386B	⚙️ ⚙️ ⚙️



OSBB	61	46	SHIMANO	24	●	OSPF3024B	⚙️ ⚙️ ⚙️
			SRAM GXP	24/22	●	OSPF3024BR	⚙️ ⚙️ ⚙️

⚙️ Ceramic SG3-coated ⚙️ Ceramic ⚙️ Stainless steel

Frame type	Bracket width	Frame ID	Crank type	Spindle	Colour	Type	Bearing type
BBRIGHT BB30	79	42	SHIMANO	24	●	RBB3024BS	⚙️ ⚙️ ⚙️
			SRAM GXP	24/22	●	RBB3024BR	⚙️ ⚙️ ⚙️
BBRIGHT PF30	79	46	SHIMANO	24	●	RPF3024BS	⚙️ ⚙️ ⚙️
			SRAM GXP	24/22	●	RPF3024BR	⚙️ ⚙️ ⚙️
			PRAXIS M30	28/30	●	RPF30386MB	⚙️ ⚙️ ⚙️
			SRAM DUB	29	●	RPF30386DB	⚙️ ⚙️ ⚙️
			ROTOR 30	30	●	RPF30386B	⚙️ ⚙️ ⚙️
BB30A (Cannondale road)	73	42	SHIMANO	24	●	BB30A24B	⚙️ ⚙️ ⚙️
			SRAM GXP	24/22	●	BB30A24BR	⚙️ ⚙️ ⚙️
PF30A (Cannondale road)	73	46	SHIMANO	24	●	PF30A24B	⚙️ ⚙️ ⚙️
			SRAM GXP	24/22	●	PF30A24BR	⚙️ ⚙️ ⚙️



⚙️ Ceramic SG3-coated ⚙️ Ceramic ⚙️ Stainless steel

Press Fit & Direct Fit bearing series



Frame type	Bracket width	Frame ID	Type	Spindle	Colour	Type	Bearing type
BB86/92	86,5	41	SHIMANO	24	●	86PS	⚙️
			SRAM	24/22	●	86PR	⚙️
	SHIMANO		24	●	86PS	⚙️	
	SRAM		24/22	●	86PR	⚙️	

Frame type	Bracket width	Frame ID	Crank type	Spindle	Type	Bearing type
BB30	68/73	42	BB30	30	BC30-SG3	⚙️
					BC30	⚙️
	BS30S				⚙️	
BB30A CANNONDALE	73				BS30	⚙️
BB90/95	90,5	37	SHIMANO	24	BB90CS	⚙️
					BB90SS	⚙️
					BB90JS	⚙️
	95		SRAM GXP	24/22	BB90CR	⚙️
					BB90SR	⚙️
					BB90JR	⚙️

Threaded series



Frame type	Thread Type	Bracket width	Crank type	Spindle	Colour	Type	Bearing type
BSA	1.37" X 24	68/73	SHIMANO	24	●	BSA24B	⚙️ ⚙️ ⚙️
					●	BSA24R	⚙️
			SRAM GXP	24/22	●	BSA24BR	⚙️ ⚙️ ⚙️
					●	BSA24RR	⚙️
			PRAXIS M30	28/30	●	BSA386MB	⚙️ ⚙️ ⚙️
			SRAM DUB	29	●	BSA386DB	⚙️ ⚙️ ⚙️
ROTOR 30	30	●	BSA386B	⚙️ ⚙️ ⚙️			

⚙️ Ceramic SG3-coated ⚙️ Ceramic ⚙️ Steel ⚙️ Stainless steel

Threaded series

Frame type	Thread Type	Bracket width	Crank type	Spindle	Colour	Type	Bearing type
ITA	36 mm x 24 T	70	SHIMANO	24	●	ITA24B	⚙️ ⚙️ ⚙️
			SRAM GXP	24/22	●	ITA24BR	⚙️ ⚙️ ⚙️
			PRAXIS M30	28/30	●	ITA386MB	⚙️ ⚙️ ⚙️
			SRAM DUB	29	●	ITA386DB	⚙️ ⚙️ ⚙️
			ROTOR 30	30	●	ITA386B	⚙️ ⚙️ ⚙️
T45	M45 X 1	82,5	SHIMANO	24	●	T4724B	⚙️ ⚙️ ⚙️
			SRAM GXP	24/22	●	T4724BR	⚙️ ⚙️ ⚙️
T47 (OUTBOARD)	M47 X 1	68/73	SHIMANO	24	●	T4724B	⚙️ ⚙️ ⚙️
			SRAM GXP	24/22	●	T4724BR	⚙️ ⚙️ ⚙️
			PRAXIS M30	28/30	●	T47386MB	⚙️ ⚙️ ⚙️
			SRAM DUB	29	●	T47386DB	⚙️ ⚙️ ⚙️
			ROTOR 30	30	●	T47386B	⚙️ ⚙️ ⚙️
		CAMPA UT	25	●	T4725UB	⚙️	
T47A	M47 X 1	77	SHIMANO	24	●	T47A24B	⚙️ ⚙️ ⚙️
			SRAM GXP	24/22	●	T47A24BR	⚙️ ⚙️ ⚙️
			PRAXIS M30	28/30	●	T47A386MB	⚙️ ⚙️ ⚙️
			SRAM DUB	29	●	T47A386DB	⚙️ ⚙️ ⚙️
			ROTOR 30	30	●	T47A386B	⚙️ ⚙️ ⚙️
T47 - TREK (INBOARD)	M47 X 1	85,5	SHIMANO	24	●	T47A24B	⚙️ ⚙️ ⚙️
			SRAM GXP	24/22	●	T4724TBR	⚙️ ⚙️ ⚙️
			PRAXIS M30	28/30	●	T47386TMB	⚙️ ⚙️ ⚙️
			SRAM DUB	29	●	T47386TDB	⚙️ ⚙️ ⚙️
			ROTOR 30	30	●	T47386TB	⚙️ ⚙️ ⚙️



⚙️ Ceramic SG3-coated ⚙️ 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.

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 nearly 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.



Compatibility	Discipline	Speed	Tooth pulley	Material	Colour	Type	Bearing type
SHIMANO	ROAD	9 - 10 - 11	11 - 11	PA66 PLASTIC	●	PR01	⚙️⚙️⚙️
				ALUMINIUM	●	B001	⚙️⚙️⚙️
		●	R001		⚙️⚙️⚙️		
		11	12 - 14	ALUMINIUM	●	B024	⚙️⚙️⚙️
	12	12 - 14	ALUMINIUM	●	B02412D	⚙️	
			●	B02412U	⚙️⚙️⚙️		
	MTB	9 - 10 - 11	11 - 11	PA66 PLASTIC	●	PR01	⚙️⚙️⚙️
				ALUMINIUM	●	B001	⚙️⚙️⚙️
●	R001	⚙️⚙️⚙️					
SRAM	ROAD	9 - 10 - 11	11 - 11	PA66 PLASTIC	●	PR01	⚙️⚙️⚙️
				ALUMINIUM	●	B001	⚙️⚙️⚙️
		●	R001		⚙️⚙️⚙️		
	12	12 - 14	ALUMINIUM	●	B02412R	⚙️⚙️⚙️	
	MTB	10 - 11	12 - 12	PA66 PLASTIC	●	PR02	⚙️⚙️⚙️
		12	12 - 14	ALUMINIUM	●	B024E	⚙️⚙️⚙️
CAMPAGNOLO	ROAD	11	11 - 11	PA66 PLASTIC	●	PR01	⚙️⚙️⚙️



⚙️ Ceramic ⚙️ Full ceramic ⚙️ Stainless steel

DERAILLEUR PULLEY INSTALLATION GUIDE



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.



CEMA Bottom Bracket Replacement tool

006D

To remove and install all types of pressfit bottom brackets.

008C

CEMA Hub Bearing Press - Expert Professional - Standard

008B - 008A

To install bearings into hubs.



CEMA Bearing puller

B004A

To remove hub bearings with an inside diameter from 4 to 25 mm.



**CEMA Bottom bracket
Wrench**

B020

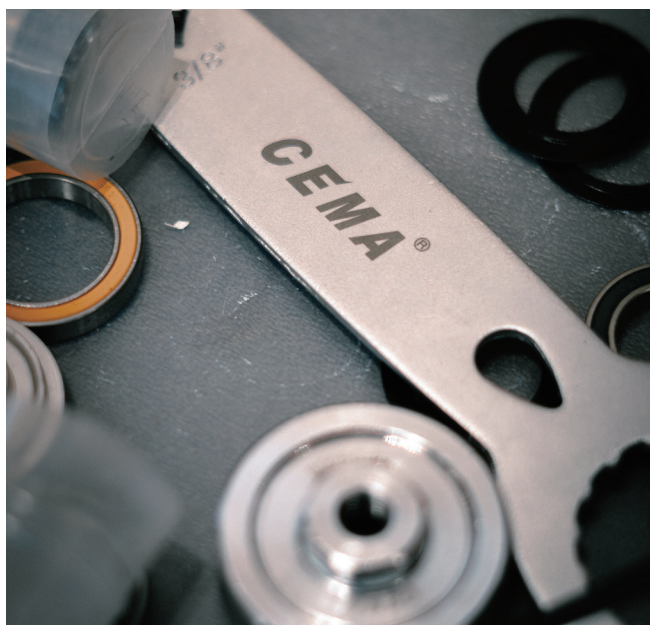
Fits all type of CEMA bottom brackets. Two pieces recommended to install CEMA Interlock bottom brackets.



**CEMA Bottom Bracket
Tool - 24 mm**

B019

To remove and install CEMA bottom brackets: BSA24, ITA24, T4724, T4725, and Interlocks BB86/89/92, BB3024, BB3025, PF3024, PF3025, RBB3024, RPF3024, BB30A24, PF30A24, OSPF3024



**CEMA Bottom Bracket
Tool - 30 mm**

B006D-18

To remove and install CEMA bottom brackets BSA386, ITA386, T4524, T47386, T4724T (TREK), T47386TB and Interlocks BB30386, PF30, PF30386, BB38624, BB386, RPF30, RPF30386





Want to become a dealer or distributor
or just need more information?

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