





# YOUR WHEELS YOUR STYLE

PRODUCT BROCHURE

# IT MAKES A

# DIFFERENCE





# ABOUT THE ROTOBOX WHEEL

The Rotobox Carbon Fiber Wheels are ultra light motorcycle wheels for racing and road application and an upgrade product to any model of Sport motorcycle. Our wheels have been designed to meet the highest level of racing performance and due to one-piece hollow carbon cast construction the wheels develop a safe and controlled advantage in speed, providing the lowest moment of inertia and the lowest gyroscopic effect.

The Rotobox wheels are **the lightest and the strongest carbon fiber motorcycle wheels**, due to the use of premium materials and advanced technology. Our process of producing **one-piece hollow carbon cast** is an adaptation of high pressure Resin Transfer Molding technology to ensure the best quality, the continuity of the procedure and subsequent safety of our products.



### SAFETY

The wheels conform to safety standard JASO T203-85 for JWL dotE Certification. Before riding on public streets, make sure about conformity with local regulations.



PLUS X AWARD®

BEST PRODUCT 2016/2017

# COMPATIBILITY

Direct replacement for original wheels, except for rear symmetric wheel which use specific sprocket pattern, 5-hole M10 PCD 100mm ID 76mm.

# **ZNOITATIMU**

		FRONT WHEEL	REAR WHEEL
		FRONT WHEEL	
Limits:	Maximal allowable static load	150 kg (330 lbs)	250 kg (551 lbs)
	Maximal operating temperature	100°C (212°F)	100°C (212°F)
	Maximal tire pressure	4 bar	4 bar

# AWARDS

ROTOBOX RBX2 carbon fiber wheels won the world's largest innovation award for technology, sports and lifestyle - the Plus X Award - in the categories Innovation, High Quality and Design.

The international jury consisting of independent experts from 27 industries and the testing institute TÜV Süd also rewarded the RBX2 with the prestigious Plus X Award for "Best Product of the Year 2016/2017"

**RBX2 SYMMETRIC** wheels in size: 17"x3.5"/6.0" Weight: 6.69KG / 14.74LBS





# THERE'S NO BETTER PROVING GROUND THAN RACETRACKS!

ROTOBOX



SHOEL

NITER

200

YAMAHA

Yamaha Austria Racing Team Official ROTOBOX Testing Team

### **TECHNICAL** DESCRIPTION

#### **ULTRA THIN LAYER OF SPECIAL CLEAR COATING**

The carbon cast is protected from radiation with a very thin layer of special clear UV protective coating. The rim surface is very clean, smooth and UV resistant and ensures our wheels zero notch effect on the surface.

#### HIGH ACCURACY OF CENTRE PARTS

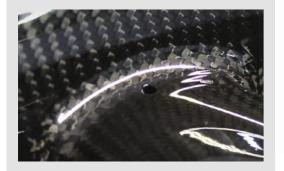
The centre parts of the wheel includes aluminium alloy 7075 T6 hubs, spacers and sprocket carrier. All parts are CNC machined at accuracy of ±0.02 mm for each bike model specifically and designed to be direct replacement for stock wheels, except for sprocket.

#### **ANODIZED 90° ANGLED VALVE STEM**

We use 90° angled valve stem to ensure air pressure resistance at high speed. Default color of valve stem is red, on request we provide also black, silver, gold, green or blue color option of valve stems.

#### VENTING HOLE

Each rim spoke has special venting hole placed on the bottom of the spoke to prevent from condensation.



#### THE LOWEST UNSPRUNG WEIGHT

Unique design of the wheel yields the maximum output for each specific motorcycle model while significantly reducing overall weight for top performance.

#### **ROTATIONAL AERODYNAMICS**

Eliptical cross-section of spokes for lower aerodynamic coefficient during rotation.



#### **ONE-PIECE HOLLOW CARBON CAST**

The shape, structure and dimensions of each wheel are defined by highly precised aluminium tool CNC made in-house specifically for a wheel design. Our process of producing one-piece hollow carbon cast is special high pressure Resin Transfer Molding technology to ensure the best quality, the continuity of the procedure and subsequent safety of our products.

#### **ANTI-SLIP ADHESION RIM TO TIRE**

We apply special anti-slip compound on adhesion rim-tire area to prevent rotation of the tire during acceleration and breaking.

#### **RIM REINFORCED WITH STAINLESS** 2.5 mm STEEL WIRE

For greater impact resistance of the rim we insert stainless 2.5 mm steel wire inside each side of the rim.



#### A RIB FOR TORQUE RESISTANCE

Each spoke of the wheel has a special rib to improve torque resistance.



# **SAFETY FIRST**

The construction of one-piece hollow carbon cast of the Rotobox wheel develop the safest and most controlled advantage in speed. Rotobox wheels are truly the first safe carbon wheels for motorbikes on the market.

# OTOEOX dotEJIL Mar. 2016

# **GO FOR BETTER RESPONSE**

The Rotobox wheel gives great response, because of faster acceleration and better braking. This is a great advantage in turns allowing higher speed entering into the turn and faster accelerating after the turn. Rotobox wheel gives your bike clever performance.

#### EMBRASE GREATER TIFFNESS

The Rotobox wheel has greater stiffness, because of the construction of one-piece hollow carbon cast. The wheel is produced with high pressured RTM technology, which ensures a clean, smooth and hard surface.

# IS THE GOAL

In seven years of intensive R&D work we have made the most powerful wheel for road and racing motorcycles. We are focused on Sport motorbikes, because when the bike uses Rotobox wheels it becomes at least 5 kg (11 lbs) lighter than stock and that is a huge amount of unsprung mass shaved from the bike; it is basically like adding some hp to the engine.

### ADVANTAGES







WEIGHT SAVING CERTIFICATION 3 - COMPONENT

COMPOSITE

# WEIGHT COMPARISON

#### **STOCK OEM WHEELS**

11.7 kg (25.8 lbs)

AFTERMARKET FORGED ALUMINIUM DOT E JWL WHEELS 9.5 kg (21 lbs)

AFTERMARKET MAGNESIUM DOT E JWL WHEELS 8.15 kg (18 lbs)

AFTERMARKET CARBON DOT E JWL WHEELS

7.4 kg (16.3 lbs)

ROTOBOX RBX2 CARBON DOT E JWL WHEELS

6.7 kg (14.7 lbs)

# MOMENT OF INERTIA COMPARISON

STOCK OEM REAR WHEEL

2570 kg•cm<sup>2</sup> (878 lb•in<sup>2</sup>)

AFTERMARKET FORGED ALUMINIUM DOT E JWL REAR WHEEL 1450 kg•cm<sup>2</sup> (495 lb•in<sup>2</sup>)

AFTERMARKET MAGNESIUM DOT E JWL REAR WHEEL 1090 kg•cm² (372 lb•in²)

AFTERMARKET CARBON DOT E JWL REAR WHEEL 880 kg•cm<sup>2</sup> (300 lb•in<sup>2</sup>)

ROTOBOX RBX CARBON DOT E JWL REAR WHEEL 720 kg•cm² (246 lb•in²)

















Weight comparison for the set of Rotobox RBX2 wheels. Presented is the complete mass of both rims without the sprocket and without the braking discs for the motorcycle BMW S1000RR.

Moment of inertia comparison for the rear wheel of the SUZUKI GSXR1000.





# BREATHTAKING EVEN AT O KM/H!



### PERSONALIZE YOUR WHEEL



Let your personality and style shine through in the design of your wheels. We allow you to personalize your wheels with your very own graphic. Additionally, you can choose between various colors of logo labels, valve stems, colors used for anodizing the centre parts of the wheel, as well as the transparency of coating - either glossy or matte. Dare to be different. It's your bike, ride it your way.

#### CHOOSE YOUR COLORS

We offer various color options for the ROTO-BOX logo label and valve stems. The color possibilities for the logo are endless, while for the valve stem you can choose betwen red, blue, green, silver, gold, or black.



Color options for valve stems:





#### **CHOOSE TRANSPARENCY OF COATING**

Depending on your taste, we can lacquer your wheels with a glossy or matte finish coating. Both options guarantee the highest level of protection from scratches, dents and UV rays. The glossy finish enhances the brightness of the carbon weaving, while the matte option enhances the natural look of the carbon fiber.





#### **OPTIONAL TRANSLUCENT COLORS**



BLUE

GREEN



#### **DESIGN YOUR GRAPHICS**

Based on your taste, you and the ROTOBOX Design Team can produce a unique graphic design of the wheel on these areas:

- Rim Line Area
- Spokes
- Inner Rim Area

Choose your very own color combination and image and our ROTOBOX Design Team will create a graphic design tailored exactly to your imagination and desire. Your graphic is produced and printed on a special thin foil, which is hand placed on the carbon rim during the production phase and protected with a transparent coating finish.

#### **CHOOSE THE COLOR OF YOUR CENTER PARTS**

The standardized center parts color is black. However, during the production process of anodizing, we can color all the center parts of your wheel according to your taste. You can choose between the following anodizing colors:



red, blue, green, silver, or gold. Every color combination you choose guarantees an excellent hard surface and impeccable corrosion protection.

Color options for center parts:



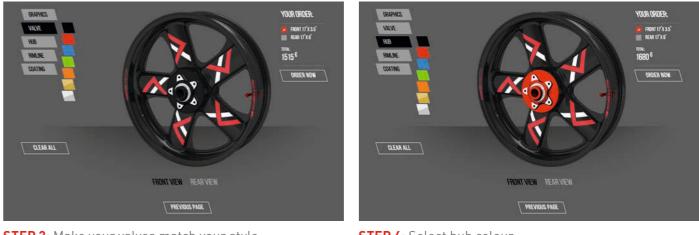


# YUUR WHEELS. VISIT OUR WEBSITE FOR FULLY CUSTOMISABLE WHEELS

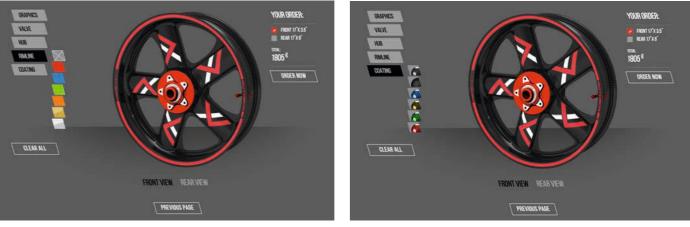




STEP 1: Find your motorcycle and model.



STEP 3: Make your valves match your style.



**STEP 5:** Put on a custom rimline.

**STEP 2:** Choose your design.

**STEP 4:** Select hub colour.

STEP 6: You can select between matt or gloss finish and also between many translucent colors.



