

New!

 **SUGINO**

# OX3-920D



**12**  
SPEED

**IDS**  
24  
∅24mm Axle

 CYCLOID II

New addition to OX series, the long-awaited  
**12 speed version** is now available!

Further evolved smooth and quiet shifting mechanism  
enables more effective power transmission.  
It's optimized for long-distance rides and hill climbing.

|              |   |
|--------------|---|
| Axle type    | IDS24 (∅24mm axle)                      |
| P.C.D.       | 110- <b>74mm</b>                        |
| Chainring    | 46- <b>30T</b> (*1)                     |
| Crank length | 160 , 165 , 167.5 , 170 , 172.5 , 175mm |
| Q-factor     | 143.6mm                                 |
| Chain line   | 44.5mm (*2)                             |
| Rear speed   | Shimano 12 Speed road (*2)              |
| Chain        | Shimano HG 12 Speed                     |
| Color        | Silver                                  |

\*1 : There are 2 shape options for the inner chainring.  
For details, refer to the next page.

\*2 : For 12 Speed road only. Not compatible with GRX  
due to different chainline.

**IDS**  
**24** ⇔ **HOLLOWTECH**  
**II**  
IDS24 is compatible with  
Shimano Hollowtech 2.

## OUTER CHAINRING

### Enforce Bridge

#### Key feature of OX3!

New chainring designed by using unique patented technology, which is the main feature of OX3.  
Thus, high-performance OX series has further evolved to deliver even more advanced performance.

- ✓ The special design contributes to rigidity and efficient power transmission.
- ✓ The special design facilitates more efficient chain engagement, resulting in quieter and smoother shifts without power loss.

**Enforce Bridge**



**NEXT** >>

New!

 **SUGINO**



### CRANK IDS24 Axle



**IDS 24** ⇔ **HOLLOWTECH II**

IDS24 is compatible with Shimano Hollowtech 2.

#### IDS24 Axle

$\phi 24$ m axle has both high rigidity and high corrosion resistance. Its precision design contributes to optimal stress distribution.

#### Adjustable bolt

The pressure bolt provides a fine adjustment to apply light pressure, ensuring the crank spins smoothly.



#### ① Super-low Q-factor

#### ② Perfectly symmetrical Q-factor

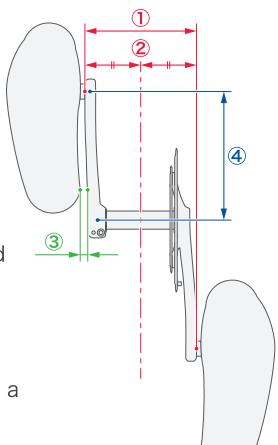
Q-factor is 143.6mm, lower than the existing model and perfectly symmetrical, which is crucial for body comfort and ensuring smooth pedaling.

#### ③ Ankle clearance

While being Super-low Q-factor, it's designed to secure enough ankle clearance. So, your shoes won't rub the cranks.

#### ④ Crank lengths

Available from 160mm short crank. There're a wide range of sizes offered.



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**IDS 24**  
 $\phi 24$ mm Axe

**CYCLOID II**

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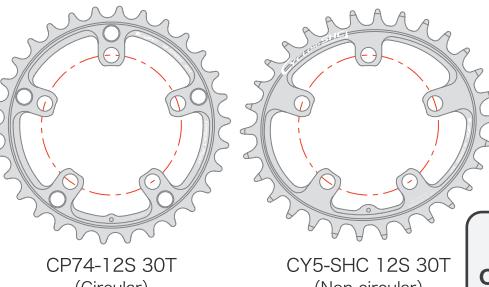
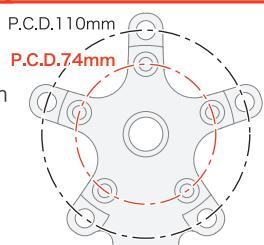
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### INNER CHAINRING

#### Compact Plus+

The dual P.C.D. design enables the use of P.C.D.74mm super small inner ring, which is ideal for long-distance rides, hill climbing, Granfondo, where stamina is required.



**Two options**

#### CYCLOID SHC Super Hill Climb

Non-circular chainring with special features unlike any other ovals, developed uniquely by Sugino.



#### Non-circular chainring

It increases the diameter during the power phase and minimizes it at the top and bottom dead spots to ensure more efficient pedaling. Also, its shifting performance is perfect as circular chainrings.

#### Autofocus mechanism

Under hard pedaling, the chain moves higher on the teeth which feels like pedaling a larger chainring. The vertical position of the chain on the teeth suitably changes depending on the pedal force so the pedaling is always smooth. No need of pedal stroke analysis to identify the peak point.



Rotation direction

#### Super Hill Climb

Special mechanism, ultra-lightweight, Compact plus, crucial features for boost your performance in hill climbing.



**SUGINO ENGINEERING CORPORATION**



<https://www.suginoltd.co.jp/us/>

Specifications are subject to change without notice due to continual improvements.



2025.11.25

