

TECH TIP

ROTAX
RACING

06 Revised Cylinders for Rotax MAX engine family

1 - TECHNICAL DETAILS

With the renewal of the casting and manufacturing tools, the best available technologies have been applied to further maximize the engine parity, durability and product appearance of the engine.

1. Casting process which provides a uniform smooth casting surface
2. Extended CNC control machining (ports, port heights, chamfer of ports)
3. NiCaSiI plated stop for exhaust valve (Senior MAX and DD2 cylinder only)

The revision of the casting tool has been also used to

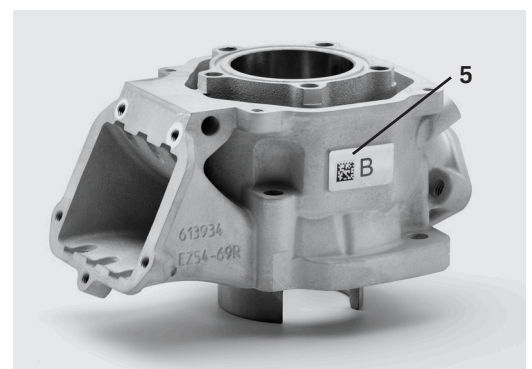
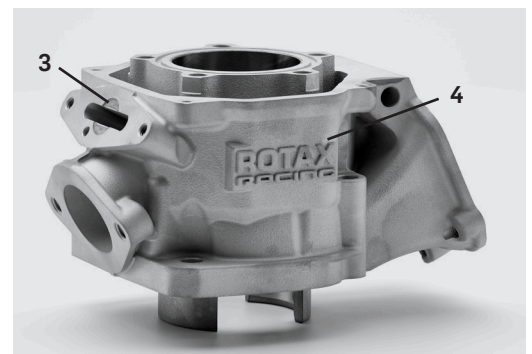
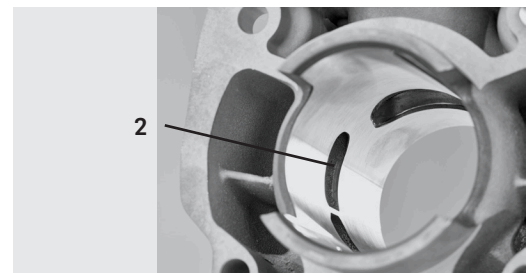
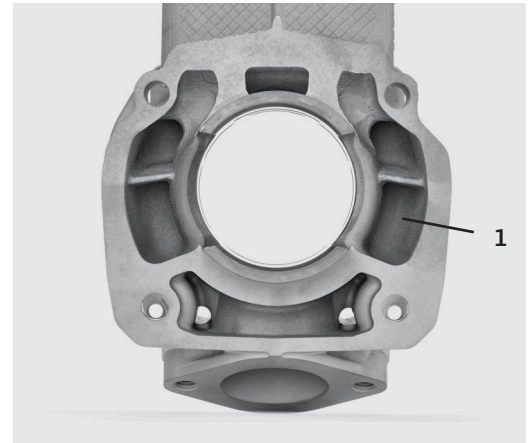
4. apply the logo "ROTAX RACING" to foster the brand appearance.
5. apply a QR-code for traceability of product quality

Product features

- › The cylinders with the revised casting tool are 100% exchangeable with the current cylinders.
- › The support plate (Rotax 251336) for exhaust valve (Senior MAX and MAX DD2) must not be used for the revised cylinders.
- › The performance and performance characteristic are identical to the current cylinders.
- › The tolerance groups A, AB and B for the cylinder bore (marked beside the QR code) are identical with the current cylinders.

- › The reading of the QR-code on a cylinder will provide a unique 6-digit number (not ascending but random number). This allows distributors to register and publish which cylinders have been supplied to their markets and are legal for national RMC events.
- › The cylinder is a 100% made in Austria product.
- › The cylinder and piston are provided by the same supplier.

Confidential extensive testing on dynos as well on kart tracks has confirmed to be ready to roll out the product for season 2024.

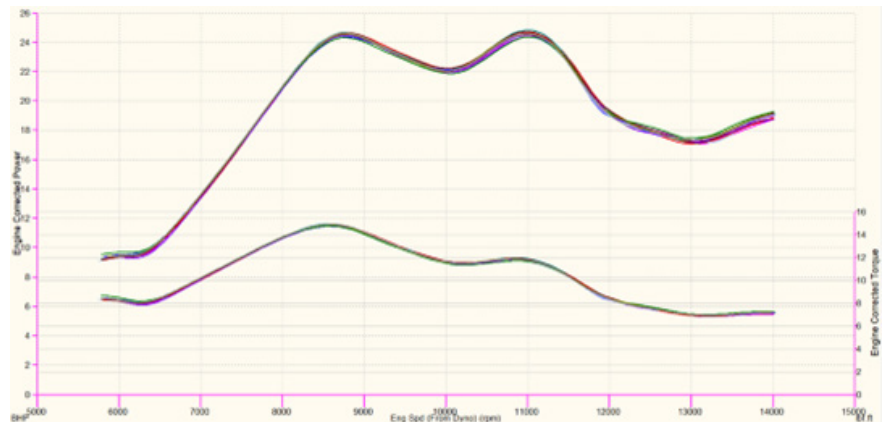


2 - TESTING

Learnings from extensive testing on engine dyno used by service centers

The following 3 aspects should be preferable considered before executing performance testing on dynamic dynos:

- 1) The cylinder will reach its best performance after 1h run time
- 2) Confirm proper piston clearance
- 3) Jetting is about 2 points higher than with the actual cylinder



Excellent parity result of revised cylinder

11 different cylinders tested on dyno. The graph illustrates the parity of the revised cylinder.

3 - ROTAX QUALITY

Expectation of our customers

BRP-Rotax to provide products at highest quality standards as well as to secure the timely availability according to the demand of the market. To achieve this goal, BRP-Rotax has been constantly raising the bar by applying new technologies.

The challenge

The global turbulences and the growth of Rotax Karting Business have challenged the supply chain of BRP-Rotax. The cylinder as the key element in regards of engine performance and its parity, must have maximum focus.

The solution

To secure all aspects mentioned above as well increase the supply chain capacity, the decision has been taken to transfer the cylinder manufacturing to Austria and consequently to invest to renew the casting and manufacturing tools of all cylinders of the Rotax MAX engine family. With this investment the latest and best racing technology could be applied to finally keep our technology leadership also in the future.

4 - GENERAL INFO

All Rotax genuine spare parts or devices mentioned in this issue of the TECH TIPS are available at your Rotax dealer.

If you have any questions or concerns – please ask your Rotax dealer. They will be happy to help you in any case.