

Engineered Without Compromise: Hyundai Motor's Midengined Coupe Concept 'RM15' Revealed at 2015 Seoul Motor Show

- RM15 (Racing Midship 2015) is a mid-engined, lightweight, high-performance two-seat concept
- Latest concept demonstrates Hyundai Motor's continued commitment to advanced vehicle technologies and materials
- Aluminum core structure with CFRP body panels minimizes vehicle weight
- High levels of downforce at speed, with competitive lift coefficient
- 2.0-liter T-GDI mid-mounted engine generates 300 ps and 39 kgm (383 NM) torque

April 2, 2015 ⁻ Hyundai Motor Company has revealed its latest mid-engined model, an aggressively-styled high-performance coupe concept named 'RM15' (Racing Midship 2015). The lightweight two-seat concept, unveiled today at the 11th Seoul Motor Show, makes a confident statement about Hyundai Motor's passion for performance and its expertise in the development of advanced vehicle technologies.

The RM15 features an aluminum spaceframe as its core structure, with a covering of light, stiff body panels formed in carbon-fiber reinforced plastic (CFRP), which together help to achieve a significant weight saving compared to a conventional all-steel vehicle. The body panels are painted in the signature colors of the company's 'N' (pale blue, black, red and Hyundai mid-blue) which also feature on the Hyundai WRC i20 rally car.

Based on the Veloster RM shown at last year's Busan Motor Show in Korea, the new RM15 features a host of modifications that boost the latest model's performance, handling and efficiency. Total weight is reduced (to 1,260 kg⁻ a saving of 195kg compared to an all-steel

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structure), weight distribution is more evenly balanced (43% front, 57% rear), the center of gravity is just 491 mm from the ground and aerodynamic downforce is 24 kg at 200 kph, aided by a competitive lift-coefficient.

Power comes from Hyundai Motor's Theta 2.0-liter T-GDI engine mounted transversely behind the two-seater cabin and ahead of the rear axle, ensuring optimized weight distribution and a low moment of inertia for excellent handling agility and high levels of traction. New, vertical air-intake slots in the flanks of the car, ahead of the rear wheel arches, increase cooling airflow within the engine bay and enhance powertrain efficiency.

The four-cylinder turbocharged gasoline engine generates 300 ps at 6,000 rpm and drives the rear wheels through a six-speed manual transmission. Strong torque delivery (39 kgm [383 Nm] at 2,000 rpm) helps to reduce the 0-100 km acceleration time to just 4.7 seconds.

Integrated sub-frame (front & rear) and a WRC-inspired roll-cage add extra stiffness to the structure, providing a firm foundation for the aluminum double-wishbone suspension, enabling it to give precise responses and consistent handling characteristics. RM15 rides on stylish 19-inch diameter mono block forged alloy wheels fitted with 235/35 R19 tires (front) and 265/35 R19 tires (rear).

The body panels, named 'Hybrid Lightweight Body Structure (HLBS)' provide further demonstration of Hyundai Motor's expertise with carbon-fiber reinforced plastic structures. With an aluminum core structure and CFRP body panels, the RM15 is light yet extremely strong, with torsional stiffness of 37,800nm/deg.

"The RM15 is another bold statement of the progressive spirit of Hyundai Motor, illustrating what we can achieve when we channel our passion and enthusiasm into a product that is not limited by convention," comments Joonhong Park, Senior Vice President and head of High Performance Vehicle Development Center at Hyundai Motor Group. "I'm very proud to unveil the RM15 at our home motor show, where visitors have become used to seeing Hyundai Motor confidently give expression to its creative and engineering talents and energies. We intend to demonstrate our

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progress with high-performance technologies with other exciting prototype projects in the near future".

Hyundai RM15 Concept / Specification Summary

Bodystyle	Two-door, two-seater, mid-engined high-performance sportscar	
Length	4,220 mm	Width 1,865 mm
Height	1,340 mm	Wheelbase 2,650 mm
Engine	Theta 2.0 T-GDI turbocharged gasoline direct injection	
Power / Torque	300 ps at 6,000 rpm / 39 kgm [383 Nm] at 2,000 rpm	
Transmission	Six-speed manual	
Performance	0-100 kph / 4.7 sec	
Weight	1,260 kg	

-Ends-

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