

X-BOW X-BOW

READY TO RACE

EN



**KTM**



# THE KTM X-BOW R

SUPER SPORTS CAR TECHNOLOGY FOR THE 21ST CENTURY

Revolutionary. Pure. Radical. In the form of the production version of the X-BOW, Austrian manufacturer KTM presented its interpretation of a super sports car for the 21st century in 2008. “We wanted to take Colin Chapman’s idea of a spartan, lightweight sports car reduced to the bare essentials and transfer it into the new millennium – with as many technological innovations as possible,” says KTM CEO Stefan Pierer.









# HIGH PERFORMANCE

ON ROAD AND RACETRACK

Together with the specialists at Italian sports car manufacturer Dallara, the composites experts Wethje, the think-tank KTM Technologies and engine partner Audi, what is probably the most exciting super sports car of our times was produced in only 18 months. The extraordinary styling came from Gerald Kiska and his team of designers, who created an iconic modern sports car.







A BR 692 HY  
www.ktm-x-bow.com



# CONCENTRATION

ON THE ESSENTIALS

READY TO RACE – this not only applies to KTM motorcycles, but also to the X-BOW. When developing the “R”, we focussed on improving both performance data and overall performance. Even more extreme, even faster and even more impressive. The result is quite outstanding.



Form follows function. The KTM X-BOW R has been designed down to the very last detail as an uncompromising driving machine. Many of the conventional elements aimed purely at comfort have been omitted. Dispensation with a roof and the windscreen as well as omission of air-conditioning and entertainment systems all takes a little getting used to. But it allows concentration on the most important aspect: the driving experience!

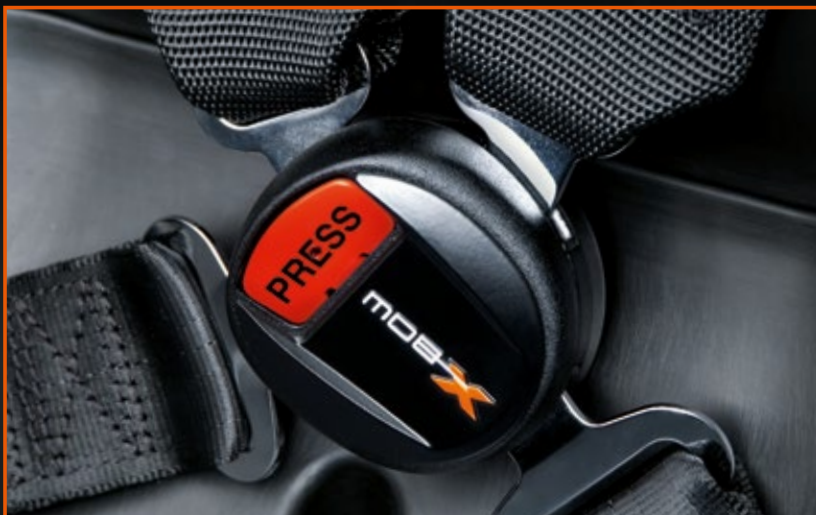




# CARBON- MONOCOQUE

SAFETY AND PERFORMANCE

The KTM X-BOW is the world's first production vehicle to boast a monocoque made completely from composite carbon fibre material – a trailblazing and pioneering technology, previously reserved exclusively for racing vehicles. Together with Dallara, the specialists at KTM Technologies succeeded in adapting this technology for application in series production.



## BELTS

Driver and passenger are protected by a four-point (also six-point upon request) safety belt from Schroth, which is also used in racing.



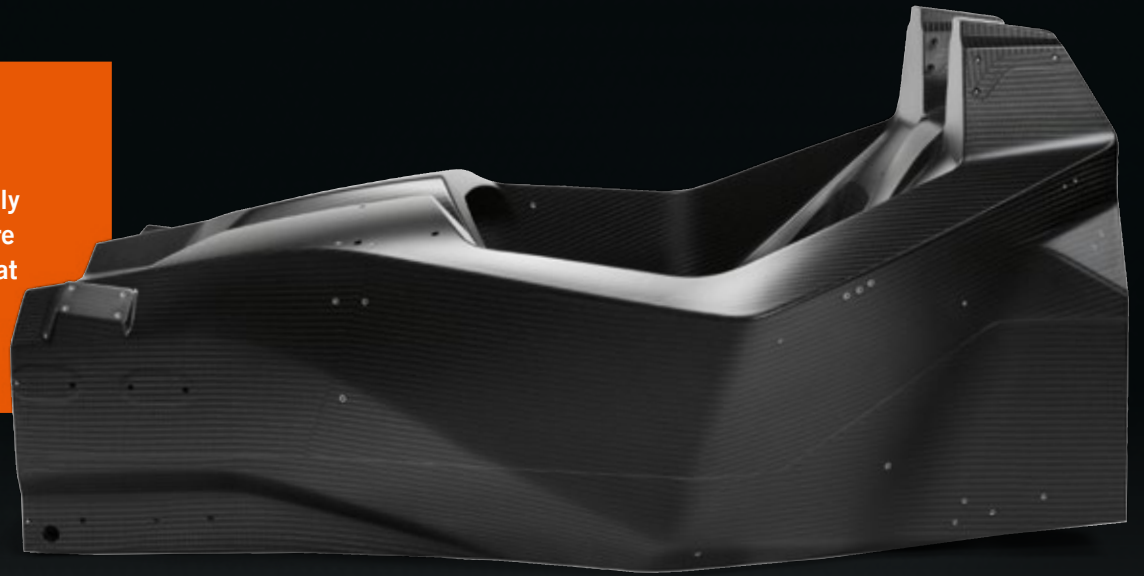
## ROLL BARS

In the event of a rollover, optimum protection is guaranteed by the aluminium roll bars integrated in the monocoque. They withstand loads of up to 2.5 times the weight of the vehicle.



## MONOCOQUE

Four layers of carbon fibre, epoxy resin, elaborate handiwork, autoclave technology: All come together to produce the twin-wall, two-part, extremely lightweight, carbon monocoque, which is manufactured by composite-fibre specialist Wethje in Germany. The result is a carbon-fibre construction that provides highest levels of safety, but only weighs 80 kilogrammes – with an unbelievably high torsional stiffness of 35.000 Nm/rad.



## CRASHBOX

The crash box at the nose of the vehicle provides for additional safety. Thanks to its carbon-aluminium sandwich construction, it even complies with the strict safety regulations of the FIA-GT and Formula 3.







# AUDI

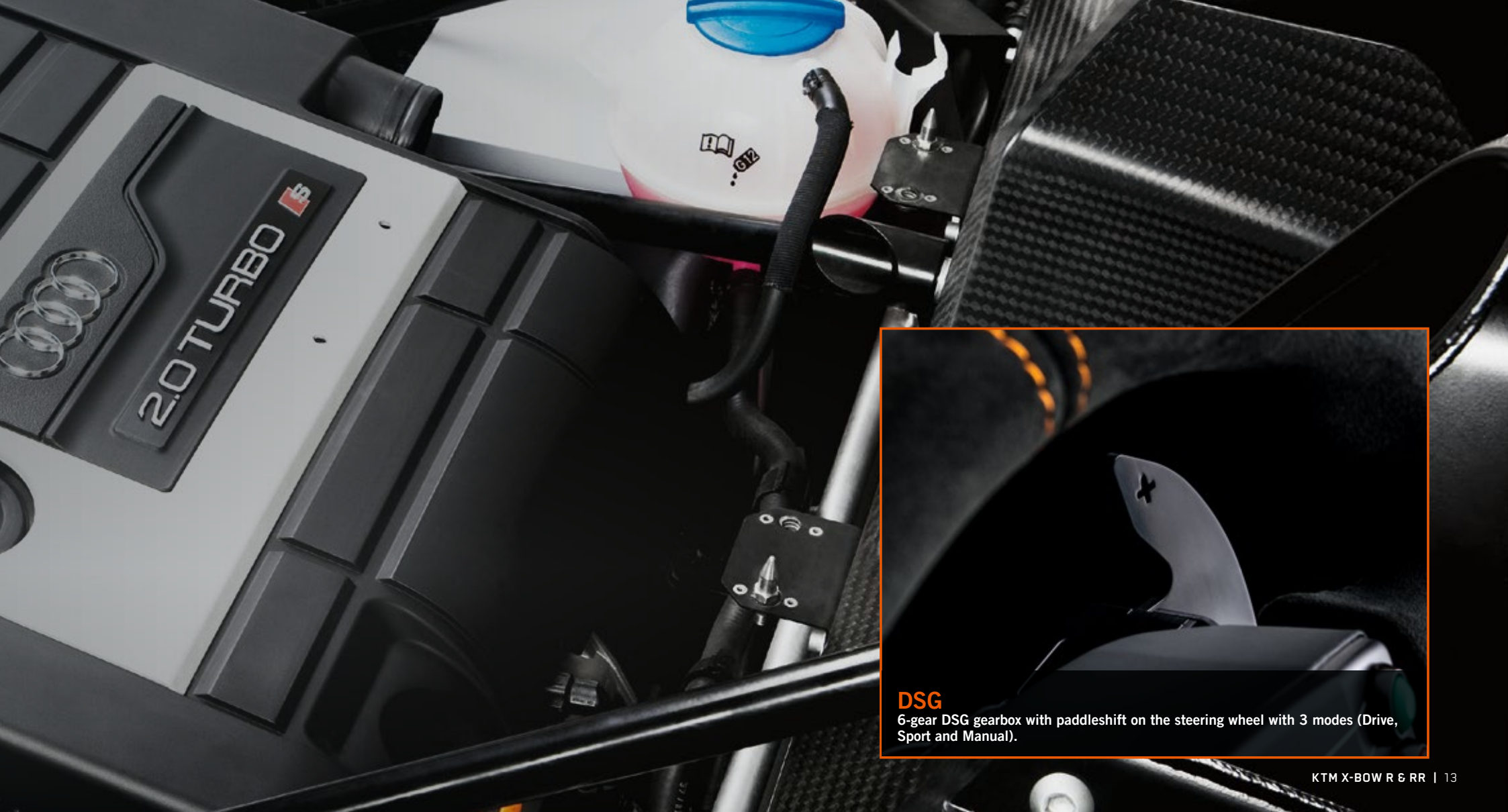
PERFORMANCE AND EFFICIENCY

# ENGINE TECHNOLOGY

The rear end of the KTM X-BOW R accommodates a 300 hp, 2.0-litre TFSI engine from premium manufacturer Audi. The state-of-the-art power unit works with gasoline direct injection and combines the dynamics of turbocharging with highly effective charge air cooling. Alongside outstanding power and torque characteristics, the four-cylinder engine surprises above all with its minimal fuel consumption: only 8.3 litres per 100 km in the MVEG cycle. The CO<sub>2</sub> emission in the homologation status is 190g/km with a manual gearbox and 240g/km with a direct-shift gearbox (DSG). With a homologated OPF the R Modell corresponds to the EURO 6D exhaust emission standard and can therefore reach single type approval in Europe.







**DSG**

6-gear DSG gearbox with paddleshift on the steering wheel with 3 modes (Drive, Sport and Manual).

## TRANSMISSION

Tried and tested in series production, but tuned optimally to the KTM X-BOW R: The manual 6-speed gearbox from Audi always has the right gear available. The Drexler limited slip differential that comes as standard guarantees optimum propulsion in every curve.



## FRAME

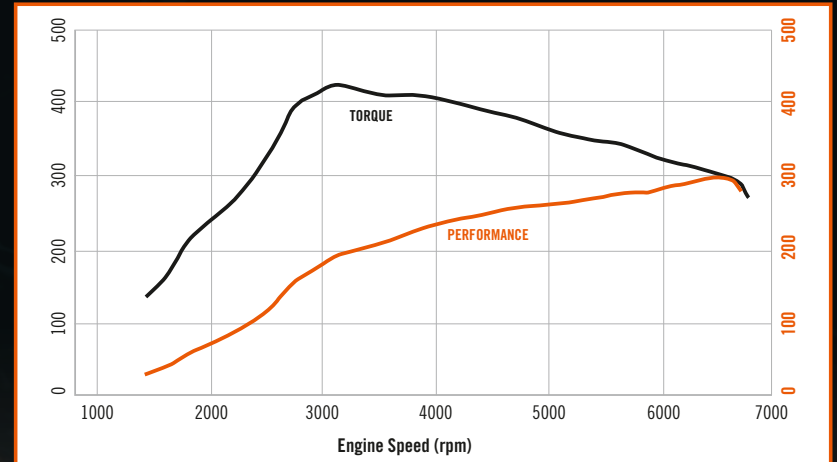
The aluminium spaceframe is the central supporting element for the engine/gearbox assembly. It has been possible to lower the whole unit by 19 millimetres, thereby lowering the KTM X-BOW R's already impressively low centre of gravity by another 15 millimetres. As a direct consequence, even greater lateral acceleration forces and even higher cornering speeds are possible.





### TORQUE SUPPORT

The extreme forces of the engine are cushioned in the KTM X-BOW R by a torque support, which is mounted directly on the carbon monocoque.



### TORQUE CURVE

The engine achieves its maximum torque of 420 Nm at a speed of only 3,200 rpm – thereby making, in the truest sense of the phrase, “very light work” of the KTM X-BOW R, which tips the scales at a mere 790 kg. The maximum power output of 300 hp is attained at 6,400 rpm.



BR 792 HF

[www.ldm-k-row.com](http://www.ldm-k-row.com)







# RACING EXPERTISE

FOR THE ROAD

The KTM X-BOW R combines outstanding technical solutions from the racing world with high-quality products from KTM. Examples include the high-performance radiators and charge-air cooler from WP Radiator, the spring/damper units from WP Suspension, the exhaust system from KTM and the concept for the ingenious aerodynamics from KTM Technologies and Dallara. One look underneath the X-BOW reveals the three-piece, completely flat, racing underbody derived from formula racing vehicles. Almost 200 kilogrammes of downforce are generated at 200 km/h thanks to the front splitter, underbody and rear diffuser and close to 400 kilogrammes with the aerodynamics packages that have been developed exclusively for the KTM X-BOW R. Depending on the tyres, up to 2.0 g of lateral acceleration are possible – more than with any other street-legal production vehicle.»



## REAR DIFFUSER

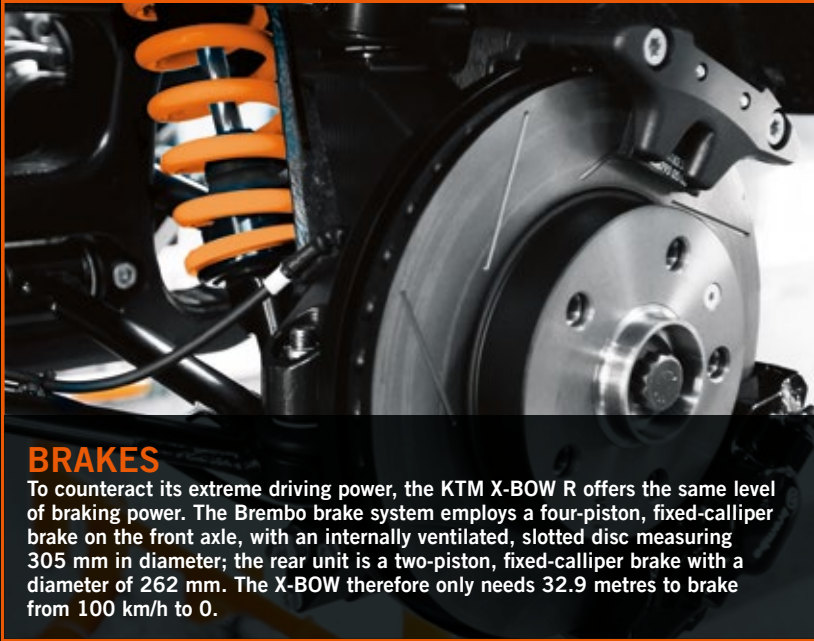
Air flows optimally into the rear diffuser, which ensures distribution of pressure in the underbody thanks to its asymmetric design. It generates a large part of the downforce.



## SUSPENSION COMPONENTS

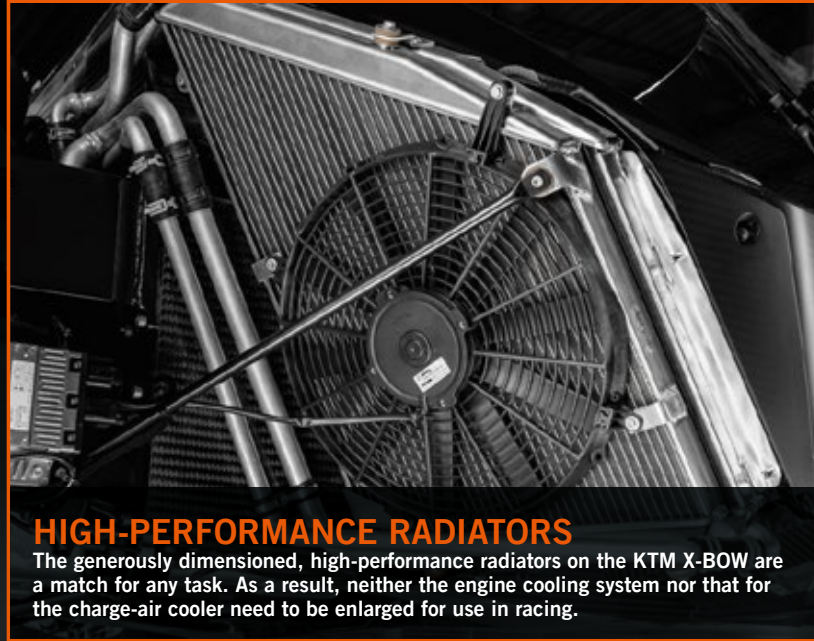
In conjunction with the special tyre mix from exclusive partner Michelin and as the last link in a very long chain, the springs and dampers from WP Suspension ensure optimum contact with the road surface. On the front axle, the pushrod chassis - derived directly from the world of formula racing - features compression damping with high and low-speed settings as well as adjustable rebound damping. All these setting options are also available on the rear axle, although here the spring/damper unit is directly attached to the wheel mounting.





## **BRAKES**

To counteract its extreme driving power, the KTM X-BOW R offers the same level of braking power. The Brembo brake system employs a four-piston, fixed-calliper brake on the front axle, with an internally ventilated, slotted disc measuring 305 mm in diameter; the rear unit is a two-piston, fixed-calliper brake with a diameter of 262 mm. The X-BOW therefore only needs 32.9 metres to brake from 100 km/h to 0.



## **HIGH-PERFORMANCE RADIATORS**

The generously dimensioned, high-performance radiators on the KTM X-BOW are a match for any task. As a result, neither the engine cooling system nor that for the charge-air cooler need to be enlarged for use in racing.

## **TYRES: MICHELIN PILOT SPORT 4**

A high-performance tyre that combines energy efficiency and durability with extraordinary driving pleasure. Moreover, cornering has been improved even further compared with its predecessor and the braking distance in the wet has been reduced by up to 3 metres.



# KTM X-BOW R / RR

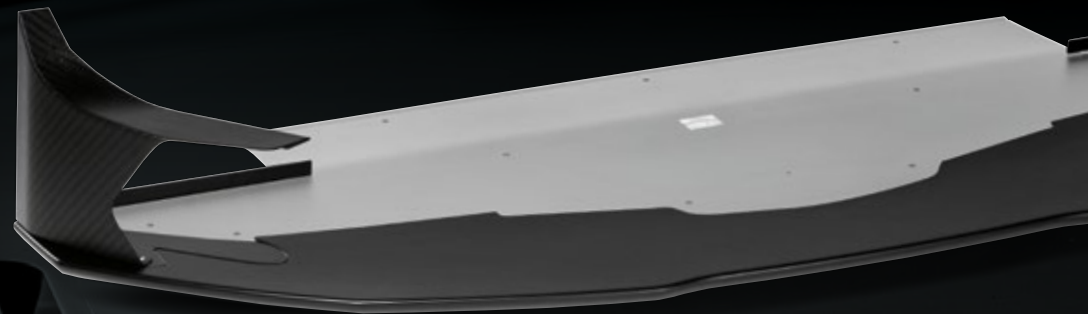
PERFORMANCE UPGRADES

Naturally, there's an extensive range of accessories for the KTM X-BOW R. Above all, for those X-BOW owners who like to put their vehicle through its paces on the racetrack – whether it be in the KTM X-BOW BATTLE or at other events – the KTM PowerParts range provides plenty of options.»



## PERFORMANCE PACK 2

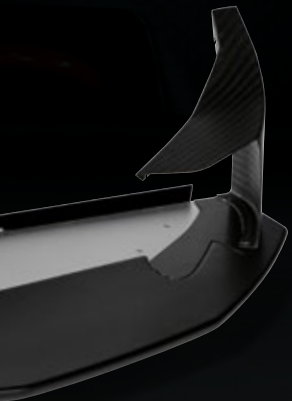
Performance Pack 2 was originally developed for the X-BOW R. It contains a new air filter box and a chrome-molybdenum steel tubular space frame. This strengthens the rear subframe of the X-BOW and increases the vehicle's torsional stiffness considerably. The flow-optimised geometry of the carbon air filter housing increases throughput in the intake tract, thereby improving the responsiveness of the turbocharger. The new air intake system also generates a sportier intake sound.



## AERODYNAMICS PACK 4

The Aerodynamics Pack 4 contains an front-splitter extension, two flicks/fences which are mounted on the front-hoods as well as two gurneys for the underfloor. This combination leads to a significant increase of downforce on the front-axle.





### **RACING REAR WING**

The Racing Rear Wing is both a technical and a visual enhancement to the KTM X-BOW and has a special aerodynamic design. The rear wing and the special attachment for its mounting that is included are made of aluminum in order to guarantee maximum rigidity with low weight. To set-up the car to its optimum the tilt of the approx. 1,8m wide Racing Rear Wing can be adjusted.



### **RACING HEADLIGHT COVERS**

Aerodynamic fairings for the headlights. The covers provide additional protection from dirt and stone impact.

# KTM X-BOW R/RR

PERFORMANCE UPGRADES



## FULL-GRAIN LEATHER STEERING WHEEL

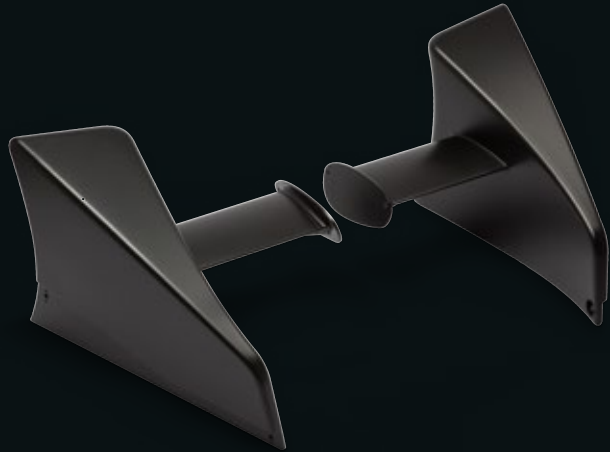
The racing steering wheel is covered with high quality full-grain leather, and is lightly padded in comparison to the standard steering wheel. In extreme racing situations this steering wheel ensures perfect grip and on street purposes the steering wheel convinces with its sporty design. With orange stitched 12 o'clock marking.



## SPORTS EXHAUST

The black chromed sports exhaust system is 5 kg lighter than the production version and has a throatier sound.





### SIDE PROTECTION DROPS

The side protection drops prevent wheels from interlocking in the event of side impact. The components made from glass-fibre reinforced plastic are aerodynamically optimised, although heavier than the carbon version. Modifications to the underbody and monocoque are required for fitting.

## RACING SUSPENSION

The new Racing suspension by WP is adjustable in both rebound and compression damping (high and low speed). 80N/mm springs at the front and 120N/mm springs at the rear are delivered ex works. The modified damper characteristics combined with the significant increase in damping power leads to an increased roll stiffness at the beginning and in the middle sections of corners. In addition, high-performance bearings at the connection points lead to a minimization of the slip-stick effect and support a highly precise spring action.



# THE ULTIMATE WEAPON IN THE FIGHT FOR ONE HUNDREDTHS

THE KTM X-BOW RR

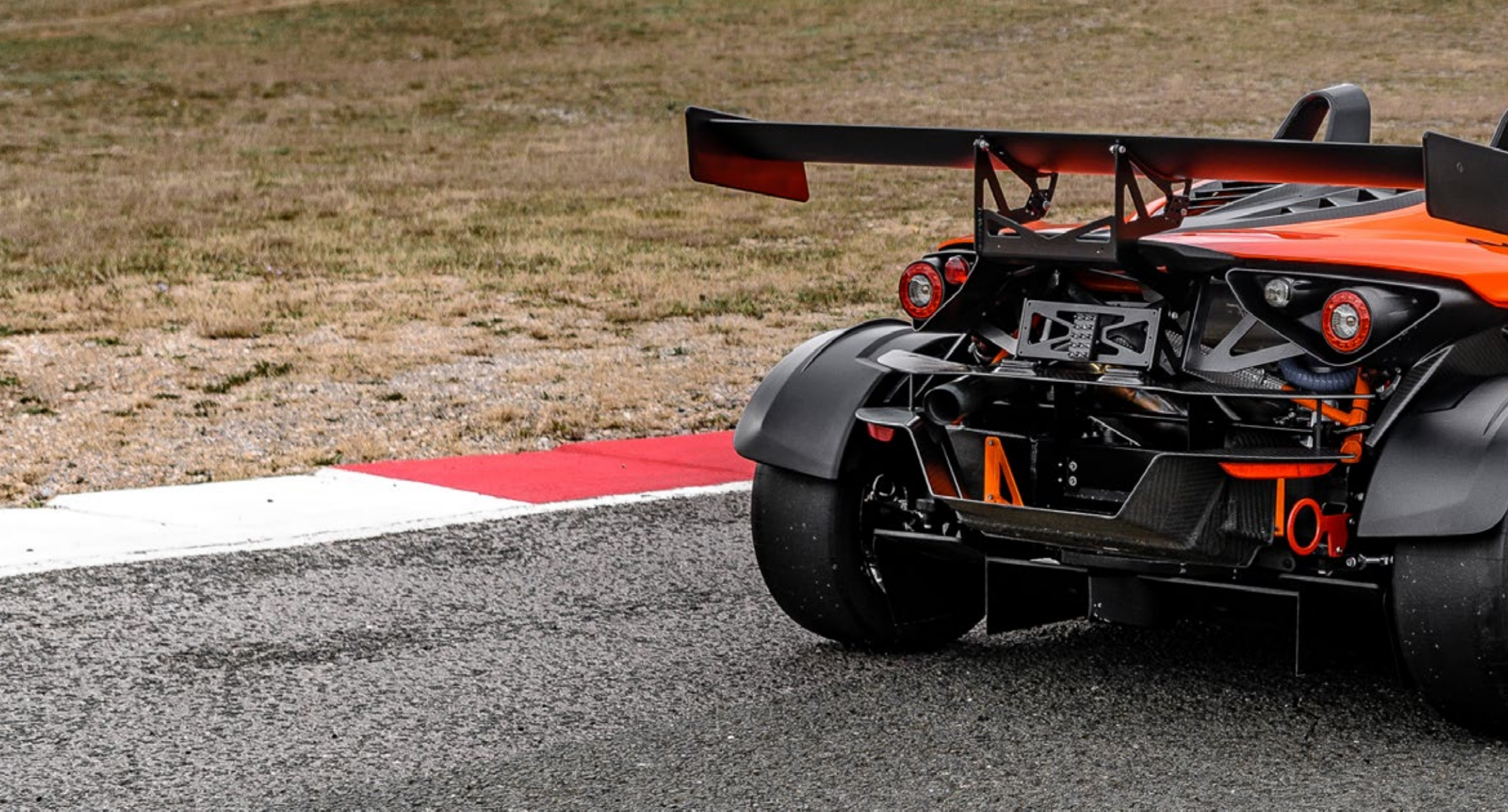
The KTM X-BOW RR is the essence of all the experience that KTM has gained since 2008 in the widest variety of motorsports events around the globe. Tuned uncompromisingly for victory, almost limitlessly customisable, alarmingly fast for its opponents – and still surprisingly affordable. Depending on the configuration level, the “RR” can be the perfect vehicle for KTM’s own one-make cup (“KTM X-BOW BATTLE”) or an extremely awkward rival for the aforementioned international competitors. Talk to the specialists from our Motorsport department, who do their best to fulfil every customer request – after all, they’re always READY TO RACE as well!











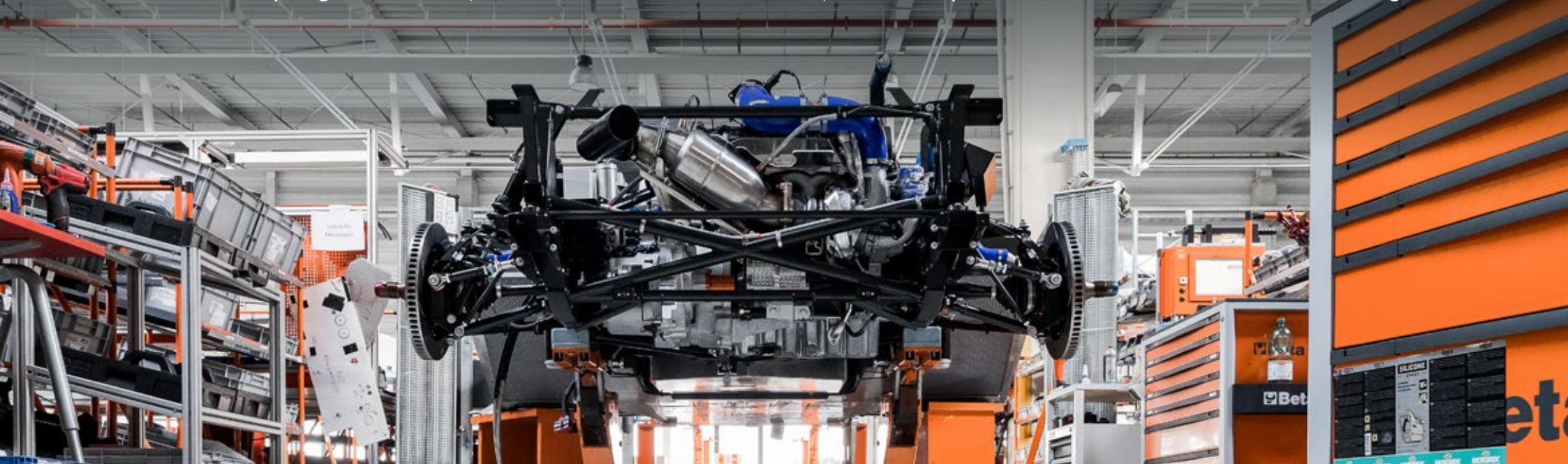






# PRODUCED PERFECTLY BY HAND

The KTM X-BOW has been manufactured in a special-purpose plant in Graz since June 2008. One of the world's most modern vehicle limited-production facilities was built in a matter of months here in accordance with the latest standards. At the same time, KTM developed ingenious warehousing, special transport logistics (including specially designed transport containers for the valuable carbon-fibre parts) and special assembly technologies. Around 100 examples of the KTM X-BOW are produced with the greatest precision every year by a small team of specialists. However, despite the revolutionary nature of what is probably the most extraordinary super sports car of our times, it is still assembled by hand: Every X-BOW is built with the greatest of care and specific know-how, in compliance with the strictest quality criteria. The whole factory is of course certified according to ISO standards. Moreover, each operation is recorded and logged electronically – even the torque values of every single tightened bolt are automatically archived. So it's not surprising that the vehicles, which have been sold all around the world, continue to impress the exclusive circle of X-BOW owners with lasting effect.





# TECHNICAL DATA



## ENGINE

### KTM X-BOW R

### KTM X-BOW RR

TYPE	In-line 4-cylinder gas engine with direct injection, exhaust turbocharging with charge-air cooling	In-line 4-cylinder gas engine with direct injection, exhaust turbocharging with charge-air cooling
DISPLACEMENT	1,984 cc	1,984 cc
PERFORMANCE	220 kW (300 hp)@6,400 rpm	Depending on specification
MAX. TORQUE	420 Nm@3,200 rpm	Depending on specification
VALVES	4/cylinder, DOHC	4/cylinder, DOHC
FUEL CONSUMPTION	8.3 l/100 km	Depending on specification
CO <sub>2</sub> -EMISSION	190 g / km with manual gearbox, 240 g / km with DSG gearbox, EURO 6	Depending on specification

## CHASSIS

LENGTH X WIDTH X HEIGHT	3,738 x 1,915 x 1,202 mm	3,738 x 1,915 x 1,202 mm
WHEELBASE	2,430 mm	2,430 mm
TURNING RADIUS	10.8 m	10.8 m
WHEELTRACK FRONT / REAR	1,672/1,626 mm	1,672/1,626 mm
POWER TRAIN	Rear wheel drive with mechanical limited-slip differential	Rear wheel drive with mechanical limited-slip differential
TRANSMISSION	6-speed gearbox, manual/6-gear DSG gearbox	6-speed gearbox, manual/6-gear DSG gearbox
BRAKE SYSTEM	Sport braking system with Brembo calipers and internally ventilated brake discs 305 mm / 262 mm (front / rear)	Sport braking system with Brembo calipers and internally ventilated brake discs 305 mm / 262 mm (front / rear)
TYRES FRONT / REAR	205/40 R17 / 255/35 R18	215/45 R17 / 255/35 R18
HEIGHT OF CENTER OF GRAVITY	380 mm	380 mm
FUEL TANK CAPACITY	40 l	40 l
WEIGHT EXCL. FUEL	790 kg	810 kg

## MISCELLANEOUS

MAX. SPEED	231 km/h	Depending on specification
ACCELERATION 0-100 KM/H	3.9 s	Depending on specification
DECELERATION 100-0 KM/H	32.9 m	32.9 m
AERODYNAMIC DOWNFORCE 100 KM/H	48 kg	Depending on specification
AERODYNAMIC DOWNFORCE 200 KM/H	193 kg	Depending on specification
LATERAL ACCELERATION	> 1.5 g (road tires)	> 2.0 g (semi-slicks)
STATIC WEIGHT DISTRIBUTION (FRONT / REAR)	37:63	37:63

# KTM.COM



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Only the homologated versions of the motor vehicles promoted in this brochure are suitable for road use. X-BOW RR, X-BOW GT4, GT4 EVO, KTM X-BOW Comp R and X-BOW GTX/GT2 models are pure racing machines and not approved for use on public roads. For this reason, it is absolutely essential that use on public roads is avoided. The warnings and hazard notices in the owner's manual must be observed without fail when purchasing a motor vehicle and using it for the first time (especially the prescribed speed limits). The illustrated motor vehicles may vary in selected details from the production models and some illustrations feature optional equipment available at additional cost. All information concerning the scope of supply, appearance, services, dimensions and weights is non-binding and specified with the proviso that mistakes, printing, setting and typing errors may occur; such information is subject to change without notice. Please note that model specifications may vary from country to country.

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