

MOTOCROSS 2008



KTM



SX MODELS 2008 »

ONE YEAR AFTER INTRODUCING THE SENSATIONAL NEW GENERATION OF SX MODELS KTM HAS FOCUSED ON A NUMBER OF DETAIL ENHANCEMENTS TO THE ENGINE AND CHASSIS AS WELL AS THE CONTINUED OPTIMISATION OF THE SUSPENSION SETTINGS. The new SX bikes, with their completely independent appearance, are characterised by exclusive components combined with high-end quality. Even standard models offer numerous possibilities for optimum tuning for both rider and track. As if that weren't enough, KTM's one-of-a-kind PowerParts programme is launching a range of products for tuning, chassis and appearance, the likes of which is offered by no other manufacturer.



THE 125 SX IS A VERY AGILE AND EXTREMELY LIGHT BIKE. It distinguishes itself from the 4-strokes with its low weight, its low price, its ease of maintenance and low running costs. Unlike other manufacturers, KTM is continuing its steady development of 2-stroke technology. In conjunction with the completely new chassis, its further improved and even more powerful engine make the 125 SX the ultimate two-stroke machine for the MX2 class!

- » World Championship-tested technology, "READY TO RACE"
- » Unrivalled features such as a hydraulic clutch, selectable ignition curves, Renthal handlebars, Excel rims, machined triple clamps, Brembo brakes, and much, much more.
- » Optimised chassis and frame
- » Unbeatable power-to-weight ratio
- » Optimum price/performance ratio



NEW: PISTON

An optimised piston with two new extremely robust keystone rings guarantees maximum durability and increased performance. KTM has the most powerful motorcycle in the 125cc class again this year.



NEW: IGNITION

The new CDI ignition box with a 16-bit processor features two ignition curves, which can easily be activated via an electrical connector near the steering head. That way you can tune the engine for either maximum (more aggressive) performance or gentler power output (e.g. for muddy conditions).



NEW: ENGINE HOUSING

Improved flow rates in the intake tract mean improved cylinder charging and even greater performance as a result.



TRANSMISSION

On the 125 SX, a shorter-geared 6-speed transmission ensures that the engine is always kept in the optimum rpm range.



EXHAUST

The lightweight exhaust expansion chamber is tuned to a broad power band while at the same time offering peak performance. Corrosion-resistant nickel plating has long been standard on a KTM.



CLUTCH

The hydraulic clutch's operation ensures a precise pressure point and therefore perfect clutch control; it changes gears easily and is practically maintenance-free. In contrast, our competitors' antiquated cable clutches are hard to shift and are less reliable.

125SX - TECHNOLOGY: ...»



BODYWORK

When we designed our plastic parts, our primary focus was on optimum ergonomics. Broad contact surfaces near the tank and airbox provide optimum knee contact and grip and therefore an excellent feeling for the bike.



NEW: TANK

The fuel tank has been moved to a favourable centre of gravity beneath the seat and features air ducts that transport fresh air into the airbox through 5 openings in the spoilers. The new bayonet cap features a screw-lock to prevent the cap from opening unintentionally while riding.



FENDER

The front fender acts as a highly efficient spray guard, thanks to its optimised shape and width. Integrated in a 2-component process, the fender brace (the black section near the triple clamp) replaces the fender brace used previously.



STARTING NUMBER PLATES

The front starting number plate is also manufactured using 2-component technology. For those who also want to display their numbers on the side, large starting number stickers are available in white, black and yellow from the PowerParts range of products.



SPOILERS

The spoilers feature a new graphic design and are manufactured using „IN-MOULD technology“. This means that the stickers are integrated into the spoilers during manufacture and protected with a thin layer of plastic. Advantage: they're lighter and cheaper.



FRAME

The chromium molybdenum frame is an eye-catcher due to its super-stable, oversized lateral tubes and entirely new tube dimensions. This frame design offers the optimum blend of rigidity and flex. Together with swingarm and suspension components, the frame design was developed to be an important element in the overall optimisation of the chassis.

In comparison to the competition's aluminium frames, the latest KTM chrome molybdenum frame is much more flexible, significantly sturdier, provides more room for the fuel tank, exhaust and other components and is last but not least the lightest concept on the market, thanks to additional weight reductions.



SUBFRAME

Ultra-wide aluminium profiles provide a great deal of stability for the rear subframe, while keeping weight at a minimum.



SWINGARM

The improvements to the ultra-light aluminium swingarm's design and shape increase its bending load capacity and optimise its flexural rigidity, offering the same flex for both arms and thus greater tracking stability at even less weight. A new chain guide with integrated aluminium reinforcement ensures even more rigidity and thus more safety.



125SX - TECHNOLOGY: ...»



HANDLEBARS

KTM relies on high-quality Renthal handlebars of tapered aluminium, which means maximum stability at minimum weight. Offset handlebar clamps, which can be screwed onto two mounting points on the triple clamp, allow a total of four different handlebar positions and thus the best possible adaptation to the rider.



NEW: FORKS

The newest generation of the 48 WP-USD forks with a "closed cartridge" system received new settings and feature numerous modifications to reduce internal friction. "Closed cartridge" is the term for a separate, self-contained damping unit, in which the damper oil is compressed, thus reducing frothing and guaranteeing noticeably more consistent damping; an advantage, especially on neglected MX tracks. A new aluminium piston rod coating along with an optimised seal position means less friction and therefore better responsiveness. This system also features an adjustment innovation: compression damping above, rebound damping below.



NEW: SHOCK ABSORBER

The fully adjustable PDS shock now features an aluminium housing on all SX models. This new setting ensures more progressiveness and increased safety against bottoming-out.



COOLING SYSTEM

In this innovative cooling circuit, a T-piece integrated into the frame triangle controls the lateral supply of cooling water to the radiators. This eliminates all the tubes behind the radiators, which means better air flow and thus better cooling, as well as easier assembly.





AIRBOX

The Twin Air air filter can be effortlessly changed without tools. Easy, tool-free access to the airbox is standard on all KTM motorcycles. Changing the air filter on competitors' models often calls for sweaty contortions.



WHEELS

The turned hubs not only look great, but with the aid of the light spokes, they reduce the unsprung masses, which is also great for the suspension reactivity. EXCEL rims are already considered to be the best products on the market.



BRAKES

The floating Brembo brake calipers harmonise perfectly with the ultra-light wave brake discs, whose design results in even better cleaning of the brake pads. With that, KTM and Brembo again raise the bar regarding brake performance.



TRIPLE CLAMPS

At best, the CNC-machined triple clamps are sold by other companies as expensive tuning parts. At KTM, they're standard equipment. The clamps permit the quick adjustment of the fork offset (18 or 20 mm) and the trail for an individual riding style or track (either modifying the bike towards more stability or greater agility).



125SX »



250SX »



THE 250 SX WINS YOU OVER WITH ITS EXCEPTIONALLY LOW WEIGHT, ITS AGILITY AND ITS ABUNDANCE OF POWER.

Thanks to its enormous power, it leaves even the higher-displacement 4-strokes behind. The 250 SX is the perfect racing bike for sports and hobby riders, who value minimum weight, a good price/performance ratio and low maintenance. Unlike other manufacturers, KTM is continuing to emphasise 2-stroke technology and is constantly making further improvements in this sector. The 250 SX can adapt itself to riders and riding styles like no other motocross bike in its class. Chassis, handlebars, handlebar position, fork offset (machined triple clamp), TVC valve, etc. are all fully adjustable.

- » World Championship-tested technology, "READY TO RACE"
- » Unrivalled features such as a hydraulic clutch, selectable ignition curves, Renthal handlebars, Excel rims, machined triple clamps, Brembo brakes, and much, much more.
- » Optimised chassis and frame
- » Unbeatable power-to-weight ratio
- » Optimum price/performance ratio



NEW: IGNITION

The CDI ignition box with a 16-bit processor features two new ignition curves, which can easily be activated via an electrical connector near the steering head. That way you can tune the engine for either maximum (more aggressive) performance or gentler power output (e.g. for muddy conditions).



NEW: ENGINE HOUSING

Improved flow rates in the intake tract mean improved cylinder charging and even greater performance as a result.



CLUTCH

The Brembo hydraulic clutch's operation ensures a precise pressure point and therefore perfect clutch control; it changes gears easily and is virtually maintenance-free. It was especially tuned to the characteristics of this two-stroke engine. In contrast, our competitors' antiquated cable clutches are hard to shift and are less reliable.



TVC EXHAUST SYSTEM

KTM sets the standards in motocross racing in this domain as well. With the help of the springs provided, the engine characteristics can be adjusted to the rider and/or the track in no time. That way the power curve can be tuned to be gentler or more aggressive. So the rider is virtually riding three motorcycles in one.



EXHAUST

The lightweight exhaust expansion chamber is plated with high-grade nickel and is absolutely corrosion-resistant.

250SX - TECHNOLOGY: ...»



BODYWORK

When we designed our plastic parts, our primary focus was on optimum ergonomics. Broad contact surfaces near the tank and airbox provide optimum knee contact and grip and therefore an excellent feeling for the bike.



NEW: TANK

The fuel tank has been moved to a favourable centre of gravity beneath the seat and features air ducts that transport fresh air into the airbox through 5 openings in the spoilers.

The new bayonet cap features a screw-lock to prevent the cap from opening unintentionally while riding.



FENDER

The front fender acts as a highly efficient spray guard, thanks to its optimised shape and width. Integrated in a 2-component process, the fender brace (the black section near the triple clamp) replaces the fender brace used previously.



STARTING NUMBER PLATES

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SPOILERS

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FRAME

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In comparison to the competition's aluminium frames, the latest KTM chrome molybdenum frame is much more flexible, significantly sturdier, provides more room for the fuel tank, exhaust and other components and is last but not least the lightest concept on the market, thanks to additional weight reductions.



SUBFRAME

Ultra-wide aluminium profiles provide a great deal of stability for the rear subframe, while keeping weight at a minimum.



SWINGARM

The improvements to the ultra-light aluminium swingarm's design and shape increase its bending load capacity and optimise its flexural rigidity, offering the same flex for both arms and thus greater tracking stability at even less weight.

A new chain guide with integrated aluminium reinforcement ensures even more rigidity and thus more safety.



250SX - TECHNOLOGY: ...»



HANDLEBARS

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NEW: FORKS

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NEW: SHOCK ABSORBER

The fully adjustable PDS shock now features an aluminium housing on all SX models. This new setting ensures more progressiveness and increased safety against bottoming-out.



COOLING SYSTEM

In this innovative cooling circuit, a T-piece integrated into the frame triangle controls the lateral supply of cooling water to the radiators. This eliminates all the tubes behind the radiators, which means better air flow and thus better cooling, as well as easier assembly.





AIRBOX

The Twin Air air filter can be effortlessly changed without tools. Easy, tool-free access to the airbox is standard on all KTM motorcycles. Changing the air filter on competitors' models often calls for sweaty contortions.



WHEELS

The turned hubs not only look great, but with the aid of the light spokes, they reduce the unsprung masses, which is also great for the suspension reactivity. EXCEL rims are already considered to be the best products on the market.



BRAKES

The floating Brembo brake calipers harmonise perfectly with the ultra-light wave brake discs, whose design results in even better cleaning of the brake pads. With that, KTM and Brembo again raise the bar regarding brake performance.



TRIPLE CLAMPS

At best, the CNC-machined triple clamps are sold by other companies as expensive tuning parts. At KTM, they're standard equipment. The clamps permit the quick adjustment of the fork offset (18 or 20 mm) and the trail for an individual riding style or track (either modifying the bike towards more stability or greater agility).



THE WINNING 250 SX-F IS THE BENCHMARK IN THE HARDFIGHT MX2 CLASS. It deploys the extremely compact and lightweight DOHC RC4 engine.

The special construction of the valve controls using cam followers and a DLC (Diamond-Like Carbon) coating (a technology borrowed from Formula 1), chrome-nitrate-coated titanium valves, a hydraulic timing chain tensioner, 39-mm Keihin flat slide carburetor and plenty of other technical treats turn the new 250 SX-F into an invincible weapon in the small class.

Considering its ultra-easy handling and low weight, its 39 HP at 11,000 rpm and 25 Nm at 8000 rpm, this engine raises the bar pretty high.

- » World Championship-tested technology, "READY TO RACE"
- » Unrivalled features such as a hydraulic clutch, selectable ignition curves, Renthal handlebars, Excel rims, machined triple clamps, Brembo brakes, and much, much more.
- » Optimised chassis
- » Unbeatable power-to-weight ratio



NEW CYLINDER HEAD

A new exhaust camshaft further improves the charge exchange process and leads to noticeably better power development. New valve springs, combined with 31 mm titanium intake valves and 26.5 mm exhaust valves, increase durability. The sloped valve cover makes for easier access to the shims. All housing covers are made of ultra-light magnesium. A separate camshaft housing and the short timing chain with hydraulic tensioner guarantee an extremely solid valve train. That reduces maintenance to a minimum.



NEW IGNITION

New mapping of the ignition control unit guarantees more precise responsiveness and even better performance.

CRANKSHAFT

The distance between the main bearings has been reduced to a minimum and makes the crankshaft strong and reliable. Due to the precise fine balancing, a balancer shaft proved unnecessary.



CRANKCASE

A powerful oil pump in a hermetically sealed casing with an only 1-mm compensation jet draws the oil out of the crankcase, producing a vacuum that aids the piston's operation.



CLUTCH

The Magura hydraulic clutch guarantees maximum control, easy shifting and almost no maintenance. Our competitors still use the antiquated cable mechanisms, which do not disengage cleanly, need regular maintenance and are not 100% reliable.

CARBURETOR

The 250 SX-F is equipped with the latest 39-mm KEIHIN FCR-MX flat-slide carburetor. The carburetor features an adjustable accelerator pump and a hot-start button, which can be activated right on the handlebars. Due to its high valve lift, KTM uses a 39-mm carburetor. Our competitors primarily use 37 mm carburetors.



250SXF - TECHNOLOGY: ... >>

>> ... ENGINE



NEW EXHAUST SYSTEM

A new manifold with a larger diameter guarantee noticeably improved peak power. The silencer is perfectly tuned to the maximum permissible noise levels in the sport with its completely new inner-workings.



» 250SXF



250XF - TECHNOLOGY: ...»



BODYWORK

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NEW TANK

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The new bayonet cap features a screw-lock to prevent the cap from opening unintentionally while riding.



FENDER

The front fender acts as a highly efficient spray guard, thanks to its optimised form and width. Integrated in a 2-component process, the fender brace (the black section near the triple clamp) replaces the fender brace used previously.



STARTING NUMBER PLATES

The front starting number plate is also manufactured using 2-component technology. For those who also want to display their numbers on the side, large starting number stickers are available in white, black and yellow from the Power Parts range of products.





SPOILERS

The spoilers feature a new graphic design and are manufactured using „IN-MOULD technology“. This means that the stickers are integrated into the spoilers during manufacture and protected with a thin layer of plastic. Advantage: they're lighter and cheaper.



FRAME

The chromium molybdenum frame is an eye-catcher due to its super-stable, oversized lateral tubes and entirely new tube dimensions. This frame design offers the optimum blend of rigidity and flex. Together with swingarm and suspension components, the frame design was developed to be an important element in the overall optimisation of the chassis.

In comparison to the competition's aluminium frames, the latest KTM chrome molybdenum frame is much more flexible, significantly sturdier, provides more room for the fuel tank, exhaust and other components and is last but not least the lightest concept on the market, thanks to additional weight reductions.



SUBFRAME

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SWINGARM

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250SX F - TECHNOLOGY: ...»



HANDLEBARS

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NEW FORKS

The newest generation of the 48 WP USD forks with a "closed cartridge" system received new settings and feature numerous modifications to reduce internal friction. "Closed cartridge" is the term for a separate, self-contained damping unit, in which the damper oil is compressed, thus reducing frothing and guaranteeing noticeably more consistent damping; an advantage, especially on neglected MX tracks. A new aluminium piston rod coating along with an optimised seal position means less friction and therefore better responsiveness. This system also features an adjustment innovation: compression damping above, rebound damping below.



NEW SHOCK ABSORBER

The fully adjustable PDS shock now features an aluminium housing on all SX models. The new setting ensures more progressiveness and increased safety against bottoming-out.



COOLING SYSTEM

In this innovative cooling circuit, a T-piece integrated into the frame triangle controls the lateral supply of cooling water to the radiators. This eliminates all the tubes behind the radiators, which means better air circulation and thus better cooling, as well as easier assembly.



AIRBOX

The Twin Air air filter can be effortlessly changed without tools. Easy, tool-free access to the airbox is standard on all KTM motorcycles. Changing the air filter on competitors' models often calls for sweaty contortions.



WHEELS

The turned hubs not only look great, but with the aid of the light spokes, they reduce the unsprung masses, which is also great for the suspension reactivity. EXCEL rims are already considered to be the best products on the market.



BRAKES

The floating Brembo brake calipers harmonise perfectly with the ultra-light wave brake discs, whose design results in even better cleaning of the brake pads. With that, KTM and Brembo again raise the bar regarding brake performance.



TRIPLE CLAMPS

At best, the CNC-machined triple clamps are sold by other companies as expensive tuning parts. At KTM, they're standard equipment. The clamps permit the quick adjustment of the fork offset (18 or 20 mm) and thereby of the trail for an individual riding style or track (either modifying the bike towards more stability or greater agility).



AT THE HEART OF THE 450 SX-F IS THE EXTREMELY POWERFUL DOHC RF4 ENGINE.

With loads of innovative engine technology, the 450 SX-F is the first series motocross bike that is started exclusively by an electric-starter. Yet the engine is still compact and lightweight. In addition, the 450 SX-F can be tuned to its rider and their riding style like no other motocross bike in its class. Handlebars, handlebar position, fork offset (machined triple clamp), frame, ignition curve, etc. are all adjustable.

- » World Championship-tested technology, "READY TO RACE"
- » Unrivalled features such as an E-starter, selectable ignition curves, hydraulic clutch, Renthal handlebars, Excel rims, machined triple clamps, Brembo brakes and much more.
- » Optimised chassis and frame
- » Very good power-to-weight ratio



E-STARTER

Why use a kickstarter, when the bike can also be reliably started with the push of a button? A huge advantage in the usual hectic rush of a race. The small E-starter engine sits in the dead space behind the cylinder head and means, in spite of the battery, only a minimal weight addition, which could be compensated for in other places due to the extremely light construction. To reduce weight, the kickstarter option was discontinued.



CYLINDER HEAD

The 4 ultra-lightweight titanium valves are operated by two overhead camshafts, in combination with DLC-coated rocker arms. This delivers the highest rpm and plenty of power from bottom to top.



NEW: CRANKSHAFT DRIVE

The new, compact crankshaft features more centrifugal mass, which ensures even more drive from below. At the same time, the weight of the two lateral balancer shafts has been reduced, thereby improving handling.



VALVE TRAIN

An intermediate gear above the crankshaft operates a short timing chain, which runs both camshafts. A hydraulic chain tensioner regulates the tension of the chain.



NEW: CLUTCH

The supply of oil to the torque cushioned clutch is improved thanks to additional lubrication holes. This decreases the temperature while improving the stability of the discs.



IGNITION

The ignition box features two different ignition curves – the engine characteristics can be easily adjusted for different track conditions (gentler or more aggressive power output) by re-plugging a cable into the CDI.





HOUSING COVER

Clutch and ignition covers are made of lightweight magnesium.



CARBURETOR

The 450 SX-F is equipped with the latest 39-mm KEIHIN FCR-MX flat slide carburetor. The carburetor features an adjustable accelerator pump and a hot-start button, which can be activated right on the handlebars.



NEW: EXHAUST SYSTEM

The silencer is perfectly tuned to the maximum permissible noise levels in the sport with its completely new inner-workings.





450XF - TECHNOLOGY: ...»



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THE NEW 505 SX-F IS FOR RIDERS WHO WANT MORE POWER THAN THE 450 SX-F CAN DELIVER.

Its brutal torque and even greater performance leaves nothing to be desired. Of course, the 505 SX-F also starts with an electro-starter only. The larger piston guarantees solid power output and yet is designed for rideability, which means this new DOHC engine generation is a major podium contender in the MX 3 class. In addition, the 505 SX-F can be tuned to its rider and their riding style like no other motocross bike in its class. Handlebars, handlebar position, fork offset (machined triple clamp), frame, ignition curve, etc. are all adjustable.

- » World Championship-tested technology, "READY TO RACE"
- » Unrivalled features such as an E-starter, selectable ignition curves, hydraulic clutch, Renthal handlebars, Excel rims, machined triple clamps, Brembo brakes and much more.
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E-STARTER

Why use a kickstarter, when the bike can also be reliably started with the push of a button? A huge advantage in the usual hectic rush of a race. The small E-starter engine sits in the dead space behind the cylinder head and means, in spite of the battery, only a minimal weight addition, which could be compensated for in other places due to the extremely light construction. To reduce weight, the kickstarter option was discontinued.



CYLINDER HEAD

The 4 ultra-lightweight titanium valves are operated by two overhead camshafts, in combination with DLC-coated rocker arms. This delivers the highest rpm and plenty of power from bottom to top.



NEW: CRANKSHAFT DRIVE

The new, compact crankshaft features more centrifugal mass, which ensures even more drive from below. At the same time, the weight of the two lateral balancer shafts has been reduced, thereby improving handling.



VALVE TRAIN

An intermediate gear above the crankshaft operates a short timing chain, which runs both camshafts. A hydraulic chain tensioner regulates the tension of the chain.



NEW: CLUTCH

The supply of oil to the torque cushioned clutch is improved thanks to additional lubrication holes. This decreases the temperature while improving the stability of the discs.



IGNITION

The ignition box features two different ignition curves – the engine characteristics can be easily adjusted for different track conditions (gentler or more aggressive power output) by re-plugging a cable into the CDI.



HOUSING COVER

Clutch and ignition covers are made of lightweight magnesium.



NEW: EXHAUST SYSTEM

The silencer is perfectly tuned to the maximum permissible noise levels in the sport with its completely new inner-workings.



CARBURETOR

The 505 SX-F is equipped with the latest 39-mm KEIHIN FCR-MX flat slide carburetor. The carburetor features an adjustable accelerator pump and a hot-start button, which can be activated right on the handlebars.





505SXF - TECHNOLOGY: ...»



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SUBFRAME

Ultra-wide aluminium profiles provide a great deal of stability for the rear subframe, while keeping weight at a minimum.



SWINGARM

The improvements to the ultra-light aluminium swingarm's design and shape increase its bending load capacity and optimise its flexural rigidity, offering the same flex for both arms and thus greater tracking stability at even less weight. A new chain guide with integrated aluminium reinforcement ensures even more rigidity and thus more safety.



505SX^F - TECHNOLOGY: ...»



HANDLEBARS

KTM relies on high-quality Renthal handlebars of tapered aluminium, which means maximum stability at minimum weight. Offset handlebar clamps, which can be variously screwed onto the triple clamp, allow a total of four different handlebar positions and thus the best possible adaptation to the rider.



NEW: FORKS

The newest generation of the 48 WP-USD forks with a "closed cartridge" system received new settings and feature numerous modifications to reduce internal friction. "Closed cartridge" is the term for a separate, self-contained damping unit, in which the damper oil is compressed, thus reducing frothing and guaranteeing noticeably more consistent damping; an advantage, especially on neglected MX tracks. A new aluminium piston rod coating along with an optimised seal position means less friction and therefore better responsiveness. This system also features an adjustment innovation: compression damping above, rebound damping below.



NEW: SHOCK ABSORBER

The fully adjustable PDS shock now features an aluminium housing on all SX models. The new setting ensures more progressiveness and increased safety against bottoming-out.



COOLING SYSTEM

In this innovative cooling circuit, a T-piece integrated into the frame triangle controls the lateral supply of cooling water to the radiators. This eliminates all the tubes behind the radiators, which means better air flow and thus better cooling, as well as easier assembly.





AIRBOX

The Twin Air air filter can be effortlessly changed without tools. Easy, tool-free access to the airbox is standard on all KTM motorcycles. Changing the air filter on competitors' models often calls for sweaty contortions.



WHEELS

The turned hubs not only look great, but with the aid of the light spokes, they reduce the unsprung masses, which is also great for the suspension reactivity. EXCEL rims are already considered to be the best products on the market.



BRAKES

The floating Brembo brake calipers harmonise perfectly with the ultra-light wave brake discs, whose design results in even better cleaning of the brake pads. With that, KTM and Brembo again raise the bar regarding brake performance.



TRIPLE CLAMPS

At best, the CNC-machined triple clamps are sold by other companies as expensive tuning parts. At KTM, they're standard equipment. The clamps permit the quick adjustment of the fork offset (18 or 20 mm) and thereby of the trail for an individual riding style or track (either modifying the bike towards more stability or greater agility).



MOTOCROSS SX»

4 STROKE	250 SX-F	450 SX-F	505 SX-F
			
ENGINE	single cylinder, 4-stroke	single cylinder, 4-stroke	single cylinder, 4-stroke
DISPLACEMENT	248.6 cc	449.3 cc	477.5 cc
BORE / STROKE	76 / 55 mm	97 / 60.8 mm	100 / 60.8 mm
COMPRESSION RATIO	12.8 : 1	12.5 : 1	12.5 : 1
STARTER	kick-starter	E-starter	E-starter
TRANSMISSION	6 gears	4 gears	4 gears
CARBURETOR	Keihin FCR-MX 39	Keihin FCR-MX 41	Keihin FCR-MX 41
CONTROL	4 V / DOHC with finger followers	4 V / DOHC with finger followers	4 V / DOHC with finger followers
LUBRICATION	pressure lubrication	pressure lubrication	pressure lubrication
ENGINE LUBRICATION	Motorex Motorex PowerSynth 4T 10W-50	Motorex Motorex PowerSynth 4T 10W-50	Motorex Motorex PowerSynth 4T 10W-50
PRIMARY RATIO	22 : 68	29 : 74	29 : 74
FINAL DRIVE	13 : 48	14 : 52	14 : 52
COOLING	liquid cooled	liquid cooled	liquid cooled
CLUTCH	wet multi-disc clutch, operated hydraulically	wet multi-disc clutch, operated hydraulically	wet multi-disc clutch, operated hydraulically
IGNITION	Kokusan digital magneto CDI	Kokusan digital DC CDI	Kokusan digital DC CDI
CHASSIS			
FRAME	central double-cradle-type 25 CrMo4	central double-cradle-type 25 CrMo4	central double-cradle-type 25 CrMo4
SUBFRAME	aluminium 7020	aluminium 7020	aluminium 7020
HANDLEBAR	Renthal aluminium Ø 28 / 22 mm	Renthal aluminium Ø 28 / 22 mm	Renthal aluminium Ø 28 / 22 mm
FRONT SUSPENSION	WP-USD Ø 48 mm	WP-USD Ø 48 mm	WP-USD Ø 48 mm
REAR SUSPENSION	WP-PDS shock absorber	WP-PDS shock absorber	WP-PDS shock absorber
SUSPENSION TRAVEL FRONT / REAR	300 / 335 mm	300 / 335 mm	300 / 335 mm
FRONT / REAR BRAKES	disc brakes 260 / 220 mm	disc brakes 260 / 220 mm	disc brakes 260 / 220 mm
FRONT / REAR RIMS	1.60 x 21"; 2.15 x 19" Excel	1.60 x 21"; 2.15 x 19" Excel	1.60 x 21"; 2.15 x 19" Excel
FRONT / REAR TYRES	80/100-21"; 110/90-19"	80/100-21"; 110/90-19"	80/100-21"; 110/90-19"
CHAIN	chain 5/8 x 1/4"	chain 5/8 x 1/4"	chain 5/8 x 1/4"
MAIN SILENCER	aluminium	aluminium	aluminium
STEERING HEAD ANGLE	63.5°	63.5°	63.5°
WHEELBASE	1.475 ± 10 mm	1.475 ± 10 mm	1.475 ± 10 mm
GROUND CLEARANCE (UNLOADED)	380 mm	380 mm	380 mm
SEAT HEIGHT	925 mm	925 mm	925 mm
FUEL TANK CONTENTS	approx. 7.2 litres	approx. 8.2 litres	approx. 8.2 litres
WEIGHT (READY TO RACE)	approx. 98 kg (without fuel)	approx. 104.6 kg (without fuel)	approx. 104.6 kg (without fuel)

MOTOCROSS

250 SX
125 SX
505 SX-F
450 SX-F
250 SX-F



» TECHNICAL DATAS

2STROKE



MODEL
125 SX



MODEL
250 SX



ENGINE	single cylinder, 2-stroke	single cylinder, 2-stroke
DISPLACEMENT	124.8 cc	249 cc
BORE / STROKE	54 / 54.5 mm	66.4 / 72 mm
COMPRESSION RATIO	-	-
STARTER	kick-starter	kick-starter
TRANSMISSION	6 gears	5 gears
CARBURETOR	Keihin PWK 39	Keihin PWK 36 S AG
CONTROL	TVC power valve	TVC power valve
LUBRICATION	mixture oil lubrication 1 : 40	mixture oil lubrication 1 : 60
TRANSMISSION LUBRICATION	Motorex Top Speed 15W-50	Motorex Top Speed 15W-50
PRIMARY RATIO	23 : 75	26 : 76
FINAL DRIVE	13 : 50	13 : 48
COOLING	liquid cooled	liquid cooled
CLUTCH	wet multi-disc clutch, operated hydraulically	wet multi-disc clutch, operated hydraulically
IGNITION	Kokusan digital magneto CDI	Kokusan digital magneto CDI
CHASSIS		
FRAME	central double-cradle-type 25 CrMo4	central double-cradle-type 25 CrMo4
SUBFRAME	aluminium 7020	aluminium 7020
HANDLEBAR	Renthal aluminium Ø 28 / 22 mm	Renthal aluminium Ø 28 / 22 mm
FRONT SUSPENSION	WP-USD Ø 48 mm	WP-USD Ø 48 mm
REAR SUSPENSION	WP-PDS shock absorber	WP-PDS shock absorber
SUSPENSION TRAVEL FRONT / REAR	300 / 335 mm	300 / 335 mm
FRONT / REAR BRAKES	disc brakes 260 / 220 mm	disc brakes 260 / 220 mm
FRONT / REAR RIMS	1.60 x 21"; 2.15 x 19" Excel	1.60 x 21"; 2.15 x 19" Excel
FRONT / REAR TYRES	80/100-21"; 100/90-19"	80/100-21"; 110/90-19"
CHAIN	chain 5/8 x 1/4"	chain 5/8 x 1/4"
MAIN SILENCER	aluminium	aluminium
STEERING HEAD ANGLE	63°	63.5°
WHEELBASE	1,471 ± 10 mm	1,475 ± 10 mm
GROUND CLEARANCE (UNLOADED)	390 mm	385 mm
SEAT HEIGHT	925 mm	925 mm
FUEL TANK CONTENTS	approx. 7.5 litres	approx. 7.5 litres
WEIGHT (READY TO RACE)	approx. 90.8 kg (without fuel)	approx. 95.4 kg (without fuel)



MOTO

ARE YOU „READY TO RACE“? »

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suspension
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