

Husqvarna TE 300 / FE 350 Pro – Model Year 2024

Media information

The new 2024 TE and FE Pro machines from Husqvarna Motorcycles represent a new standard for offroad riding. These latest offerings have been designed from the ground up to give experienced and ambitious enduro riders the performance edge they need to excel at the highest levels of competition.

Both the FE 350 Pro and TE 300 Pro are based on a revolutionary enduro platform, all-new for 2024. Expertly crafted with new frames, subframes, bodywork, suspension, brakes plus a host of engine refinements, the Pro models share an extensive list of innovations. This new enduro platform focuses on continued improvements to overall rideability, delivering outstanding performance. Riders will immediately appreciate and benefit from the technical changes made to both machines.

Technical sections can be conquered in complete confidence and control thanks to predictable damping from new, enduro-specific WP suspension. A WP XACT Closed Cartridge fork incorporates a mid-valve piston for smooth action and consistent performance, while a hydrostop in the final 68 mm of travel helps maintain momentum. A redesigned WP XACT shock features a new piston for improved comfort and is 100 g lighter and 15 mm shorter while retaining 300 mm of travel. Both fork and shock settings can be adjusted by hand for quick, easy personalised set-up.

Striking restyled bodywork adorned with modern, Swedish-inspired graphics and a new high-grip seat cover complement the revised chassis. An improved ergonomic rider triangle offers greater knee contact for better control. The slimline bodywork also affords complete freedom of movement when riding standing up while a redesigned LED headlight produces greater illumination and is fitted using a more efficient and user-friendly mounting system.

Based on the all-new 2024 enduro range, the TE 300 Pro engine is fuelled by Throttle Body Injection (TBI) technology. Developed to sustain the best-in-class performance of these 2-stroke lightweight machines, TBI gives more consistent and controllable power throughout the rev range, even in the toughest conditions.

Engine innovation is also a hallmark of the FE 350 Pro, powered by a new and much more compact DOHC unit. This is tilted back in the frame by two degrees compared to previous models, further centralising mass and contributing to improved anti-squat chassis characteristics. Additionally, all major engine components are positioned as centrally as possible to improve handling and generate maximum torque and power.

Both models raise the enduro riding experience to new levels thanks to advanced electronics. The EMS allows each machine to offer two pre-set riding maps to suit varying terrain, with each gear matched to tailored power delivery. The 4-stroke model offers additional rider aids including Traction Control and a Quickshifter for positive upshifts, even under heavy load.

The TE 300 Pro and FE 350 Pro showcase Husqvarna Motorcycles' progressive approach. Premium components shared across both models complete the TE/FE Pro line-up. These include a new LED headlight, Brembo hydraulic clutch and brake systems with high performance GALFER discs, a combined start/stop button, a new Factory Racing wheel-set with high-strength EXCEL Takasago rims, ProTaper handlebars, and Michelin enduro tyres.

2024 Technical Highlights

- New competition-inspired graphics
- Factory Racing approved, Brembo hydraulic clutch and brake systems
- GALFER brake discs front and rear
- WP XACT Closed Cartridge front forks offer more progressive end-of-stroke damping
- WP XACT rear shock design with CFD-optimised main piston and tool-free adjusters
- New Factory Racing wheel-set with high-strength EXCEL Takasago rims
- New competition seat cover with additional ribs
- Polyamide skid plate with added linkage protection
- Front and rear brake disc protector
- Supersprox rear sprocket
- Soft compound ODI handlebar grips
- 2-stroke engine features TBI technology for improved rideability and ease of use
- 350cc DOHC 4-stroke engine provides class-leading power and torque
- Quickshift sensor providing seamless up-shifting on the FE 350 Pro
- Multifunctional Map Select Switch on both models, which also activates the Quickshifter and Traction Control on the FE 350 Pro
- Offroad Control Unit (OCU) for the highest level of reliability and user-friendly serviceability of electronics
- High-performance LED headlight unit for a brighter light output and simplified fitment
- Premium-quality ProTaper handlebar
- Electric starter powered by a lightweight Li-Ion 2.0 Ah battery

Features and benefits

Frame

The hydro-formed, laser-cut and robot-welded frame is expertly crafted and constructed with specifically calculated parameters of longitudinal and torsional flex. The frame provides exceptional rider feedback, energy absorption and straight-line stability. Additionally, the frame features forged brackets to mount a heavy-duty skid plate with added linkage protection.

The wall thickness of the frame has been optimised to increase reliability and specific rigidity in high-stress areas such as the steering head and the shock mounts. Parallel frame mounts (same position on left and right sides) improve chassis flex characteristics, while stability characteristics remain unrivalled. Together with the shock mounting, which is no longer connected to the main tube, chassis anti-squat has been significantly improved.

Another highlight of the frame topology is that the footrest mounting positions have been moved inwards, resulting in less susceptibility to hooking in deep ruts or when scrubbing jumps. The overall size of the footrests has been maximised, designed with the help of state-of-the-art Computational Fluid Dynamics (CFD).

The one-piece steering head seal allows easier mounting in case of replacement or service and offers increased reliability. Additionally, the head tube is closed to prevent the ingress of water, dust, or fuel from the overflow hose destroying the bearings. The fuel overflow hose now is routed downwards and sideways.

The steering lock system, which is clamped under the upper triple clamp, guarantees perfect functionality and can be easily replaced by removing the upper fork crown.

As with previous 2-stroke model, the oil tank is integrated to the frame, optimised and adapted to the frame concept.

A forged one-piece side-stand design is perfectly integrated and provides a convenient and stable option for when the machine needs to be parked.

The frame finish is durable black powder-coating. The standard 2-component frame protectors guarantee superior protection, durability, and advanced grip in any condition.

- Specifically engineered longitudinal rigidity → exceptional rider feedback, energy absorption and stability
- Repositioned engine and shock mounting → significantly improved chassis anti-squat
- Topology-optimised frame wall thickness for specific rigidity and increased reliability in high-stress areas (e.g., steering head, shock mount)
- Parallel frame mounts (same position on left and right side) for improved flex characteristics
- Footrest mounting position moved inwards for reduced risk of hooking in deep ruts or when scrubbing
- Service friendly one-piece steering head seal → easier mounting, increased reliability
- Durable powder-coated finish with 2-component Factory Racing frame protectors
- Closed head tube and new routing of gasoline overflow hose
- Forged one-piece side-stand → convenient parking solution for all machines
- Steering lock system → removable without cutting of frame

Polyamide-reinforced aluminium subframe

Using 60% polyamide and 40% aluminium, the two-component subframe has a total weight of just 1.8 kg. With the help of computational flow dynamics, specific rigidity was engineered into the light and robust subframe, delivering outstanding handling and rider comfort.

The lower subframe spars and frame mounts are made from extruded aluminium profiles to guarantee robustness and reliability. The upper subframe is a perfect combination of injection-moulded polyamide and 3D formed aluminium, enabling specific flex characteristics and providing a reliable construction.

- Topology-optimised polyamide/aluminium hybrid construction
- Lower subframe spars and frame mounts made from 3D formed aluminium profiles → extremely robust and reliable (no weld joints)
- Upper subframe made from injection-moulded polyamide → specific rigidity and flex benefit handling and comfort

Swingarm

The hollow die-cast aluminium swingarm is designed to offer optimal stiffness and reliability at the lowest possible weight. The topology has been refined for optimal rigidity, while an innovative casting process minimises weight. In order to optimise and match the chassis flex characteristics, a 22 mm rear axle is fitted.

Additionally, the chain guard and chain slider have been designed for increased durability and less susceptibility to hooking up on external objects. This design helps reduce dirt build up around the swingarm and chain guard, especially in extreme muddy conditions.

Chain adjustment markings are also visible from above to make for simpler adjustment.

- Die-cast swingarm → topology-optimised for optimal rigidity
- Innovative casting process for minimal weight
- 22 mm rear axle optimised to match chassis flex characteristics
- Chain guard and chain slider
 - Aligned with swingarm surface; spring-steel mounted for increased durability
- Overall, less susceptible to hooking up on external objects

WP XACT Closed Cartridge fork

Fast and consistent damping characteristics are guaranteed thanks to a closed cartridge spring design, optimising oil flow within the cartridge and adapted from market-leading WP Pro Component technology. This setup avoids unwanted foaming of oil which would lead to less-consistent damping behaviour. Additionally, a spring-preloaded base valve provides precise high-speed compression damping, and can be further customised with a preload adjuster available as a Technical Accessory through WP.

A hydro stop in the last 68 mm of stroke helps to maximise reserves of travel in extreme riding situations such as large jumps and flat landings (e.g., special stages of enduro races). The fork protection rings have been updated as well and are now designed to reduce abrasion from fork movement.

The WP XACT Closed Cartridge fork diameter is 48 mm as before, while total length has been increased from 928 mm (previous model generation) to 940 mm.

The fork is fully adjustable for rebound (36 clicks) and compression (36 clicks) damping. Hand adjustable clickers on the fork bottom and fork top cap allow riders to change settings on the fly without tools.

An additional supporting strap mounted on the fork makes it easier to lift your motorcycle up in extreme conditions.

- WP XACT Closed Cartridge spring fork → fast and consistent damping characteristics, superior performance for any riding level
- Mid-valve piston → fully closed oil cartridge, no foaming of oil
- Hydrostop → high damping reserves for severe impacts and jumps (no abrupt hardening)
- Redesigned fork protection rings → reduced abrasion from fork movement
- Fully adjustable → rebound and compression damping adjustable via easy access clicker dials (base valve preload adjuster available as Technical Accessory through WP)

CNC-machined triple clamps

Made from high-grade aluminium, the CNC-machined triple clamps feature optimally tuned steering stem stiffness, perfect alignment of the fork tubes and precise geometry of the fork clamps to ensure highly responsive and smooth fork action.

Topology optimised bar mounts provide increased grip surface for less handlebar twist at the same weight as the previous generation. Additionally, they come with a rubber-damped mounting to provide just the right amount of handlebar flex. A 2-way handlebar adjustment is standard and allows for customisable ergonomics by rotating the handlebar mount.

The headlight mask integrates a triple clamp protector which covers the lower triple clamp and protects it from wear caused by roost.

- CNC-machined aluminium with anodised surface → finest quality and reliability
- Perfect clamping and alignment → smooth fork action
- Topology-optimised handlebar mounts → increased grip surface for less handlebar twist, same weight as previous generation
- Rubber damping on top clamp → reduced vibration, increased comfort
- Adjustable handlebar position → adjustable ergonomics

WP XACT rear shock

The 455 mm-long WP XACT rear shock provides 300 mm of rear wheel travel. It is matched to a linkage system, the geometry of which delivers optimised progression for enduro riding with maximum traction and bump absorption. In combination with the frame geometry, the ground clearance of the linkage is increased making it less susceptible to damage even on the hardest enduro obstacles.

A Computational Fluid Dynamics (CFD) optimised main piston in the shock improves initial comfort and provides strong support. Different-size flow holes allow the shims to open more easily and reduce the overall stress of oil flow and pressure on the shims. Reduced weight also means less moving mass, resulting in lower forces on the piston bearings.

A fully hand-adjustable dual compression control concept allows high- and low-speed settings to be changed by hand. Together with the rebound adjuster, which is hand or tool adjustable, riders are now able to adjust their shock settings without tools and without the help of a mechanic.

On top of the tool-free setting adjustment possibilities, the preload adjuster provides a dirt intrusion resistant design, and a two-piece spring retainer allows for quick mounting without splitting the shock.

Combined with the low-friction and highly durable SKF linkage seals, the WP XACT rear shock reliably provides advanced damping characteristics for unsurpassed traction and energy absorption.

- Lightweight, compact rear shock design
 - Rear wheel travel → 300 mm
 - Reduced weight results in less moving mass → lower forces on bearings
- CFD-optimised main piston increases initial comfort and guarantees strong hold-up
- Increased ground clearance, lower risk of damage in extreme bottoming-out situations
- Dual compression control allows high- and low-speed settings to be adjusted by hand
- Rebound adjuster allows setting changes by hand or tool
- Two-piece spring retainer allows for quick mounting and assembly of preload adjuster and shock
- Low-friction SKF linkage seals → reliably sustain rear shock response for advanced damping characteristics

Engine mounts

The engine mounts have been redesigned and unified. This gave significant advantages when it came to the development process. The results and effects of different suspension set-ups, balance set-ups, or changes to the frame could be easily understood. This wasn't possible previously, as frame geometry changes had different effects on the different capacities due to the variety of engine mounts and engine positions within the frame.

- 2-stroke enduro Pro → unified engine mounts
- 4-stroke enduro Pro → unified engine mounts

Brembo hydraulic clutch

The high-performance Brembo hydraulic clutch system guarantees even wear, near maintenance-free operation and perfect modulation in every condition. It means that play is constantly compensated so that the pressure point and function of the clutch remain identical in cold or hot conditions, as well as over time. Countless hours of race-focused testing have proven the exceptional reliability of the high-quality, Italian-made Brembo hydraulic system.

- Brembo hydraulic clutch system → perfect modulation and outstanding reliability in every condition

Brembo brakes

The highest level of quality is guaranteed with class-leading Brembo calipers and controls. The 260 mm floating front and 220 mm solid rear discs deliver superior stopping power, instilling confidence in all conditions. A 2-component carbon front disc protector and CNC-machined rear disc protector are fitted as standard for added protection.

- Brembo brake calipers and high-performance discs → superior stopping power with greater control and confidence
- Solid-rear brake disc → smooth brake feel, fine delivery of rear braking and reduced wear in muddy conditions.
- 2-component carbon front disc & CNC-machined rear disc protector → added protection for extreme enduro rides with minimal weight

ProTaper handlebar

The ProTaper handlebar is second to none for function and style. Manufactured to exacting standards, the handlebar features class-leading fatigue resistance at a minimal weight. The handlebar bend further increases comfort with an optimal pressure point on the rider's hands, while the ProTaper logos are chemically applied and are scratch and peel resistant.

- ProTaper handlebar → class-leading function and style
- Handlebar bend → adapted to ergonomics

Grips and throttle assembly

The ODI lock-on grip on the left side does not require gluing, while on the right, the vulcanised grip features an innovative integrated throttle mechanism. The assembly has easy free-play adjustment and, by changing a cam, throttle progression can be altered. The throttle housing has been designed for increased stability and resistance against external objects.

- Throttle assembly and soft compound ODI grips → easily alter throttle progression; easy grip mounting without glue
- Throttle housing → increased stability and resistance against external objects

Footrests

The CFD-designed footrests offer a bigger surface for boot soles while being less susceptible to hooking on deep ruts, take-offs when scrubbing or track barriers. The result is better control of the bike in all conditions. This is achieved by a narrow mounting concept integrated in the frame design which also minimises weight.

- Topology-optimised, die-cast footrests → minimised weight and less susceptible to dirt build-up
- Footrest mount integrated into frame → narrow profile is less susceptible to hook on deep ruts

Map Select Switch, Quickshifter and Traction Control

Designed for easy and intuitive operation, the Map Select Switch comes as standard. It activates Traction Control, selects between two engine maps and activates the Quickshift feature on the FE 350 Pro. Map 1 is the mellow map for linear, predictable power, while Map 2 is an aggressive map for added throttle response and more explosive power output.

The Quickshift function (upwards only) can be activated or deactivated via the Map Select Switch. The function works only when upshifting, interrupting the ignition for a fraction of a second. This allows upshifting while the throttle is fully opened without the use of the clutch lever. A sensor on the shift drum registers the force from the shift lever, sends the signal to the ECU and the ignition timing

is interrupted. To prevent unintended shifts and false neutrals, the function is only active from second to sixth gears.

Traction Control on the FE 350 Pro is engaged by a switch marked 'TC', and functions by analysing throttle input from the rider and the rate at which engine RPM increases. If the engine speed increases too quickly, the Engine Management System (EMS) registers a loss of grip and reduces the amount of power to the rear wheel, ensuring maximum traction. This is a distinct advantage in wet or muddy conditions.

The Map Select Switch on the TE 300 Pro features a simpler design, allowing the selection between two engine maps (mellow/aggressive). Quickshifter and Traction Control are not available on 2-stroke models. Map 1 is the standard, more mellow map for linear, predictable power, while Map 2 is the aggressive map for added throttle response and a peakier, more explosive power output.

- Handlebar Map Select Switch → alters engine characteristics according to conditions and rider preference
- Quickshift function → clutch-free upshifting
- Traction Control → optimal traction in all conditions

Start/Stop switch

Start/Stop switch:

- Newly designed switch including ignition on/off, start, stop. Mounted on the right side of handlebar, allows easy and intuitive start/stop of the engine.

Engine Management System (EMS)

The Keihin EMS is specifically designed to be smaller, lighter and faster at processing data. It integrates selectable engine maps and traction control via the Map Select Switch on the handlebar as well as the Quickshift function (QS). Combined with the gear sensor, power delivery is tailored for each ratio.

A Rollover Sensor (ROS) cuts the ignition in case of heavy crashes, adding another level of safety to the latest Husqvarna enduro machines.

- Keihin EMS → small, light and faster at processing engine data for more efficient engine management
- Rollover Sensor (ROS) → automatic cutting of ignition in heavy crashes
- Gear sensor → specific engine maps for each gear

Offroad Control Unit (OCU)

The OCU replaces electronic fuses and relays (main relay, fan relay, light relay) and can be found under the seat. All outputs are switched depending on signals from the voltage regulator and the ECU. In the event of over-current, outputs are deactivated individually. This allows simple error detection, as the status of each output is indicated by a LED light. The OCU operates wholly independently. Once an indicated mechanical error is fixed (e.g. fuel pump), the OCU light status will change from red to green, indicating that everything is functioning correctly again.

Additionally, compact electrical packaging meant that the voltage regulator could be better integrated, allowing for an increased steering angle while keeping the regulator clean and secure.

- Simple error detection and self-explanatory guidance to find solution
- No more carrying of fuses
- Optimised voltage regulator position → increased steering angle

Keihin throttle body

The FE 350 features a 42 mm Keihin throttle body while the TE 300 features a newly developed 39 mm throttle body. The injectors are positioned to ensure the most efficient flow into the combustion chamber. To ensure optimal throttle response, the throttle cable is mounted directly without a linkage providing more immediate throttle response and feel.

The 39 mm Keihin throttle body features dual injectors positioned for optimal flow and more immediate throttle response thanks to direct cable mounting. Idle is controlled via the throttle valve with a dual injector setup (not via a bypass system as on transfer port injection) for maximum performance – with one low-load injector (positioned as on the FE 350) and one “top-feed” oriented injector before the throttle valve.

A new and more robust TPS-sensor provides the same cold start mechanism as on the 4-stroke models. The throttle valve pivots on ball bearings instead of plain bearings – this provides less than half the friction torque compared to the previous throttle body and allows much easier throttle operation.

All in all, this provides much better idle control, more stable idle behaviour, and much better fuel-air mixture preparation. The results are more power, more response and a larger possible fuel-air mixture operation window in comparison to TPI. Therefore, it is less prone to engine cut-outs or hesitations, and less sensitive to different ambient conditions (e.g. temperature, altitude, humidity).

- 4-stroke throttle body → 42 mm, injector positioned for optimal flow, more immediate throttle response thanks to direct cable mounting
- 2-stroke throttle body → 39 mm with two injectors positioned for optimal flow and more immediate throttle response thanks to direct cable mounting

Exhaust system

The Husqvarna enduro 2-stroke header pipe has been designed using an innovative 3D process, with the aim of achieving more ground clearance and to reduce the risk of damage in deep ruts or from the external objects typical to enduro situations. A state-of-the-art manufacturing process maintains quality and reduces manufacturing inconsistencies.

The compact 2-stroke enduro silencer is crafted from lightweight aluminium and features an aluminium mounting bracket and advanced internal construction for excellent noise damping and weight saving. Additionally, it is stylishly finished in a black coating that highlights its premium quality.

The 4-stroke exhaust system is expertly designed to deliver class-leading performance at the lowest possible weight. The header pipe is designed and manufactured in two pieces to be as compact as possible. The joining position allows it to be removed without having to remove the rear shock. The routing of the header pipe is extremely close to the engine to maximise mass centralisation and minimise exposure to rocks or other potentially damaging objects.

Further innovation allows for a short, compact silencer without increasing noise levels. The component is crafted from lightweight aluminium and is stylishly finished in a black coating that highlights its premium quality.

- More compact exhaust systems, light weight and engineered for optimal performance
- Header joining position allows removal without removing rear shock
- Standardised mounting points and screw lengths across 4-stroke exhaust systems
- Header pipe mounted directly onto engine mount for easy serviceability

LED headlight unit

All Husqvarna enduro models come with an LED headlight unit and mask. The mask itself features lower triple clamp protection against roost and external objects while the headlight is directly mounted to the triple clamp. This allows the fork to be quickly demounted while the front mask stays in position.

Inside the headlight, the LED lighting unit snaps in place with a quick release system. This has the big advantage of allowing fast replacement in case of damage. Also, not having to replace the complete headlight unit brings enormous cost savings to customers.

Output from the light has been improved significantly, making riding in the dark a dramatically improved experience. The maximum light output is approximately three times brighter when compared to the old model generation, increasing from 320 to 900 Lumen for 2024. Undoubtedly, this is a significant improvement and is considerably more effective in all low-light situations.

Additionally, the robust speedometer provides exceptional readability while being attached to the motorcycle with just one electric connector.

- State of the art headlight unit → LED technology and improved light output
- Speedometer → exceptional readability and less risk of failure

Electric start and Li-Ion battery

Along with the benefit of an easy electric starting system, a Li-Ion 2.0 Ah battery is fitted to the Husqvarna enduro Pro machines. The Li-Ion battery weighs approximately 1 kg less than a conventional lead/acid battery, so the convenience of electric starting is delivered while minimising overall weight.

- Electric starter → easy starting when time is critical
- Li-Ion battery → lightweight, 1 kg lighter than a conventional battery

Integrated cooling system, radiators and fan

The radiators are expertly crafted using high-strength aluminium. CFD optimisation is used to channel air through the radiators more efficiently and provide optimal cooling in all conditions. The cooling system is integrated into the frame, allowing for improved cooling by channelling coolant through the frame while eliminating the need for additional hoses. A large centre tube running through the frame reduces pressure at this point in the system, allowing for more consistent coolant flow and now features an internal thermostat for added reliability.

Additionally, the radiators are mounted close to the centre of gravity for handling agility and are equipped with a standard radiator fan for increased cooling effect.

- Integrated cooling with centre tube → maximum efficiency in minimum space
- Bayonet closure radiator caps → optimised pressure sealing
- CFD-optimised radiators → efficient for optimal cooling
- ECU-controlled radiator fan → no additional thermal switch necessary

Fuel tank

The 8,5 / 8,0 litre transparent polythene (XPE) fuel tanks incorporate threaded filler caps and integrated fuel pumps. A one-piece fuel pump with integrated filter provides optimal fuel supply for both models, and the external fuel lines are specifically positioned to make them less exposed and susceptible to damage. Fuel filters can be easily replaced with toolless access.

- 8,5 litre (TE) / 8,0 litre (FE) polythene fuel tanks → large capacity for extended running times
- One-piece fuel pump and filter for reliable fuel supply → tank can be emptied further at low fuel levels
- External fuel-line routing → less exposed and less susceptible to damage

Airbox and tool-less air filter access

CFD-optimised airboxes are designed with precisely positioned inlet ducts to prevent air deformation and ensure maximum airflow and filter protection. The air filter is easily accessed on the TE and FE, without tools, by removing the left side-panel. Easy maintenance is guaranteed by the Twin Air filter element and filter cage design, featuring a simple fail-proof mounting system for safe and accurate filter installation.

- CFD-optimised airbox → optimised air flow and maximised filter protection
- Intuitive filter mounting system → safe and accurate protection against dirt
- Tool-less filter access → quick and easy maintenance
- High-flow airbox cover included with each machine → further customisability of engine response

Factory Racing wheel set

Black high-strength anodised EXCEL Takasago rims are mounted on high-quality black-anodised, CNC-machined hubs with reinforced spokes and black anodised aluminium nipples for maximum weight saving, and optimised handling and stability in the most extreme conditions.

Additionally, the standard front axle puller allows easier removal of the front wheel and reduces time spent servicing.

- Lightweight but strong and reliable construction → minimum unsprung weight
- Front axle puller as standard

Tyres

The TE 300 Pro and FE 350 Pro feature Michelin Enduro tyres as used by the Husqvarna Factory Racing team. These FIM-approved tyres offer exceptional grip in a wide variety of terrain and different riding conditions.

- Michelin Enduro tyres → advanced grip in challenging conditions
- Increased durability and crack resistance through innovative rubber compounds

Bodywork

The enduro Pro models feature bodywork which clearly showcases Husqvarna Motorcycles' progressive approach to offroad motorcycles. Striking grey-and-white graphics stylishly adorn the Swedish-inspired design.

Ergonomics are tailored to provide exceptional knee contact, especially in the standing position, enabling riders to perform at the highest level for extended periods of time. Slim bodywork contact surfaces allow the rider to move around on the bike more easily, improving overall handling and agility.

A flat seat profile, combined with a new competition-focused seat cover, delivers superior control in all conditions. A recessed pocket under the seat, just above the airbox, allows gripping and lifting of the bike.

- Progressive bodywork → distinctive looks, modern design and graphics
- Optimised rider triangle for better knee contact, especially when riding in the standing position
- Maximised contact surfaces → allow for easier gripping and movement of the bike
- Recessed grip pocket → providing better grip to lift the bike
- Seat → flat profile and new cover with added traction ribs offer exceptional control in all conditions

Technical information by model

FE 350 Pro

Striking a competitive balance between power and handling, the FE 350 Pro is undoubtedly the most versatile enduro machine on the market. Powered by a new engine, which is positioned inside the new frame to centralise mass, together with new WP XACT suspension, handling and overall performance are much improved for 2024. Complete with a fresh, Swedish-inspired look and assembled with premium components throughout, the FE 350 is capable of competing at the highest level of enduro in standard form.

Engine

The FE 350 engine is tilted 2° backwards and hence has a repositioned sprocket 3 mm lower than on the previous generation. The main benefit of this design is improved anti-squat behaviour of the entire chassis.

Draining noses for liquids and additional service markers on the engine (▲) clearly show where to use washers, making maintenance and service easier than in the past.

All major components and shaft arrangements are carefully designed and placed to best suit the performance and handling characteristics of the overall package. The 350cc engine is not only light at 28.8 kg but also remarkably powerful.

- Light and compact engine design for optimised mass-centralisation
- Outstanding, high-revving performance engine with 11,500 rpm rev-limit
- Low friction design, reducing overall drag and vibrations
- Engine tilted 2° backwards with repositioned sprocket (3 mm lower)
- Exceptional serviceability of engine internals with added service markers and draining noses for liquids
- Maps (1 white, 2 green) differ mainly in partial load range and acceleration functions, which makes for a clearly noticeable difference

Cylinder head

The DOHC cylinder head features finger followers with DLC (Diamond Like Carbon) coating resulting in minimal friction and optimal performance. These actuate large steel valves (36.3 mm intake, 29.1 mm exhaust) which at the 11,500-rpm rev-limit open and close multiple times every second, introducing fuel/air mixture to the carefully designed combustion chamber to deliver efficient and optimal power throughout the rev-range.

The 29.1 mm exhaust valve results from the engine being designed to deliver optimised gas flow. Valve timings work in perfect harmony with the camshaft.

For easy serviceability and maintenance within the engine, the camshaft bearing bridge is screwed in and increases stiffness.

- Cylinder head designed for increased durability and serviceability
- Finger followers with DLC coating, reducing friction and guaranteeing optimal performance
- Large steel valves (36.3 mm intake, 29.1 mm exhaust) for optimised gas flow
- Lightweight valve cover with reduced number of mounting screws (only two)

- Camshaft bearing bridge increasing stiffness and improving serviceability (screwed-in design)

Cylinder and piston

The 88 mm bore cylinder houses a forged bridged-box-type piston made by CP. Both cylinder and piston are professionally engineered from high-strength aluminium, resulting in outstanding performance and reliability. The compression ratio is 13.7:1.

- Large 88 mm bore and diameter-optimised exhaust valves for high-revving and quick response
- Forged bridged-box-type piston guaranteeing high performance and reliability
- CFD-optimised combustion chamber with optimised valve guides and valve shaft diameters for increased engine responsiveness
- Compression ratio of 13.7:1 for increased torque and peak power

Crankshaft

The crankshaft is designed to offer the best possible performance, all while being perfectly positioned to centralise oscillating masses for optimal handling. The plain big-end bearing features two force-fitted shells, ensuring maximum reliability and durability guaranteeing long service intervals of 135 hours (major engine service in normal usage, in competition usage -> 70 hours).

- Plain big-end bearing with force-fitted shells for increased durability and service intervals
- Friction bearing on the counter-balancer shaft for increased durability

Crankcases

The FE 350 engine is designed with mass-centralisation as one of the main criteria. The crankcases have been designed to house the internal components of the engine in the perfect position to achieve the ideal centre of gravity while adding the least possible weight. The casings are manufactured using a high-pressure die-cast production process, resulting in thin wall thickness while retaining exceptional reliability. The Husqvarna crown logo gives the bronze powder-coated enduro-specific and noise-reducing clutch cover a premium and durable look. Additional oil scrapers in the ignition cover round off the package.

- Light and compact crankcases, optimised mass-centralisation
- High-pressure die-cast production process with thin walls for reduced weight, while maintaining strength
- Enduro-specific clutch cover (same look but lower noise compared to FC models)

Gearbox

Produced by Pankl Racing Systems, the 6-speed gearbox is designed to be extremely light and durable, featuring a primary gearing ratio of 24:72.

The shift-shaft is specifically designed to reduce gearchange operating forces. The Quickshift sensor is positioned on the shift drum, allowing clutchless upshifts. The function can be activated/deactivated via the QS button on the Map Select Switch, located on the left side of the handlebar.

The gear lever is designed to prevent dirt build-up and ensures perfect gear selection in all conditions. An advanced gear sensor allows for specific engine maps delivering the best possible performance in each gear.

- 6-speed gearbox by Pankl Racing Systems with enduro-specific primary transmission ratio and exceptional durability and effortless shifting
- Shift-shaft design reduces operating force of gear changes
- Quickshift sensor positioned on the shift drum allows clutchless upshifts, the function can be activated/deactivated via the QS button on the Map Select Switch on the left side of the handlebar
- Integrated gear sensor for specific engine maps for each gear and seamless upshifts

DDS clutch

The FE 350 features a DDS (Dampened Diaphragm Steel) clutch. The unique characteristics of this system include a single diaphragm steel pressure plate instead of traditional coil springs. It integrates a damping system for better traction and durability. The clutch basket is a single-piece, CNC-machined steel component that allows the use of thin steel liners and contributes to the compact design of the engine.

Pressure lubrication provides optimal clutch cooling, reducing fade in high stress usage.

- Lightweight DDS clutch featuring consistent modulation and exceptional durability
- Optimal clutch cooling from pressure lubrication, reducing clutch fade from high stress
- Enduro-specific clutch cover for reduced noise output

TE 300 Pro

The flagship TE 300 Pro offers astonishing power in a light and agile package. Its 300cc 2-stroke engine features an innovative throttle body fuel injection and sets the benchmark in unrivalled power and lightweight construction while retaining exceptional reliability and low maintenance costs. Even though it offers the highest 2-stroke performance in the Husqvarna enduro range, the TE 300 Pro is even more controllable than before. Eliminating the need to premix fuel provides an additional benefit.

Engine

All the latest innovations have been brought into the 2-stroke enduro platform. With an overall weight of just 24,6 kg, the TE 300 Pro engine sets the benchmark when it comes to weight/performance ratio. Many championships will see the TE 300 Pro top the result sheets of the highly competitive E3 class, underlining this new era of 2-stroke technology.

The lightweight engine is designed to provide more torque than any previous 2-stroke engine without losing its signature high-revving, lightweight 2-stroke character.

The engine is designed to centralise rotating mass for optimal operation with the chassis, resulting in light and agile handling. The power train has been positioned the same as on the TE 250. Together with the benefits of mass centralisation and reduced weight, the anti-squat behaviour of the chassis was significantly improved by changing the backbone of the steel frame concept while the engine is mounted symmetrically side to side.

The throttle body fuel injection system (Keihin 39 mm throttle body in combination with a Vitesco EMS) and electronic exhaust control allow for a more compact engine design and free definable values for engine speed and load. The result is tailormade power delivery for each gear and every situation.

Another focus in development was serviceability of the TE 300 Pro engine. Draining noses for liquids and added service markers on the engine (▲) clearly show where to use washers, making maintenance and servicing easier than in the past.

The water pump concept has a shaft featuring a drive wheel instead of the previous centrifugal regulator, and it is protected by an aluminium diecast water pump cover. The water pump concept is shared among all 2-stroke enduro engines, making it easy for dealers to supply spare parts in the rare cases they are required.

- Pinnacle of performance → high power output, 24,6 kg
- Mass-centralisation → significant benefits in handling and manoeuvrability
- Improved serviceability of engine internals → added service markers and draining noses for liquids

Cylinder head

The cylinder head cover features an external water temperature sensor located within the tubing to provide accurate readings. A “front” indication makes it almost impossible to mount the cylinder head the wrong way, which will assist dealers and also tech-savvy customers servicing engines themselves.

The combustion chamber inserts follow the same logic. Mixing up inserts from different models is no longer possible. All of these details significantly improve overall engine quality ex-factory.

Enduro-specific cylinder timing and porting results in a higher compression ratio and no compromise between the motocross and enduro ranges, as each engine configuration is tailor-made for its own competition discipline.

- “Front” indication on cylinder head → avoiding incorrect installation
- Combustion chamber insert → impossible to mix-up inserts from other models
- Enduro-specific cylinder timing and porting → best compression ratio for enduro competition without compromise

Cylinder

The cylinder features a 72 mm bore. The highly innovative electronic exhaust control manages the opening of both main exhaust and lateral exhaust ports via an actuator. On the TE 300 Pro, the main exhaust port opens before the lateral exhaust port to deliver maximum yet controllable power.

The results are exceptional rideability, engine control and a larger adjustability range of engine characteristics (differences between the two engine maps).

The power valve can be controlled according to the throttle position and engine RPM (vs. only engine speed on a mechanical system). Additionally, it is auto-calibrating, meaning there are no more issues with incorrect power valve adjustments.

The machined finish on the upper contour of the exhaust port ensures accurate port timing, delivering unrivalled performance in every situation.

- Electronic exhaust control → tailormade, linear and predictable power delivery
- Machined exhaust port → outstanding performance and controllability

Crankshaft

The crankshaft is designed with weight reduction in mind to increase the liveliness and response of the engine. The perfect balance of rotating masses is achieved by balancing the weights of the crankshaft flywheel, the rotor and the counter balancer shaft. With a perfect combination of these components, vibration is kept to an absolute minimum. Engine internals are also positioned to ensure that the rotational mass created has very little effect on the handling of the motorcycle.

- Lightweight crankshaft → responsive engine character
- Combination of crankshaft, rotor, and counter balancer shaft → very little vibration

Counter balancer shaft

The TE 300 Pro features a laterally mounted counter balancer shaft. This shaft significantly reduces vibrations resulting in a smoother and more comfortable ride with less rider fatigue.

- Counter balancer shaft → significantly reduced vibration

Crankcases

The TE 300 Pro engine is designed with mass centralisation and weight reduction among the main criteria. As a result, the crankcases have been designed to house the internal components of the engine in the perfect position to achieve the ideal centre of gravity while adding the least possible weight. The casings are manufactured using a high-pressure die-cast production process, resulting in thin wall thickness while retaining exceptional reliability.

Black powder coating provides additional durability and a premium look, while service and oil level markings give easier serviceability. Additionally, the engine is connected to the frame with symmetrical engine mounts (left and right side) resulting in improved flex characteristics.

- Light and compact crankcases, optimised mass-centralisation
- Easy serviceability of engine internals with added service markers and draining noses for liquids
- Optimised crankcase pressure sensor: larger hose diameter, more protection against build-up of oil carbon particles, better signal quality and better engine load detection

Gearbox

The 6-speed gearbox is manufactured exclusively by Pankl Racing Systems ensuring the highest level of durability and reliability. The gearbox features enduro- specific gearing while the gear lever features an innovative tip design that prevents dirt build-up. A transmission ventilation concept rounds off the shift mechanism.

- 6-speed gearbox → manufactured by Pankl Racing Systems
- Gear lever → increased leverage, more smooth and precise shifting
- Friction-optimised shifting mechanism → less lever force necessary

DDS clutch

The TE 300 features a Dampened Diaphragm Steel (DDS) clutch. The unique characteristics of this system include a single diaphragm steel pressure plate instead of traditional coil springs. It integrates a damping system for better traction and durability. The clutch basket is a single-piece CNC-machined steel component that allows the use of thin steel liners and contributes to the compact design of the engine.

- DDS clutch featuring consistent modulation and exceptional durability
- Light action with integrated damping system, increased traction and reliability

EFI (TBI)

In cooperation with Keihin, we developed a 39 mm throttle body fulfilling the needs of innovative, state-of-the-art, 2-stroke enduro injection. The ECU is supplied by Vitesco and works in harmony with the Keihin throttle body by always delivering the right amount of air/fuel mixture. Therefore, the ECU continuously analyses coolant temperature, air temperature, ambient pressure, pressure within the crankcase, rpm and throttle position (via the TPS) to calculate the perfect air-fuel mixture for every riding situation.

Additionally, composite flaps on the outside of the reed valve case provide improved sealing of the intake tract. This design avoids fuel excess in extreme up- or downhill sections which could lead to

overly rich engine settings. Boyesen Inc. continues to supply the carbon membranes for the reed valve case.

A beneficial side-effect afforded by the electronic fuel injection and the ECU is the implementation of the innovative electronic exhaust control system.

With all these innovative features it was also possible to further refine engine maps on the 300cc enduro engine. Map 1 is the standard, more relaxed map for linear, predictable power, while Map 2 is the more aggressive map for added throttle response and a crisper, more aggressive power output. Both maps can be selected via the 2-stroke Map Select Switch on the left side of the handlebar.

- EFI by Keihin (39mm throttle body) → optimal power delivery and performance in all conditions
- Reed valve case design → guarantees correct air/fuel mixture even in most extreme up- or downhill sections
- Injectors with optimised Sauter Mean Diameter (SMD) → smaller droplets

Oil Injection

Additionally, the ECU controls the specific amount of oil injected into the throttle body. It is not a fixed ratio of 1:60, but varies depending on the riding situation and can accordingly be leaner or richer.

Throttle Body Injection (TBI) injection has the major benefit of more homogeneous air/fuel mixture due to later oil injection compared to the older Transfer Port Injection (TPI) engine. Now, with TBI, the injection point is at the membrane flange while in the past (TPI) its position was at the throttle body. The oscillation of membranes increases the oil/fuel mix further and leads to a previously unreached level of atomisation. As a result, the engines have a lower risk of seizure, better internal combustion and rideability in all conditions. The drawback is higher fuel and oil consumption.

The character of the TPI engines was not known for its liveliness. Actually, quite often at low revs with low engine loads, 'oil nests' were common, leading to delayed and sluggish engine response. This is now consigned to the past and the engines are much more versatile, fulfilling the demands of riders of different levels in a variety of scenarios, from Hard Enduro to Classic Enduro.

E-Start

Husqvarna enduro offerings now come with E-Start only. A kickstart is no longer featured and cannot be retrofitted. The starter motor has no intermediate shaft, saving weight and allowing compact engine design and perfect integration. A robust but also compact cover protects the starter motor from roost or rock damage. A 12,8V 2 Ah Li-Ion battery is placed under the rider's seat close to the centre of gravity. The engine can be easily brought to life by pressing the combined start/stop switch on the right side of the handlebar. A high-quality stator and pickup are built into the TE 300 engine for increased reliability and an efficient power supply for the electronics.

- E-Start → less loss of time when stalling engine in races and exceptional user friendliness
- Li-Ion battery → lightweight, 1 kg lighter than a conventional battery
- High-quality stator and pickup → increased reliability/efficient power supply for electronics

Technical Accessories

The TE 300 Pro and FE 350 Pro already come with a number of Technical Accessories as standard, however additional items are available to further enhance durability and performance. Riders can personalise their enduro machine to their own exacting specification with a Technical Accessories range that combines innovative technology with premium quality and ease of fitment. All of these premium performance parts have been developed in conjunction with the FIM World Championship-winning Husqvarna Motorcycles Factory Racing team.

Akrapovič „Racing Line“

FE 350 Pro riders can benefit from increased torque and performance for more power output at all engine speeds with the Akrapovič „Racing Line“ exhaust system. Power delivery is more precise and linear too. The stainless steel header has been shaped to route closely around the FE 350 engine, and the silencer sleeve is made from high-grade titanium. Despite delivering a deep, sonorous exhaust note, the Akrapovič „Racing Line“ complies with current FIM and AMA noise regulations.

Akrapovic „Slip-On Line“

Bringing an uncompromising race look to the TE 300 Pro, the Akrapovic „Slip-On Line“ is manufactured from high-grade titanium for a substantial weight saving. Permanently welded brackets are part of the robust construction of the silencer, which complies with current FIM noise regulations.

Expansion Chamber Guard

A high-quality carbon fibre guard gives riders a way to protect the TE 300 Pro's standard expansion chamber against falls, flying stones, branches, and the other hazards encountered in enduro competition. Elegant in design yet with high stiffness and strength, it provides the same load-bearing capacity as steel while being 80 % lighter and non-corrosive. Featuring low thermal expansion and high long-term temperature stability, the expansion chamber guard is made exclusively to fit the standard header.

Factory Racing Triple Clamp

Relied on by the Factory Racing Team for its handling and stability benefits, the CNC-milled anodised aluminium triple clamp also looks stunning. The dimensions of the steering stem are precisely tuned for optimal stiffness and ensure 100% alignment and correct geometry of the WP XACT Closed Cartridge 48 mm fork featured on the TE 300 Pro and FE 350 Pro. The triple clamp also prevents ovalisation of the fork outer tubes resulting in precise and smooth fork response. Offset can be set to 20 or 22 mm for greater straightline stability or faster steering. The triple clamp is supplied with the steering head bearing already pressed into position.

Rekluse Outer Clutch Cover

A Technical Accessory for both the TE 300 Pro and FE 350 Pro, the Rekluse Outer Clutch Cover is CNC-milled from high-strength aluminium to provide additional protection for this often-vulnerable area. Resistant to the toughest stresses, strains and impacts, it has also been weight-optimised.

Matrix A2 Bike Stand

Thorough cleaning is an essential part of the maintenance of an enduro machine. The Matrix A2 Bike Stand offers secure support for the TE 300 Pro and FE 350 Pro. Aluminium construction makes it light and easy to handle while a non-slip pad ensures the bike can't slide around during washing.

Functional Apparel

TE 300 Pro and FE 350 Pro riders can kit themselves out for every event with the 2024 Functional Offroad Apparel Collection, featuring an extensive range of riding gear and waterproof clothing, expressly designed for enduro competition. Everything in the collection has innovative technical features to deliver the highest levels of comfort, durability and protection. The Enduro Apparel is also exclusively styled to match the striking Swedish design of the 2024 TE 300 Pro and FE 350 Pro machines.

Moto-9 MIPS® Gotland Helmet

Offering maximum comfort and protection from the start to the finish of every race, the Moto-9 MIPS® Gotland Helmet is made exclusively for Husqvarna Motorcycles by Bell. A velocity flow ventilation system provides a constant supply of cooling air, while the visor is fully adjustable and also vented. An XT-2® Extended Wear interior liner with Magnefusion™ cheek padding is removable and washable and there is an integrated, ventilated mouthpiece. Weight is 1,450 g (±50 g).

Velocity 5.5 Goggles

Created exclusively for Husqvarna Motorcycles by Leatt, the Velocity 5.5 are premium offroad goggles with bulletproof construction to survive the tough discipline of enduro. An injected polycarbonate shield lens provides protection against UVA, UVB and UVC. Anti-fog and anti-scratch technology maintain race-winning vision. A three-layer, fleece-foam lining and removable nose-guard guarantee comfort, while adhesive silicone strips in the headband keep the goggles securely positioned.

Gotland Shirt

Enduro clothing must be both light and robust. The Gotland Shirt has been designed to meet these criteria – as well as being timelessly stylish. Available in blue or black, it features a woven fabric front, plus mesh inserts and perforated ventilation zones for comfort. Foam padding offers protection at the elbows and there is also an integrated chest pocket.

Gotland Pants

Like the Gotland Shirt, the Gotland Pants are lightweight and durable. Made from a hard-wearing Cordura® reinforced nylon/polyester material, they also feature heatproof and abrasion-resistant leather knee protection. Mesh inserts and reinforced elasticised panels allow mobility in movement-intensive areas, while leg bottoms without ankle cuffs allow the Gotland Pants to be worn inside or outside boots.

Crossfire 3 SRS Boots

Designed to offer style and protection in equal measure, the Crossfire 3 SRS Offroad Boots are made exclusively for Husqvarna Motorcycles by SIDI. Packed with features to ensure comfort, control and safety, the Crossfire 3 SRS has a nylon inner sole with removable foot bed, a stitch-free and replaceable boot leg, and an exclusive, patented flex system with hyper-extension block. The shin plate is replaceable, the toe area has plastic reinforcement and the shock-absorbing, anatomically shaped heel protector is made to last. There is a micro-adjustable, replaceable buckle system, as well as a fully adjustable calf area.