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## INTRODUCTION STELVIO 1200 4V NTX: THE EAGLE WITH AN APPETITE FOR ADVENTURE.

The new Moto Guzzi Stelvio 1200 4V NTX represents a fusion between the Italian passion for motorcycle as an unparalleled expression of style, engineering excellence and riding pleasure, and an appetite for adventure - the irresistible yearning to discover distant, challenging places. This is not the first time that the name "NTX" has been used in the history of Moto Guzzi. In 1986, in the heyday of long distance African races such as the Paris-Dakar and the Rally of the Pharaohs, the Mandello del Lario based marque used this moniker to distinguish its extreme adventure models, bikes that earned such respect that they were produced for over a decade. Today, these three letters have been brought back to identify the most specialised and adventurous version of the Stelvio 1200 4V NTX, the bike that marked the return of Moto Guzzi to the maxi enduro segment. Around this modern and technologically advanced base, a new concept of a *no limits* motorcycle took shape, creating a bike that is powerful, muscular, robust and unstoppable. Bolstering this image is the robust "armour" encasing the forms of the Moto Guzzi Stelvio 1200 4V NTX, consisting of a sump guard, an engine guard and integrated hand shields to protect the rider and his steed from any obstacle on their way. Adding visual presence yet also sturdy and practical, the aluminium panniers and supplementary halogen headlamps complete the generous standard equipment of the new NTX, which may be even further enhanced with a comprehensive selection of optional accessories such as a GPS, heated hand grips and, for the more adventurous rider, a kit of enduro tyres with a rear 150/70 R17 tyre mounted on the standard 4.25 inch rim.

Once in the saddle, the reality proves to be even better than you could have imagined, with the powerful "Quattrovalvole" engine delivering, in its latest incarnation, a maximum torque of 113 Nm at just 5800 rpm, marking a significant improvement over the 108 Nm at 6400 rpm of the previous version.

These results were achieved by adopting new cam profiles and a revised air box, which make the "Quattrovalvole" engine even more responsive at low engine speeds while still producing practically the same maximum power. Completing this technological tour de force is a new ABS braking system, introduced on the Stelvio 1200 4V together with the more flexible engine. The NTX has been designed with the same innovative and modern criteria as its smaller sister, and this is evident in both the quality of the chassis componentry and in premium details such as the adjustable windscreen and saddle, and the ingenious glove-box compartment with remote release operable from the handlebar, which reveal the attention dedicated in the project to rider and passenger ergonomics.





# STYLE: Solid elegance.

The style of the new 1200 4V NTX retains the personality and elegance of the original version, with additional metal guards protecting vital parts of the engine emphasising the image of a motorcycle conceived to withstand the most extreme conditions.

Painted in a warm magnesium hue, the design of the lightweight fairing features many prismatic elements and concave surfaces which, in the zone linking the top fairing, with its adjustable windshield, to the narrow but capacious fuel tank, express the level of attention that has been dedicated to optimise the aerodynamics, creating downforce at the trail and directing cool air to the cylinders via lateral ducts.

The peculiar *blow moulding* technology was used to produce the tank and helps to minimise dimensions and weight according to the (18-litre) capacity. Moreover, it includes a fantastic glove-box that can be unlocked from the handlebar and is atop the saddle, which, by covering the grooves, avoids direct contact with the rider's legs to ensure superior riding comfort. Once you are seated on the saddle, finely upholstered with non-slip material, it is quite noticeable there is more space for both rider and passenger's comfort. The rider saddle height can be adjusted to two positions, 820 mm or 840 mm from the ground, whereas the passenger, besides being seated on a thick and spacious seat, can count on a solid and comfortable handhold seat strap.

Even more aggressive than the front end, the rear end look is dominated by the hi-tech aspect of the rear light with complex surface curve and LEDs, and by an important enhanced aluminium double tail silencer that evokes solidness and power.





# COMFORT: Sensation of inner well-being.

Stelvio 1200 4V NTX is a tourer that can also be used off-road, and with excellent performance on asphalt. These characteristics emerge immediately once you are seated on the bike, where the perception of carefully-designed ergonomics can be felt straightaway: saddle, footrests and handlebar form a perfect triangle for all users. Moreover, for the perfectionists, there is still room for minor adjustments: windshield, saddle height (820 or 840 mm), handlebar inclination, levers, pedals, also for professionals, set screws to adjust hydraulic compression/rebound damping of suspension.

In a few seconds, everything is at the right place to face any challenge, from city traffic to the most inaccessible off-road paths. In motion, reduced vibration and an efficient aerodynamic protection ensure riding comfort for rider and passenger as well, ideal to tackle long trips. Among the most appreciated features for everyday use, there is a glove-box on the right-side of the tank that can be unlocked from the handlebar and even, if your are wearing gloves. The instrument panel features complete and easily visible gauges- a white-background rpm indicator that incorporates efficient service warning lights, long-range lights (optional), and a dash display that provides plenty of information about the vehicle operation and diagnosis, a fuel level indicator, average and current consumption, average speed, trip time, maximum speed peak reached and, as heated handgrips may be fitted upon request, the heating level of handgrips can also be seen.

The Stelvio 1200 4V NTX is a class leader, as a result of an elegant aesthetic appearance, and is also enhanced by features which, while fulfilling a stylistic function, set new parameters in terms of effectiveness and safety.

Some examples are the headlight assemblies, highly reliable and effective, manufactured with technology derived from the automotive industry, fittings for the panniers are integrated to the passenger handgrips and the luggage racks, design elements expressing the versatility and calling for adventure and touring of the Stelvio 1200 4V NTX model.





# CHASSIS Designed for non conventional paths.

You should not be mislead by its luxury off-road appearance: the Stelvio 1200 4V NTX features driving effectiveness superior to the average of many road motorcycles, since it is equipped for the unexpected and able to withstand any off-road driving strains.

The secret is the new upper twin spar frame, made of high-strength steel, with 2.5mm thick directional tubes, where the engine is anchored through six connecting points, two more than in usual frames, which give high rigidity to the assembly at twisting moments.

Chassis positions have been defined to facilitate handling, a headstock with a 27° inclination for a 125mm trail, improved by a 1535-mm wheelbase which guarantees impeccable steering precision.

The suspension, piece of fine workmanship adjustable not only during preloading but also for the hydraulic response at compression and rebound damping, offers an immediate and clear response to handlebar pressures. The front end is controlled by a solid upside-down Marzocchi fork, with 50mm and 170mm travel stanchions, whereas at the rear, suspension kinematic mechanisms with progressive rising rate are moved by a Sachs unit that works on a 155mm stroke.

The refinement of the suspension department guarantees a neutral setting at all times. When going out of a bend, and the action of the 105 horsepower generated by the new "Quattrovalvole" engine is requested, or when braking, under the quick deceleration generated by the three-disc Brembo braking system. And either for its effectiveness or its aesthetic value, there stands out a system consisting of radially-mounted calipers engaging onto a couple of fully drilled discs for better heat dissipation.

Splendid spoke wheels assembled with Behr rims and Alpina spokes are ideal for Pirelli Scorpion tubeless tyres. The 19-inch front wheel is shod with a 110/80 tyre, while the rear is fitted with a 150/70 tyre. The wheel sizes have been chosen specifically to allow the use of enduro tyres.

Even when considering chassis elements, where the overall assembly is what really counts, Stelvio 1200 4V NTX is not afraid of comparisons.





## ENGINE AND TRANSMISSION. New verve from the Quattrovalvole engine.

The Stelvio 1200 4V NTX is powered by the first evolution of the "Quattrovalvole" engine, which was presented in 2006 and is universally acknowledged as being the most advanced iteration yet of the legendary transverse 90° V-twin. For this new version of the engine, low and mid range responsiveness has been significantly improved to better suit the character of the Moto Guzzi Stelvio 1200 4V NTX as an all terrain machine. The engineers at the Mandello based marque optimised the camshaft profile, the air box and the exhaust (NO) to increase maximum torque from 108 Nm produced at 6400 rpm to 113 Nm available at just 5800 rpm. These results have been attained without compromising this powerplant's claim to fame as being the most powerful and fastest production engine ever built by Moto Guzzi.

This highly sophisticated mechanical gem, which is unique in terms of both architecture and engineering clarity, is built using advanced componentry and technical solutions. These include the single overhead camshaft 'high-cam' valve timing driven by Morse chains with hydraulic tensioner skids, the forged pistons with 3 piston rings, cooled by oil jets in the crankcase, ultra-light valves with 5 mm stems and conical valve springs that eliminate resonance and power loss at high engine speeds. The engine is lubricated and cooled by two separate circuits, with two coaxial gear train driven pumps. In the coolant circuit, engine oil is fed via separate conduits in the head to reach the exhaust valve seats - where the highest temperatures are generated - and the heat is then dissipated by an oil radiator, which is located at the front of the engine for maximum exposure to the air flow. The lubrication circuit feeds all the vital organs of the engine, such as the crank and connecting rod bearings and the valve timing components.

The heat generated by the impressive power produced by the engine is dissipated by cooling fins, with a modern design and tapered toward the front of the cylinders, while the valve covers - which proudly flaunt the "Quattrovalvole" moniker - feature floating mounting system to reduce mechanical noise. The "Quattrovalvole" engine introduces new Marelli IWP 189 fuel injectors installed on the intake ducts of the 50 mm diameter throttle bodies. The gearbox is a genuine six speed mechanical gem that excels for quietness, an easily selectable neutral position and precision, thanks also to the introduction of the quiet and smooth new single plate clutch. The new clutch differs from the previous version as it has less flywheel inertia and is more fade resistant and easier to use.





## MAIN CHARACTERISTICS

#### DESIGN

- Aluminium panniers
- Aluminium sump guard.
- Steel engine guard.
- Integral hand guards.
- Additional headlamp
- Double high-/low-beam headlight assembly with convex surface lenses.
- Half-fairing with integrated air deflectors and turn indicators.
- Front mudguard with spoiler and integrated fork stanchions protection.
- Manually adjustable windshield.
- Blow-moulding process tank with integrated protective superstructure.
- Rider saddle adjustable to two positions with skidproof upholstery integrated to the tank.
- Passenger saddle with adapted seating and skidproof upholstery.
- Glove-box with unlocking control on the handlebar.
- Luggage supporting frame integrated, with passenger grab handles unit and luggage carrier.
- Tubular footrest supports.
- Full black "Quattrovalvole" powertrain.
- Aluminium hexagonally cross-sectioned silencer with Moto Guzzi customised double bottom.

#### ENGINE

- 1200 cc "Quattrovalvole" 90° V-Twin in NTX STELVIO 2009 configuration
- New cam profile.
- New ignition-injection mapping.
- New increased capacity airbox.
- Single overhead valve timing with valve bucket tappets.
- Reduced inertia single plate clutch.
- Cylinder head with independent cooling oil circuit.
- Silent Morse type chains for camshaft control.
- Hydraulic chain tensioners and tensioning pads.
- Ø 50-mm throttle body.
- IWP 189 Marelli type injectors

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- Floating head covers to cushion noise.
- Transmission with compact reactive cardan shaft drive.
- 6-gear gearbox.
- Euro 3

## CHASSIS

- Double cradle frame of high-resistant steel with 6 points for engine connection.
- Upside-down front fork with 50-mm stanchions, adjustable preloading and hydraulic damping with radially-mounted caliper.
- Shock absorber with preloading and rebound adjustment.
- Rear suspension with progressive articulation single arm.
- Front brakes, radially mounted with 4 opposed pistons and 320-mm discs.
- Rear 282-mm disc brake, floating caliper with two parallel pistons.
- Tubeless spoke wheels with aluminium Behr rim and Alpina spokes.
- Rear tyre 150/70/17 Pirelli Scorpion.
- Front tyre 110/80/19 Pirelli Scorpion.





## ENGINE AND TRANSMISSION.

#### ENGINE

Type Cooling Engine capacity Bore and stroke Compression ratio Timing system diagram (1-mm checking clearance)	: : : :	90° V-twin engine, 4-stroke through air and oil and an independent cooling pump 1,151 cc 95 x 81.2 mm 11: 1 intake valve opening 12° BTDC intake valve closing 49° ABDC exhaust valve opening 55° BBDC exhaust valve closing 19° ATDC
Maximum power	:	77 kW (105CV) at 7,250 rpm
Maximum torque	:	above 113 Nm at 5,800 rpm
Fuel supply / Ignition	:	Multipoint sequential electronic ignition, Magneti Marelli IAW5A phased, alfa-n system; two Ø 50mm throttle bodies, Weber IWP 189 injectors, lambda probe.
Starter	:	Electric
Spark plugs	:	NGK PMR8B (Long Life)
Exhaust system	:	stainless steel, 2-in-1 type, three-way catalytic converter with lambda probe
Type approval	:	Euro 3
TRANSMISSION		
Gearbox	:	6-speed
Gear ratio values	:	1st 17/38 = 1 : 2.235
	:	2nd 20/34 = 1 : 1.700
	:	3rd 23/31 = 1 : 1.348
		4th 26/29 = 1 : 1.115
	:	5th 31/30 = 1 : 0.968 6th 29/25 = 1 : 0.862
	·	3(1127/23 - 1.0.002)
Primary drive	:	with helical teeth, ratio 26/35 = 1: 1.346
Final drive	:	Compact reactive cardan shaft drive system called CA.R.C.; double
		cardan joint and floating bevel gear seat, drive ratio 12/44 = 1: 3.666
Clutch	:	single-disc with integrated anti-vibration buffer



## **PRESS INFORMATION 2009**



#### CHASSIS

Chassis Centre to centre distance Trail	: :	High yield strength tubular steel with integrated engine 1,535 mm 125 mm
Headstock angle	÷	27°
Steering angle		34°
Front suspension	:	completely adjustable fork (spring preload and hydraulic compression and rebound damping) with 50 mm diam. upside down stanchions and caliper mounting for radial brake calipers
Front wheel travel	:	170 mm
Rear suspension	:	single arm with progressive linkage, monoshock with adjustable hydraulic rebound damping and spring preload adjuster knob
Rear wheel travel	:	155 mm
Front brake	:	dual 320 mm stainless steel floating discs, radial calipers with 4 horizontally opposed pistons
Rear brake	:	282 mm stainless steel fixed disc, floating caliper with 2 parallel pistons
Wheels	:	Tubeless with spokes
Front wheel rim	:	2.50" x 19"
Rear wheel rim	:	4.25" x 17"
Front tyre	:	110/80 R19"
Rear tyre	:	150/70 R17"

## ELECTRICAL SYSTEM

System voltage	:	12 V
Battery	:	12V - 18 Ah
Alternator	:	12 V - 550 W

#### SIZES

Length Width	:	1025 mm
Height	:	1475 mm (windshield high position)
Saddle height	:	840 mm
Minimum ground clearance	:	210 mm
Kerb weight.	:	251 Kg
Fuel tank capacity	:	18 litres
Reserve	:	4.5 litres





## ACCESSORIES.

## The importance of details.

With company, on long motorway stretches, in winter or on the mountains, in streets or offroad, there is always the right solution to have enhanced safety, greater load capacity or an additional elegant touch.

## CA.R.C Protection kit.

The protection for the CA.R.C (Italian for compact reactive cardan shaft drive) is made in treated and painted steel to protect the transmission from potential accidental bumps.

Solutions for carrying luggage.

## Tank bag kit

The tank bag kit consists of a dedicated tank cover with frame fasteners and a specially shaped tank bag. The bag features a quick release system allowing it to be easily removed or lifted from the tank for refuelling and boasts a map holder and 2 side pockets. A practical pouch - purchased separately - may be fitted onto the tank cover instead for the saddle bag.

#### Tank pouch

Practical pouch for mounting onto saddle cover included with saddle bag. Useful for carrying small items instead of the full sized bag.

#### Solutions to enhance comfort and riding safety.

#### Navigator installation kit

The special mounting for the Tomtom Rider2 navigator is milled from a solid aluminium billet and comes complete with specific screws for installation. The motorcycle electrical system is already pre-installed with a special power supply connector.

## Electronic antitheft system

It is supplied with double engine lock and 3-axis inertial sensor, with double variable code radio control, fully resin coated and self-powered. The system is quickly and easily installed on a mounting already included on the motorbike.





## Handgrip heating kit:

Cold weather is not going to prevent owners from wanting to ride the STELVIO 1200 4V NTX. The handgrip heating kit allows to choose between 3 different levels of temperature by simply pressing a button. Information about the on/off condition and selected temperature are shown on the display.

## LIFESTYLE

For those who not only ride, but also live the Stelvio, clothing is available to ensure maximum comfort and protection in all riding situations.

# **Stelvio Riding Suit**

Jacket and trouser set in Cordura® developed in conjunction with Dainese. Waterproof lining in D-Dry and detachable thermal lining. Composite shoulder, elbow, knee and shin armour, ice steel coloured leather inserts and pocket for back armour. Adjustable collar, waist and cuffs, Moto Guzzi logo in metal and stitching on back and thigh.

Available in men's and women's versions from sizes 40 to 58.

