



INTRODUCTION ..... 2  
STYLE ..... 3  
COMFORT ..... 4  
FRAME ..... 5  
ENGINE AND TRANSMISSION ..... 6  
MAIN CHARACTERISTICS ..... 7  
TECHNICAL DATA ..... 9



### INTRODUCTION

#### A SPECIAL EDITION FOR THE DISCERNING RIDING ENTHUSIAST.

Derived from one of the most innovative and courageous of all modern Moto Guzzi models, the Griso 8V SE SE is a special edition destined to become a classic.

The bold character expressed in the nonconformist styling of the Griso is given further emphasis by the sophisticated "Tenni" livery in a particular tone of matte green that contrasts elegantly with the numerous black painted metal elements such as the frame, the wheels, the steering plates and the handlebar.

Among the details making this a genuine special edition are the saddle upholstered in premium leather with visible stitching, attractive spoke wheels and restrained colour-coordinated badges identifying the vehicle.

Powered by a modern transverse 90° V-twin "Quattrovalvole" series engine developing a peak power of approximately 110 hp at just 7500 rpm, the Griso 8V SE SE dominates the road with silky smooth power delivery and a commanding presence, inviting the rider to delve into the ability of the outstanding chassis to keep all those straining horses in check. This is all thanks to the chassis, with twin overhead tubular elements in high tensile steel and the generously sized lateral reinforcement of the lower cradle, with ribbing that is much more than just an aesthetic suggestion but actually designed to confer extremely high torsional rigidity to the bike as a whole. The geometry has been defined for maximum stability, with a headstock inclined by of 26° resulting in a trail of 108 mm and a wheelbase of 1544 mm. Nonetheless, the Griso 8V SE SE is surprisingly nimble and sincere, rewarding the rider with lightning fast directional changes.

The impeccable road manners of the Griso 8V SE SE benefit from the low centre of gravity and the rock steady front end, with reduced offset plates to ensure an immediate and precise response to any steering input. This is a veritable scalpel on two wheels allowing the most discerning rider to carve perfect lines in the asphalt.



### STYLE

#### **Incomparable style.**

With the Griso 8V SE, Moto Guzzi once more majestically demonstrates how it can come up with a concept then develop it without having to give in to technical, traditional or other constraints.

This machine is an instinctive creation, pure, solid as a rock and has a distinct personality. It appears simply as a work of art.

Design details, discreet hollows and unexpected new lines blend together in chrome and satin finished metal to form miracles of design. The fuel tank for example seems to bend to the power of the massive frame only to form an aerodynamic teardrop of exquisite beauty. The tail seems no more than an afterthought yet houses three high intensity LED light units. The Griso is decidedly masculine and powerful yet the "Quattrovalvole" engine seems to be set like a jewel in a frame that shows off its revolutionary design to the utmost effect. A glance at the fins carefully laid out on the black cylinders is all that is needed. They have been so designed to provide maximum cooling. The rocker covers too draw the eye and, bit by bit, the care and attention paid to the creation of this machine come clear especially when you examine the superb exhaust system.

The incredible two-into-one exhaust system underscores the potential of the new Griso 8V SE.

Returning to the reality of performance, it becomes obvious that the sophisticated components are not mere technical details included for the sake of style. Take the front end that would be more at home on a racing bike with its oversized upside-down forks, radial calliper brakes and wave discs. The sporting lines of the saddle and bodywork complete the picture as do the new handlebars that have been specially designed to improve the aerodynamic package with the rider an integral part.

Details like this and simple intuition make the Griso 8V SE a machine to leave an impression before you even ride it.



### COMFORT

#### **Sheer pleasure.**

Just sit astride the Griso 8V SE to really understand how unique it will be to ride.

With a new setup between saddle and the sports type handlebars, the Griso welcomes the rider with a spectacular view of chromed, anodised and satin-finished components, displays and commands that leave nothing to the imagination.

Once aboard the Griso, the saddle that is only 800 mm from the road, grips the rider yet allows easy changes in riding position further aided by the slightly set-back high racing type footpegs.

The riding position is sporting where the rider is not "in" but over the engine and the feet feel "natural" on the footpegs. The rider's body tends to lean in to the handlebars that are now wider and provide a perfect grip of the levers.

This position is ideal for precise accurate steering made even better perfectly designed front end geometry and generous tyre sizes. The Griso is a hedonist's dream come true and the growl of the "Quattrovalvole" engine echoes in your ears even under the most difficult conditions like city traffic. The 8V SE takes conditions like these in its stride and the ease of changing direction and constant load on the front end make even such riding a pleasure. This however does not mean that the fashion naked from Mandello is not suited to more aggressive riding. In fact there are certain times when the total lack of vibration from the "Quattrovalvole" seems to get lost in the seductive style, the superb finish, the softness of commands and the of the completeness of the instrumentation.

It is at moments like this when the rider is in complete harmony with the machine, when he is in total command of an engine that can take him up to enormous speed or he can just cruise along with masses of torque ever on tap. One thing that is certain is that just looking at the rev counter can never really explain what the new Griso 8V SE is all about.



### FRAME

#### **Beauty in motion**

Don't let the long low profile fool you: The Griso 8V SE has handling that would not shame a supersport machine. The secret lies in the high-tensile steel frame with twin upper supports whose design owes little to aesthetics and much to sophisticated engineering concepts that provide exceptional rigidity under moments of extreme torsional stress. The tubular steel twin cradle frame is connected to a single-sided aluminium rear swingarm housing the CARC system.

The frame geometry had been carefully calculated to provide stability with the steering angle set at 26° and rake at 108 mm. The wheelbase measures 1544 mm and the Griso 8V SE is surprisingly manoeuvrable, even lightning fast in changes of direction.

These handling characteristics are due to the low centre of gravity and a rock solid off-set steering head that provides an immediate response to pressure on the handlebars. The front end is glued to the road thanks to upside down forks from racing stock. The 43 mm forks are adjustable for rebound and compression. A Boge progressive suspension unit is fitted to the rear and this too had three classic settings. The sophisticated suspension ensures a neutral set-up on entering and exiting corners, under acceleration from the 110 CV "Quattrovalvole" engine and under braking from the Brembo brake system. These brakes are both aesthetically pleasing and highly effective with their radial callipers acting on "wave" discs that have been specially designed for maximum heat dispersion.

What really counts in the frame is the sum of all the parts and, here again, the Griso is beyond compare.



### ENGINE AND TRANSMISSION *ELEVATED TO THE NTH POWER*

Unveiled in September 2006, the “Quattrovalvole” engine is the latest and most advanced evolution of the legendary transverse 90° V-twin. Since its debut, it has turned heads for its technological content and performance. This is in fact the most powerful production Moto Guzzi engine ever made, an achievement made possible by transplanting a new single overhead camshaft operating 4 valves for each cylinder, with an exhaust and intake valve inclination of 15.5° and 16.5° respectively.

These sophisticated mechanicals are unique in the motorcycling world in terms of both architecture and engineering clarity. Some of the most sophisticated solutions adopted for the engine include the timing system driven by Morse chains with hydraulic tensioner skids, pistons forged in 3 segments and cooled by oil jets in the crankcase, the ultralight valves with 5 mm diameter stems and the conical section valve springs that eliminate resonance and power loss at high engine speeds. Lubrication and cooling are taken care of by two coaxial pumps driven by a gear train that pump oil through a separate channel in the head to reach the exhaust valve seats, where the highest temperatures are generated. The cylinders themselves also boast a distinctly modern design, with cooling fins tapered towards the front of the motorcycle, while the valve covers, emblazoned with the “Quattrovalvole” moniker, feature a floating system to reduce mechanical noise. For the fuel system, the “Quattrovalvole” engine implements new Marelli IWP 189 injectors mounted on throttle body ducts measuring a respectable 50 mm in diameter. The gearbox is a six speed mechanical masterpiece with a host of enviable attributes: it is quiet, boasts an easily locatable neutral position and is precise, thanks to the introduction of the noiseless and smooth single plate clutch.

The sum of all of this innovation is expressed in the engine’s vital statistics: an impressive 110 hp peak power at 7500 rpm with a maximum torque of 11 Kgm at 6400 rpm, earning the Mandello-made twin membership in the exclusive club of the most powerful air cooled engines ever made. Even with a final drive ratio of 12/44, the engine has a sufficient reserve of power to propel the bike beyond 230 Km/h. And while this figure may seem irrelevant for use on public roads, it is an unequivocal indicator of just how powerful the new Griso 8V SE SE is.



### MAIN CHARACTERISTICS

#### DESIGN

- ✓ “Tenni” graphics in matte green.
- ✓ Black frame
- ✓ New saddle with leather upholstery.
- ✓ Racing Footrests
- ✓ “Quattrovalvole” powertrain in all-black colour scheme.
- ✓ Black instrument panel housing.

#### ENGINE

- ✓ 1200 V 90° “Quattrovalvole” twin.
- ✓ Single overhead cam per head with hydraulically operated valves.
- ✓ Single plate clutch.
- ✓ Exhaust system with two-into-one coiled pipes.
- ✓ Valves with 5 mm stems.
- ✓ 3 segment Asso forged pistons.
- ✓ Conical valve springs.
- ✓ Independent self-contained oil cooled heads.
- ✓ Pistons cooled by oil jets.
- ✓ Oil cooler pump with overpressure valve.
- ✓ Coaxial oil lubrication pump with cooling pump.
- ✓ Gear driven timing shaft and oil pump.
- ✓ Silent “Morse” camshaft chains.
- ✓ Hydraulic chain tensioners and rollers.
- ✓ New 50 mm throttle body.
- ✓ New Marelli IWP 189 injectors.
- ✓ Noise reducing “floating” rocker covers.
- ✓ “Reactive” shaft drive transmission.
- ✓ 6-speed gearbox.
- ✓ Euro 3



### FRAME

- ✓ Tubeless spoke wheels with aluminium Ber rim and Alpina spokes.
- ✓ High tensile steel tubular twin cradle.
- ✓ Upside down 43 mm pre-load adjustable hydraulic front forks with mounting for radial callipers.
- ✓ Pre-load and rebound adjustable shock absorber.
- ✓ Rear suspension with single progressive swingarm adjustment.
- ✓ Front brakes with 320 mm perforated wave discs and 4 (opposed) piston callipers.
- ✓ Rear 282 mm disc with floating calliper fitted with 2 parallel pistons.
- ✓ Rear tyre      180/55/17      Pirelli Scorpion Tubeless.
- ✓ Front tyre      120/70/17      Pirelli Scorpion Tubeless.





## TECHNICAL DATA

### MOTO GUZZI GRISO 8V SE

#### ENGINE

Type	: Four-stroke V 90 twin
Cooling	: Air and oil cooled with independent cooling pump
Capacity	: 1,151cc
Bore and stroke	: 95 x 81.2 mm
Compression ratio	: 11 : 1
Timing diagram (play 1 mm)	: Intake valve opening 36° before upper TDC. Intake valve closing 62° after lower TDC. Exhaust valve opening 58° before lower TDC. Exhaust valve closing 30° after upper TDC. Measured with rocker arm/valve play of 1.5 mm
Maximum power output	: Over 80.8 kW (110 CV) at 7,500 rpm
Max Torque	: Over 108 Nm at 6,400 rpm
Fuel supply/ignition	: Multipoint sequential electronic injection, Magneti Marelli IAW 5A phased, alfa-n system; 2 x Ø50 mm throttle bodies with Weber IWP 189 injectors, Lambda probe.
Starter	: Electric
Spark plugs	: NGK PMR8B (Long Life)
Exhaust system	: Stainless steel two-into-one 3-way catalysed with Lambda probe.
Homologation	: Euro 3

#### TRANSMISSION

Gearbox	: 6 speed
Gear ratios	: 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
Lubrication	: Oil bath
Primary drive	: Helicoidal gears, ratio 26/35 = 1 : 1.346
Final drive	: CA.R.C reactive drive; double universal joint with floating bevel gear, ratio 12/44 = 1 : 3,666
Clutch	: Single plate with integrated flexible couplings

#### FRAME

Frame	: High tensile steel tubular twin cradle
Wheelbase	: 1,554 mm
Rake	: 108 mm
Steering rake	: 26.30°
Steering angle.	: 34°
Front suspension	: Upside down Ø 43 mm fully adjustable forks (spring preload and hydraulic for rebound and compression) with mounting for radial callipers.
Front wheel travel	: 120 mm
Rear suspension	: Progressive single swingarm, fully adjustable monoshock with separate gas reservoir (spring preload and hydraulic for rebound and compression).

**GRISO**

## PRESS INFORMATION 2009



Rear wheel travel	: 110 mm
Front brakes	: Twin floating 320 mm stainless steel wave discs, radial callipers with 4 opposed pistons.
Rear brakes	: Single 282 mm fixed stainless steel disc, floating calliper with 2 parallel pistons.
Wheels	: Tubeless spoke wheels with aluminium Ber rim and Alpina spokes.
Front wheel	: 3.50" x 17"
Rear wheel	: 5.50" x 17"
Front tyre	: 120/70 ZR17"
Rear tyre	: 180/55 ZR17"

### ELECTRICS

Voltage	: 12 V
Battery	: 12 V – 18 Ah
Alternator	: 12 V – 550 W

### DIMENSIONS

Length	: 2,260 mm
Width	: 830 mm
Height	: 1,070 mm
Saddle height	: 800 mm
Minimum ground clearance	: 185 mm
Dry weight	: 222 kg
Fuel tank capacity	: 16.7 litres
Riserve	: 3.3 litres

Technical data specified above for the Moto Guzzi GRISO 8V SE may be changed without prior notice.