# XCNG Notor grader GR215



- Currently, Road building branch factory have more than 50 kinds of products which are categorized in seven series. As the largest manufacturing base for motor grader, our sales amount has taken the lead in the industry for years. Grader has mature technology and complete product series, we have developed four generations of grader like PY, G, GR, and C series.
- Among which, the GR series has gained national patent, and it has full
  coverage of power output which can suit different customer needs with the
  models of GR135, GR165, GR180, GR200, and GR215. We also developed
  GH series of full hydraulic grader and GRA series of all-wheel-drive grader.
  All the products have passed the CE certification, and the technical level
  adopted in our products is very advanced among same products in
  domestic construction machinery industry.
- GR215A grader has been awarded Third Prize of "China National Prize of Achievements of Science & Technology, General Machinery Aspect" in 2007. We have become the grader manufacturing enterprise with the highest development speed in the industry.

### **About XCMG**

- XCMG's predecessor was established in 1943 and was restructured in July 1989. XCMG has always been the leader of China's construction machinery industry. At present, XCMG ranks in the Top 5 in the global construction machinery industry, 122nd of Top 500 enterprise in China, and 49th of Top 500 manufacturing industry in China · XCMG is a large-scale enterprise group in China's construction machinery industry, with the largest scale and most diverse series of products.
- The annual operating income of XCMG has increased to  $\frac{1}{2}$  87billion in 2011 from 386 million Yuan since its foundation, ranking Top 1 in China's construction machinery industry.
- Market shares consisting of 9 kinds of main machines and 3 kinds of key components will push XCMG to rank first in China

# **GR SERIES MOTOR GRADER**



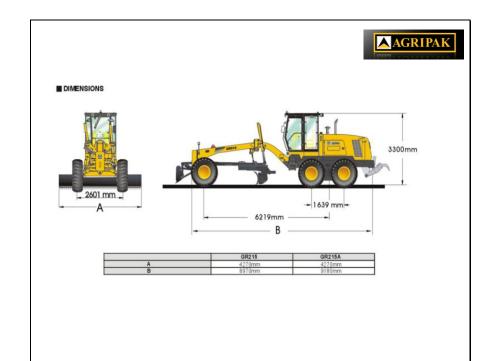
The XCMG GR series Motor Graders are mainly used in ground leveling ,canalling, slope scraping, earthmoving, scarification or snow removal work on road, airfield, farmland, and so on. They are necessary construction machinery for national defense engineering, mine construction, town and country roads building, and farmland improvement.

# Performance and characteristic

- ⊙ New appearance design.
- ⊙ The articulation frame is adopted and matched with the steering of the front wheel, With small turning radius, maneuvering and flexible.
- ⊙ The electro hydraulic controls the power shift gearbox, with 6ahead gears and 3 back gears.
- ① The international matching hydraulic parts are adopted, with reliable operation.
- ⊙ The motions of the blade are fully hydraulically controlled.
- ⊙ The rear axle is the three section driving axle which is provided with the NO SPIN self locking differential mechanism.
- ⊙ The manipulation table and seats are adjustable. The arrangement of the manipulation handle and instruments are reasonable, with convenient application, and the comfort of driving is improved .
- ⊙ The cab is grand and nice, with wide eyeshot and good sealing .
- ⊙ The front bulldozing plate, rear scarification device, front scarification harrow and automatic leveling device can be added .

## **Parameter**

Basic specification	
Engine model	6CTAA8.3 6CTA8.3
Rated power/speed	153kW/2200rpm 160kW/2200rpm
Dimension(LxWxH)	8970×2625×3470mm
Operating weight(Standard)	16500kg
Performance specification	
Travelling speed ,forward	5、8、11、19、23、38 km/h
Travelling speed ,reverse	5、11、23 km/h
Tractive force(f=0.75)	82KN
Max. gradeability	20%
Tire inflation pressure	260 kPa
Working hydraulic pressure	16 MPa
Transmission pressure	1.3~1.8MPa



Operating specification	
Max. steering angle of front wheels	±50°
Max. lean angle of front wheels	±17°
Max. oscillation angle of front axle	±15°
Max. oscillation angle of balance box	15
Frame articulation angle	±27°
Min. turning radius using articulation	7.3m
Biade	
Maximum lift above ground	450mm
Maximum depth of cutting	500mm
Maximum blade position angle	90°
Blade cutting angle	28°—70°
Circle reversing rotation	360°
Moldboard width X height	4270×610mm

## **GR SERIES MOTOR GRADER GR215**



Cummins engine, electronic injection, turbocharged and air to air after cooled. The best designed for long, effective, power strokes, and more efficient fuel combustion. The high-torque engine provide excellent fuel economy and durability. Adding pushing power heightens operating efficiency. Lower exhaust displacement, electric starting and stopping, have excellent performance and reliability.

Transmission provided six forward and three reverse speeds. Hydraulic-electricity shift makes operation easy. Adopt with autolock/unlock NO-spin anti slide differential, heavy duty balance box, heavy duty roller chain transmission, all of low noise, rusty-proof, corrosion prevention, anti-chock and being tilting, so that it is nice looking and easy maintenance and repair for the engine.



#### **GR SERIES MOTOR GRADER GR215**



Adopt the unique XCMG'S blade mechanism. The blade is made of very hard material. reloadable and it is controlled by two cylinders for changing angle, so with prefect evenness and balance. And cutting in angle can be easily controlled according to different soil conditions.

The hydraulically actuated blade can be positioned on either side up to a full 90 degree. all desired bank cutting angles of the blade can be controlled from the operator's compartment, for quicker, effort-minimizing operation and increased productivity.



Brake system

FULL 90° BANK CUTTING

The traveling brake system adopts the hydraulic components from the westen countries.

The hydraulic hub-type applies its performance on four middle and rear wheels. The parking brake system is of hub-type hand brake, which ensures the safty during travelling by appling its function on the output shaft of gearbox. Double circuit hydraulic brake system is adopted currently to increase the security of the machine.

## **GR SERIES MOTOR GRADER GR215**



Be designed diamond-shape front-tilting cab, with wide-field vision, good sealing, low noise, adjustable ABS operation panel, adjustable seat, Germany VDO instrument panel, radio, cooling and heating air conditioner, ashtray and cup-set, etc. The cab is designed to be nice looking and very comfortable.

#### Steering system

Adopt sensor with load. The superior energy-saving fully hydraulic steering system makes it possible, with the articulated frame, to achieve easy and flexible steering.

MERITOR axle is introduced from well know technology in USA. Large, heavy duty axle protect internal components in the harsh environment and offer excellent service ability and maintenance.



AXLE

#### **GR SERIES MOTOR GRADER GR215**



CIRCLE

Be fitted with hard material lining, which ensures easy and flexible move the blade, and high-accuracy flatness and low cost maintenance as well



FULL DRIVE

Mode 1: 6 wheel drive, for swamp, farming field, bumpy area etc.

Mode 2: 4 wheel drive, for normal working and high speed traveling of the grader.

Mode 3: 2 wheel drive, for precise leveling of road, yard, ect.

