

# BG605A

## MOTOR GRADER

- : BEML BSIII CEV Compliance Engine
- : High Productivity
- : Easy Operation
- : Operator Comfort



Flywheel power (net) : 121 Kw @ 1800 rpm

Blade Length : 3,710 mm

Operating Weight

With Canopy : 15,035 Kg

With ROPS Cabin : 15,800 Kg

With Ripper &  
Counter weight : 17720 Kg

# BG605A

MOTOR  
GRADER

## Salient Features:

### Product:

- BEML BG605A Motor Grader has been fitted with Bharat Stage III CEV Compliant Engine.

### Performance:

- With its high engine horse power and operating weight BG605A is ideal for heavy duty road construction / maintenance jobs at mining and demanding job sites.

### Productivity:

- High Power engine coupled with high performance blade ensures high productivity. Finger tip control of transmission gear shifting provides high maneuverability.

### Comfort:

- Front Frame Mounted Operator's compartment enables ease of viewing the machine travelling direction. Operator's comfort is enhanced by adjustable suspension seat and rubber pad mounted operator's compartment.



## ENGINE

Make	BEML
Model	BSAA6D125C1-BSIII CEV
Type	Diesel, 4-Stroke, Water Cooled, Turbocharged, Overhead Valve, Direct Injection, Mechanical variable speed governor.
Power (Gross)	127 kW (170.3 hp) @ 1800 rpm
Max.Torque (Gross)	785 Nm ( 80.0 kgm ) @1200 rpm
Displacement	11.04 l
Bore X Stroke	Ø 125x150mm
No. of Cylinders	6, Inline
<b>Electricals</b>	
Alternator	24V, 45A
Starting Motor	24V, 7.5 kW
Battery	2X12V, 200 Ah

## TRANSMISSION

Make	BEML					
Type	Hydro shift Transmission					
Travel Speed (kmph)						
<b>Range</b>	1st	2nd	3rd	4th	5th	6th
<b>Forward</b>	3.5	6.3	10.6	14.7	26.4	44.1
<b>Reverse</b>	4.1	7.5	12.6	17.4	31.3	--
Max Drawbar pull	9400 Kg					
Max. speed (kmph)	Forward - 44.1			Reverse - 31.3		

## AXLES

<b>Front Axle</b>	
Type	Elliot - Type
Center Ground Clearance	625mm
Oscillation Angle	15° ( each side )
Front Wheel Leaning	23° ( each side )
<b>Rear Axle</b>	
Full floating rear axle is made of forged heat treated steel.	

## STANDARD EQUIPMENT

Engine coolant temperature gauge, Engine oil pressure gauge, Transmission oil temperature gauge, Transmission oil pressure gauge (optional), Fuel gauge, ROPS canopy, Ammeter, Headlights, Speedometer, Stop and trail lamp, Turn signal lights, Rear view mirrors, Electric horn, Tool kit with tool box, Tachohour meter, Air pressure gauge, Back-up light, Back-up alarm, Cold start system, Front pull hook, High beam indicator lamp, Voltmeter and Dust indicator.

## OPTIONAL ATTACHMENTS

### 1. Scarifier

#### V-type, 2-stage adjustable, hydraulically controlled.

No of teeth	: 11 nos.
Digging width	: 1225mm
Max. Digging depth	: 390mm
Max. Lift above ground	: 465mm
Scarifier base	: 1000mm
Scarifier Load	: 4895 kg
Digging angle	
Standard	: 66°
Max / Min	: 72° / 60°
Additional weight	: 635 kg

### 2. Front dozer blade

#### Front arc, box section type, hydraulically controlled.

Blade length x Height	: 2500mm x 935mm
Max. Drop below ground	: 175mm
Max. Lift above ground	: 545mm
Blade base	: 1825mm
Digging Angle	: 55°
Additional weight	: 935 kg

### 3. Rear Mounted Ripper with Counter Weight

No of shanks	: 3 no's
Max. Digging depth	: 460mm
Max. Lift above ground	: 550mm
Max. Digging width	: 2195mm
Additional weight	: 1930 kg

### 4. Miscellaneous

ROPS Cab (Additional weight)	: 765 kg (approx.)
Tyre Inflation kit	

## FINAL DRIVE

Type	Double – reduction final drive of spur & spiral bevel gears with electric over hydraulically controlled differential lock-unlock device and roller chain tandem drives for four rear wheels
Tandem	Tandem case swings up to 13° assuring high machine stability and positive traction during operation.

## HYDRAULICS

Type	Four gear pumps powering the work equipment, steering, transmission, differential lock & unlock and hydraulic circuits.
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Capacity	
1.Work equipment	2X39 l/min
2.Steering	50 l/min
3.Hydro shift transmission	78.0 l/min
4.Diff.lock & unlock	8.6 l/min

Hydraulic Motor	
Type	Orbit type hydraulic motor
Output power (for blade rotation)	18 kw (24.5 hp)
Capacity	70.0 l/min

Hydraulic Cylinders	
Type	Double acting piston type, each connected to pilot check valve for positive cylinder action.

Operation	Qty (Nos.)
Blade lifting	2
Blade side shifting (without pilot check valve)	1
Frame Articulation	2
Draw bar side shifting	1
Front wheel leaning	1
Front wheel steering	2

Control Valves	
Type	5-way spool type & 4-way spool type with built in relief valve.

Relief Valve Settings	
Work Equipment	175 kg/cm <sup>2</sup>
Steering	140 kg/cm <sup>2</sup>
Transmission	31 kg/cm <sup>2</sup>
Differential	25 kg/cm <sup>2</sup>

## STEERING

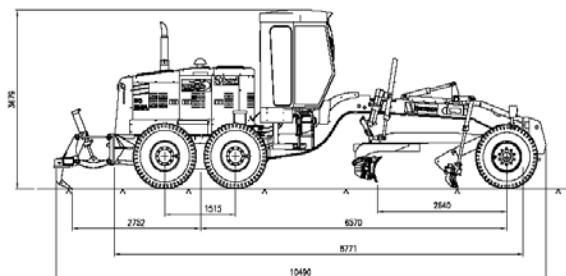
Type	Orbitrol, Full Hydraulic Steering System
Cylinders	
Type	Double acting
Quantity	2 Nos
Max. Steering Angle	40° left & right of front wheels
Frame Articulation Angle	25° Left and Right
Min. Turning Radius	7.4 m

## BRAKES

<b>Service Brake</b>	Foot operated, oil disc brakes, air actuated on four wheels and sealed for adjustment-free operation. Two crossed brake lines for sure braking
<b>Parking Brake</b>	Hand operated internal expanding, shoe type, duo-servo type actuated on transmission output shaft.

## WHEELS

Standard Fitment	14.00 X 24 – 16PR (Tube Type) G-2 type Tyre
Optional Fitment	14.00 X 24 - 16 PR (Tube Type) G-3 (ROCK) type Tyre
Rims	10.00 VA X 24
Inflation pressure	2.8 kg/cm <sup>2</sup>



Material and Specifications are subjected to change without notice, Illustrations may include optional equipment & accessories.

## SYSTEM REFILL CAPACITIES

Systems	Capacity ( Liters )
Coolant	55
Fuel Tank	250
Engine	26
Transmission	36
Tandem case (each side)	36
Final drive case	30
Hydraulic oil	58

## BLADE RANGE

All blade movements and position can be hydraulically controlled from the operators seat

Max. Lift above ground	400mm
Max. Drop below ground	500mm
Max. Shoulder reach	
Left	1670mm
Right	1955mm
Max. Bank cutting angle	90°
Cutting angle standard	36°
Maximum	71°
Minimum	24°

## BLADE EQUIPMENT

Drawbar	
Type	A-shaped, U-section press formed and welded construction for maximum strength

Circle	
Type	Internal gear type hydraulically controlled with 6 guide shoes for 360° smooth rotation.

Circle diameter (outer)	1410mm
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Mould Board	
Type	Box-section construction with wear resistant steel, hydraulic blade side shift and tip control, cutting edges and side edges are attached

Length X height X thickness	3710mm x 540mm x 20mm
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Blade Base	2640mm
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Blade Load	6450 kg
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Cutting Edges	
Type	Tungsten carbide tipped cutting edges

No. of cutting edges	4
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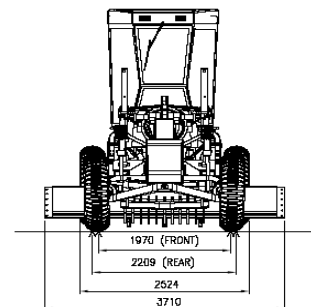
Length X height X thickness	914mm x 152mm x 27mm
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## FRAMES

Box section front frame, two box section rear frames are of steel-plate welded construction. One-piece-frame design for the front frame in which hydraulic piping's are installed

## OPERATING WEIGHT

On front wheels	3700 kg
On rear wheels	12100 kg with cabin
Total Mass(approx.)	15800 kg with cabin



Ground Clearance....325mm

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