

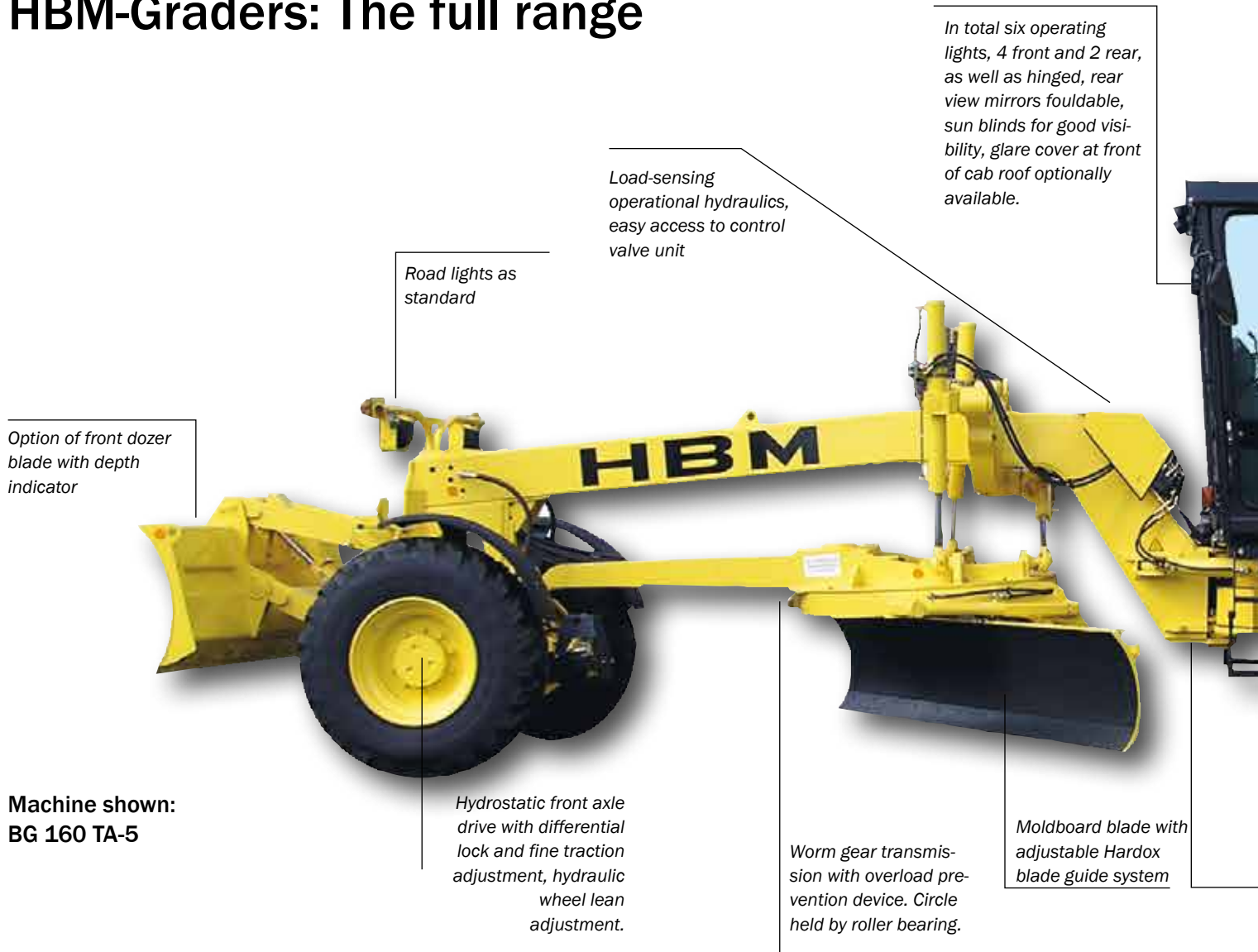


# Graders

(series 5)

11 to 23 tons

# HBM-Graders: The full range



In total six operating lights, 4 front and 2 rear, as well as hinged, rear view mirrors foldable, sun blinds for good visibility, glare cover at front of cab roof optionally available.

Option of front dozer blade with depth indicator

Road lights as standard

Load-sensing operational hydraulics, easy access to control valve unit

**Machine shown:**  
BG 160 TA-5

Hydrostatic front axle drive with differential lock and fine traction adjustment, hydraulic wheel lean adjustment.

Worm gear transmission with overload prevention device. Circle held by roller bearing.

Moldboard blade with adjustable Hardox blade guide system

## HBM graders - the professionals when it comes to precision grading and road maintenance

With our range of graders we can offer construction companies highly adaptable top performance graders at the most sophisticated technical level. Graders from HBM brings versatility. Outstanding manoeuvrability even in confined areas through use of compact design and articulated steering systems. Proven blade pull and grading characteristics are the result of genuine all-wheel drive.

## HBM graders - the applications

You will find HBM graders at work in road construction; civil and industrial engineering, waste disposal construction; railtrack and motorway projects; airfields, factories, sports grounds and leisure facility construction works. Another major market is forestry and agricultural road construction and open-pit and deep mining applications.

## The right grader, whatever the situation

With four different weight classes and the choice between tandem and all-wheel drive: HBM offers a versatile range for every purpose. The BG 110 grader is ideal for the confined inner-city site, cycle tracks and sports facilities as well as for gardening and landscaping. The medium duty three-axle grader BG 160 is the universal choice for road building. Powerful and at the same time a very mobile unit; the BG 160 grader performs the most different tasks. The large three-axle graders BG 190 and BG 240 are the powerhouses for handling heavy-duty applications, such as airfield and motorway construction, open pit mining and forestry operation. An extensive range of accessories and additional fittings also means that different and individual requirements can also be handled with the best possible results.



BG 190, all-wheel drive, heavy-duty operation in stone quarry



Steering column with four-position adjustment, Euro control panel, lever allocation adaptable, NAIS (rods) control panel or joystick controls available.

Very good visibility to the rear

Cab can be tilted for easy maintenance.

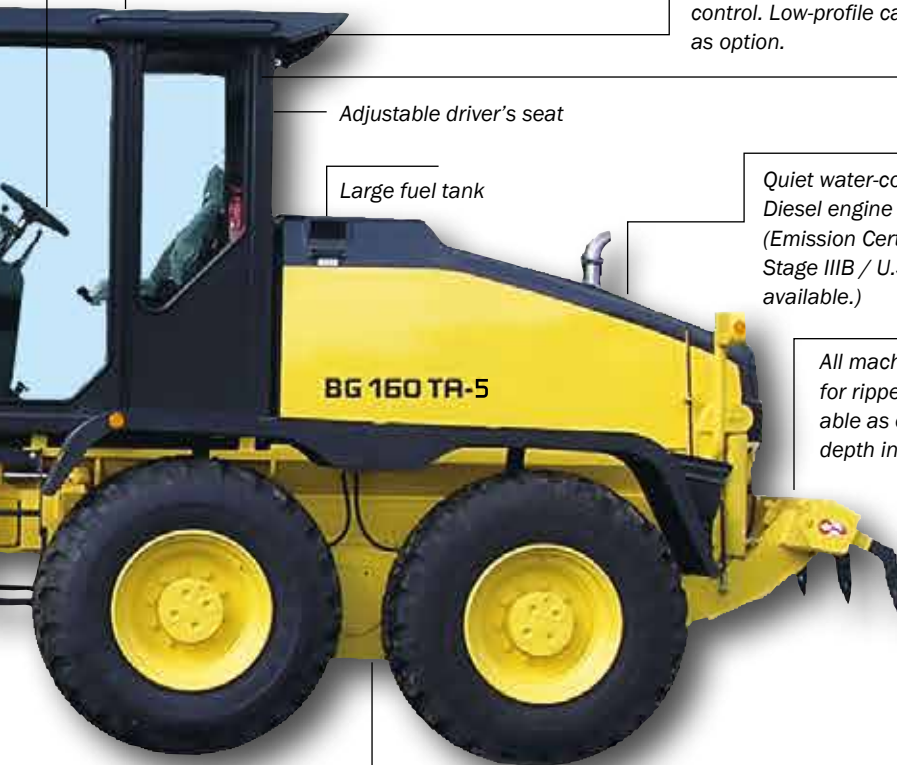
Spacious cab with good allround visibility, soundproofed, with heating, dust filter and climate control. Low-profile cab available as option.

Adjustable driver's seat

Large fuel tank

Quiet water-cooled Diesel engine (Emission Certification EU Stage IIIB / U.S. EPA Tier 4(i) available.)

All machines pre-fitted for ripper. Ripper available as option with depth indicator



Articulated joint with +/- 30° articulation

Powershift transmission with torque converter. Planetary gears in the wheels

4 Oil-bath disk brakes

**Emission Certification EU Stage IIIB / U.S. EPA Tier 4(i)**

**All-Wheel Drive (6x6)**

BG 110 TA-5	12.0 t	98 kW / 133 HP
BG 160 TA-5	16.0 t	129 kW / 175 HP
BG 190 TA-5	19.0 t	129 kW / 175 HP
BG 240 TA-5	23.0 t	172 kW / 234 HP

**Tandem Drive (6x4)**

BG 110 T-5	12.0 t	98 kW / 133 HP
BG 160 T-5	16.0 t	129 kW / 175 HP
BG 190 T-5	19.0 t	129 kW / 175 HP
BG 240 T-5	23.0 t	172 kW / 234 HP

(all weights including front blade and rear ripper)

**Really effective grader operation thanks to the optimum blade control and the latest in drive travel systems**

Load sensing hydraulics and the adjustable steering control pedestal with ergonomic lever layout provide smooth and effortless control of all blade functions. The hydraulically operated moveable blade control system adjusts 90° vertically to the left and right of the machine giving the best blade range when grading for trenches or cutting embankments. The standard equipped overload clutch within the circle drive system protects the blade from damage caused by excessive impact loads during grading operations. The roller-bearing type circle is „playfree“ and ensures the highest degree of precision during fine-grading operations. Further advantages derive from the easy, smooth and fast rotation system with maximum torque transfer. Hydraulic blade tilt results in the optimum adaption of blade pitch to the rolling resistance of the material. The grader's blade range is both horizontally and vertically adjustable and all blade guide rails are manufactured from special Hardox wear-resistant steel. Automatic differential locks on drive axles. On all-wheel drive models inter-axle locks between front and rear axles provide optimum blade pull. Optimum power transfer and blade pull is further maximised by external planetary gears in all wheels.



Sophisticated kinematics for rapid adjustment of the desired blade position.



Adjustable turning bridge for embankment and trench work.



Closed turning circle available with roller bearings. Ground clearing angle 90° to the right and left.



Infinitely adjustable hydraulic cutting angle adjustment.

## Our experience - Your advantage

### Better by design

- Excellent visibility to the moldboard
- Engines with low noise emissions
- Optimum access to engine and drive elements

### Options (some examples)

- Front dozer blade, rear ripper
- Blades in a variety of widths
- Automatic levelling systems (2D, 3D, GPS)



Good visibility to all sides – joystick, EURO, or arrangement of rods available.



Driven front axle with wheel lean.



Good maintenance accessibility: Cab and engine cover tiltable.

