

Mercedes-Benz



MB trac 1100
MB trac 1300

**The big
agricultural tractors
from Mercedes-Benz**

Engine output
81 kW (110 DIN HP)
or 92 kW (125 DIN HP)



The perfect agricultural tractor concept from Mercedes-Benz: MB trac 1100 and MB trac 1300.

The MB trac 1100 and MB trac 1300 are the logical development of the idea behind the MB trac models 65/70 and 800; together, they form a complete series of agricultural tractors.

The heavy MB trac models with engine outputs of 81 kW (110 DIN HP) and 92 kW (125 DIN HP) are powerful traction and drive units with all-wheel drive on 4 equal-sized wheels.

But the MB trac 1100 and 1300 carry conviction not only because of their powerful engines but because of their perfect technical concept which makes them superior to any conventional agricultural tractors.

This superior concept includes:

- Real all-wheel drive by four equal-sized wheels and axles of equal strength.
- Ideal weight distribution (60% front and 40% rear).
- Front and rear implement attachment areas, each with power lift and p.t.o. connection, mounting space to carry containers for bulk fertilizer, seed, spray mixtures, and also implements.
- Closed, comfortable safety cab with efficient heating and ventilation facilities and excellent view to all implement attachment areas.
- Converting the tractor into a two-way unit offers further possibilities of application.
- All main components are taken from Mercedes-Benz large-scale standard production which is known for quality all over the world.
- With the MB trac 1100 and the MB trac 1300 you invest in the safety offered by a famous make: Mercedes-Benz.

Side windows wind down completely (crank windows).

Comfortable driver's seat can be adjusted in several ways.

Easy access from both sides.

Removable doors.

Rear implement mounting area with frame for carrying implements.

Rear p.t.o. (front: optional extra) can be engaged under load using air-actuated double clutch.

Standard power lift system with three-point linkage category II or III with "Servotrac". Lifting power 50,000 N (5,000 kp). Lower control link can be pulled out. Hydraulic draft control available as an optional extra.

Multi-step gearbox with a maximum of 22/22 gears. Optional extra: High-speed gear.



Heating and ventilation system has eyeball vents to provide an effective warm and fresh air supply (air conditioning an optional extra).

Hydrostatic power steering.

Hinged windscreen and rear window.

Symmetrical two-man safety cab, can be tilted sideways for servicing. Optional extra: revolving seat and controls.



Hydraulic connections front and rear.

All-wheel drive on 4 equal-sized wheels. Twin tyres can be fitted. Ideal weight distribution: 60% front, 40% rear.

Axes fitted with planetary gear hub drives and pneumatically locking differentials. Sprung front axle.

Expanding brakes on all four wheels. Compressed air trailer brake system available as an optional extra.

Front wheel drive can be engaged and disengaged while driving.

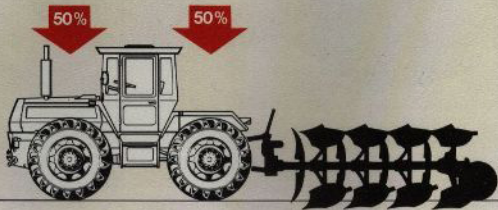
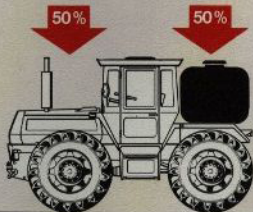
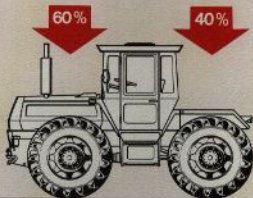
The MB trac concept is the best way of converting engine output into tractive power.

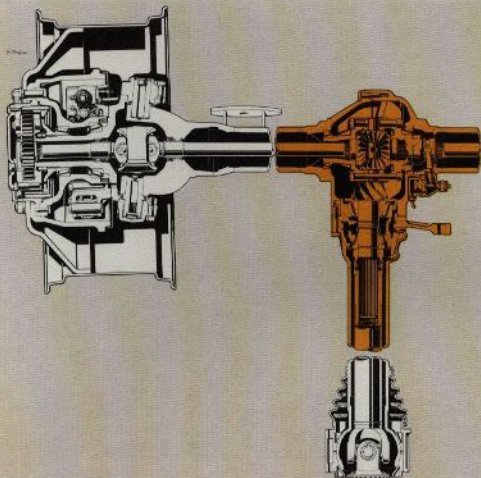
The MB trac concept represents the ideal form of an all-wheel drive agricultural tractor. Even on the most difficult terrain the four equal-sized wheels, equal-strength axles, differential locks on the front and rear axle make for optimum conversion of engine output into tractive power. Since the front and rear axles cover identical distances there is no front axle slip. This means the front axle does not have any lead, and therefore does not grab or slip.

The front axle drive can be engaged and disengaged while driving. The differentials on both axles can be locked while the vehicle is travelling. There is no torque limit for the front axle drive. The powerful hub drive axles are equipped with drum brakes. The large wheels allow exceptionally high ground clearance. Under static conditions, 60% of the gross vehicle weight are on the front axle and 40% on the rear axle.

With attachments mounted on the

rear frame, the overall weight distribution is as follows: 50% on the front axle, 50% on the rear axle. Pulling implements attached at the rear (ploughs, for example) results in a dynamic shifting of axle loads and thus in the ideal weight distribution of 50% to 50%. Identical wheel tracks and tyre width on the front and rear axle ensure the best possible grip on the ground, thus causing as little damage as possible to the soil.

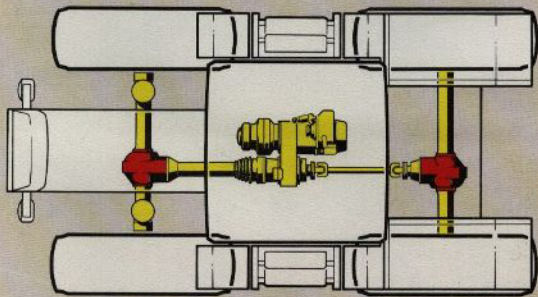




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1 The cab's excellent noise insulation, and the comfortable seats make a long day's work less tiring.

2 Weight distribution: empty load on rear frame, dynamic load distribution.

3 Section through front axle drive with differential lock.

4 All-wheel drive and differential locks in both axes can be engaged and disengaged while driving.

5 Unusually high ground clearance owing to large tyres.

A comfortable place to work in - the safety cab.

The roomy, OECD-tested safety cab offers plenty of space for the driver and, if necessary, for a co-driver. It is an integral unit, positioned in the area of least vibration. The cab is mounted on four special vibrations dampers to increase comfort. Excellent insulation results in an unusually low noise level. Wide, non-skid steps allow easy access to the cab through generously dimensioned doors.

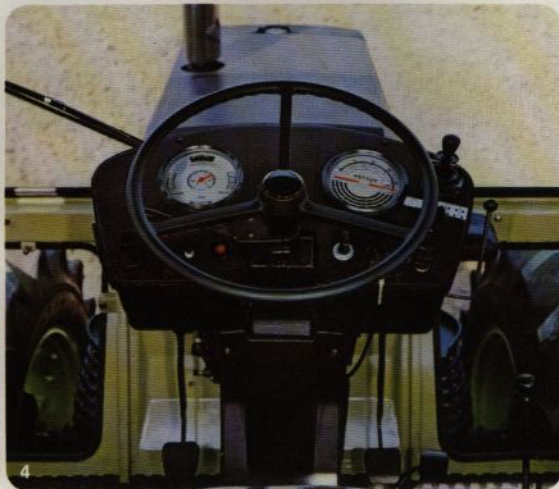
The comfortable driver's seat, which is fitted with hydraulic shock absorbers and can be adjusted in several ways, affords an excellent view to the implements.

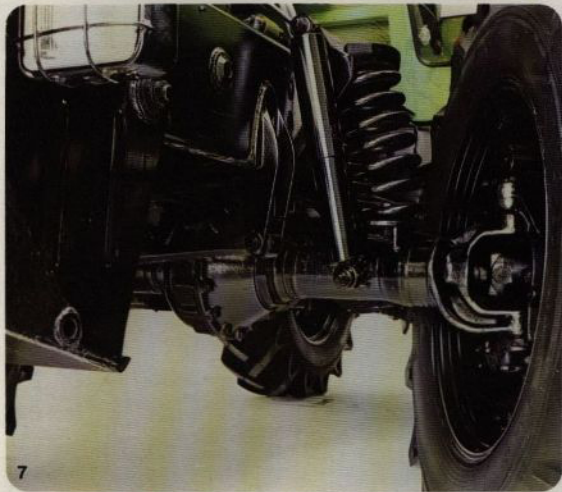
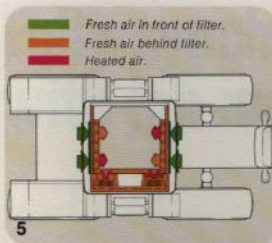
Fatigue-free seating ensures full concentration on the job for many hours at a time. All controls are clearly arranged and easy to reach. The large windscreen, the big crank windows in both doors and the sliding window in the rear wall of the cab permit an unobstructed view of all implement mounting areas. The

heating and ventilation system with filtered fresh air intake raises the pressure inside the cab slightly so that hardly any dust can penetrate. The air distribution can be controlled to suit individual requirements by several eyeball vents front and rear. As an optional extra, the system can be extended, i.e. air-conditioning can be fitted.

The standard power steering with two steering cylinders, separate oil pump, and separate oil reservoir reduces

steering effort to a minimum. Even if engine power is used to the full, vibrations are hardly noticeable, since they are not transmitted to the cab due to the fact that the engine and transmission are mounted as separate units. The cab is suspended in three points and can be tilted sideways. The MB trac 1100 and 1300 thus offer all the comfort and safety for which Mercedes-Benz commercial vehicles are renowned.





- 1 Easy access, non-skid steps.
- 2 Excellent trackholding due to special windows.
- 3 Two-man safety cab.
- 4 Controls within easy reach.
- 5 Effective heating and ventilation.
- 6 Adjustable eyeball vents.
- 7 Sprung front axle.
- 8 Excellent view to the rear.
- 9 Drum brakes with wide linings.

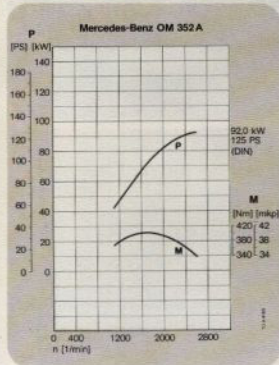
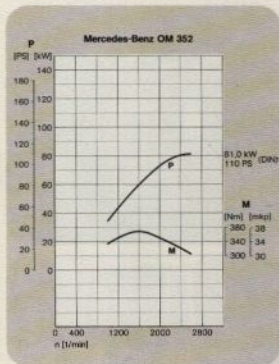
Powerful diesel engines of proven design from Mercedes-Benz.

Mercedes-Benz diesel engines have proved their value all over the world under the most varied climatic conditions. Proven design, safety, and high power are the main characteristics of the water-cooled, 6-cylinder direct-injection diesel engines from Mercedes-Benz. The proof: Alone more than 100,000 OM 352 engines — the heart of the big MB trac models — are built every year. The MB trac 1100 is powered by the OM 352. Output: 81 kW (110 DIN HP).

The maximum torque of 363 Nm or 37 mkp is obtained at 1600/min. The OM 352 A, which is basically the same engine but comes in turbo-charged form here, is used for the MB trac 1300. Output: 92 kW (125 DIN HP). Torque: 393 Nm, or 40 mkp, at 1600/min.

The engines are fitted with vibration dampers, mounted in three points, and connected to the transmission by means of a drive shaft.

Engine vibrations are therefore hardly noticeable. Engine maintenance has been greatly simplified in that all maintenance jobs can be done from one side (oil side), whereas all electrical equipment is on the other side. Intake air cleaning is by a large dry air filter with integral prefilter.

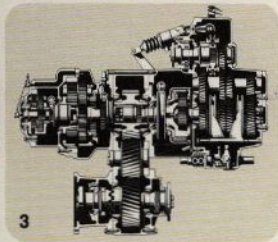


Fully synchronized transmission with job-matched gear steps.

The newly developed fully synchronized transmission consists of 6 main gears plus 8 working gears. The version up to 25 km/h thus has 14 speeds in all. A high-speed gear up to 36 km/h is also available. As an option, this transmission can be complemented by a rear-positioned planetary drive with 8 crawler gears.

All gears can also be used in reverse at the same speeds by simply shifting a lever. Typical forward/reverse jobs

(e.g. front loader work) are thus made much easier. This transmission offers the proper speed for all practical applications.



Speeds

	Gear	Main gears km/h	Working gears km/h	Crawler gears km/h
MB trac 1100 with 18.4-30 tyres	1.	5.0	0.8	0.09
	2.	6.9	1.2	0.12
	3.	9.4	1.6	0.17
	4.	12.6	2.2	0.23
	5.	18.0	3.1	0.32
	6.	24.9	4.3	0.46
	7.	34.1*	5.9	0.61
	8.	—	8.0	0.83
MB trac 1300 with 16.9-30 tyres	1.	4.8	0.8	0.08
	2.	6.6	1.1	0.12
	3.	9.1	1.6	0.16
	4.	12.4	2.1	0.22
	5.	17.3	3.0	0.31
	6.	24.0	4.2	0.43
	7.	32.9	5.7	0.59
	8.	—	7.8	0.80

* optional extra

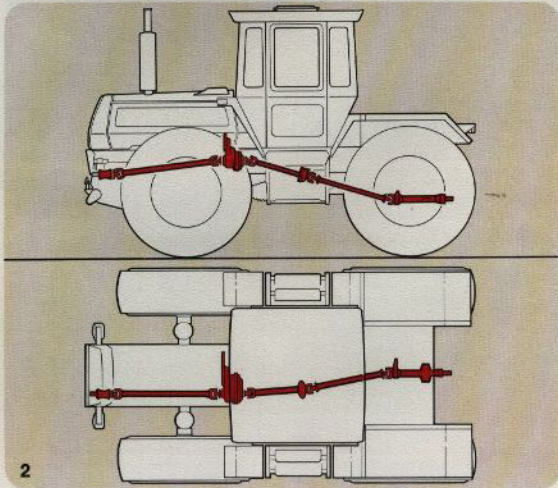
1 Since the drill is continuously refilled from the tilting hopper, large areas can be covered without interruption.

2 The high-speed gear, which is an optional extra, saves time when travelling to outlying areas or when transporting loads.

3 The fully synchronized transmission with 14/14 gears offers the right speed for all agricultural applications. The crawler gears are available as an optional extra.

Front and rear p.t.o.'s - serving full engine power.

The rear p.t.o. — front p.t.o. is an option — can be engaged and disengaged under load and fulfills all practical requirements. The standard speeds of 540 or 1000/min are selected by means of a lever. The p.t.o.'s can be used singly or together. P.t.o. power is taken from a transfer box which is mounted directly on the engine. This results in extremely high efficiency. The double clutch in front of the transmission permits the power flow to the p.t.o.'s and the chassis to be completely independent. The p.t.o. clutch is controlled via a pneumatic metering valve, so that light and heavy p.t.o.-driven implements can be put into operation without jerks and without unnecessary stress. P.t.o.'s come with all current profiles, which avoids difficulties in attaching existing implements.



1 Rotavator application makes full use of the high p.t.o. power.

2 Both p.t.o.'s (front p.t.o.: optional extra) can be shifted from 540 to 1000/min. They can be engaged and disengaged under load and operated singly or together.

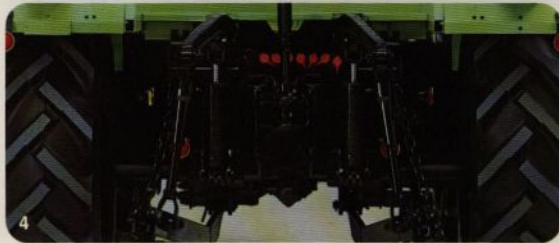
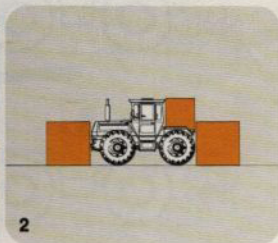
Efficient hydraulic system - no problems even with heavy implements.

Hydraulic pumps for 45 or 60 ltrs/min are available. The working pressure is 200 bar, permitting fast and efficient operation of the power lift or mounted implements (e.g. front loader, semi-mounted or 2-furrow half-turn ploughs, tipping trailers). With a permissible bleed of 30 litres out of a total oil capacity of 50 litres even the heaviest units can be operated while the tractor is in motion without additional reservoirs being required. A maximum of three additional double-

acting control units with plug connections front and rear are available to operate implements mounted in any of the three attachment areas. Separate front and rear return lines are also available.

The standard three-point linkage, cat. II or cat. III, has a lifting power of 40,000 N (4,000 kp) or with stronger hydraulic cylinder 60,000 N (6,000 kp). Besides the standard power lift with the "Servotrak" mechanical wheel pressure booster a lower link controlled hydraulic

system with traction response control, positional control, and mixed control is available. A front power lift with lateral control and a lifting power of 14,000 N (1,400 kp) or 20,000 N (2,000 kp, with 2 lift rams) can be supplied as an optional extra.

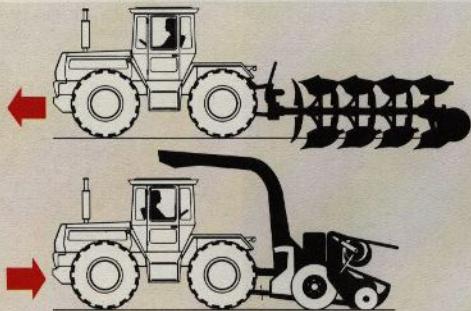


1 and 2 Up to four double-acting control units with front and rear plug connections are available to operate implements in the three attachment areas.

3 and 4 Optional extra: Laterally controlled front power lift with a lifting power of 12,000 Nm (1,200 kp) or, when fitted with two lift rams, of 20,000 Nm (2,000 kp). A conventional power lift with "Servotrak" mechanical wheel pressure booster is a standard feature. A lower link operated hydraulic draft control system is available as an optional extra.

MB trac 1100 and MB trac 1300 equipped as two-way tractors.

The controls and driver's seat can also be supplied as a rotary unit, so that the tractor can operate in two directions, pushing and pulling implements. Together with a forward-mounted implement the tractor forms a work unit which is as mobile as a self-propelled implement.



Engine, MB trac 1100

Mercedes-Benz 6-cylinder direct-injection diesel engine type OM 352, 81 kW (110 DIN HP), total displacement 5,675 cc.

Engine, MB trac 1300

Mercedes-Benz 6-cylinder direct-injection diesel engine type OM 352 A (with exhaust gas turbocharger), 92 kW (125 DIN HP), total displacement 5,675 cc.

Transmission

Fully synchronized Mercedes-Benz transmission with 6 road gears and 8 working gears. All gears can be used forward and reverse.

P.t.o.

Live p.t.o., 540 and 1,000/min.
Front p.t.o.: optional extra.

Hydraulic system

Pump capacity 45 or 60 litres/min.
A maximum of 4 double-acting control units with front and rear plug connections and separate return lines.

Rear power lift

Standard three-point linkage, cat. II or III. Lifting power 60,000 N (6,000 kp) or 40,000 N (4,000 kp) "Servotrak" mechanical wheel pressure booster. Hydraulic draft control an optional extra.

Axles

Mercedes-Benz axles with planetary gear hub drives. Differential locks in both axles, can be engaged and disengaged while travelling. Sprung front axle.

Steering

Hydrostatic power steering.

Brakes

Service brake: Air over hydraulic expanding brakes on all four wheels.
Parking brake: 2 spring-loaded cylinders.

Tyres

14.9-30 (MB trac 1100)
16.9-30 (MB trac 1300)

Cab

OECD-tested; tilting sideways. Noise-insulated. Access from both sides. Crank windows winding down completely. Rotary unit (seat, steering, pedals, instruments and controls) permits working forward and reverse (2-way tractor). Easily readable controls. Adjustable driver's seat. Co-driver's seat. Heating and ventilation system.

Weights

	MB trac 1100
Kerb weight	approx. 5,600 kg
GVW	9,000 kg

	MB trac 1300
Kerb weight	approx. 5,800 kg
GVW	10,000 kg

Fuel tank

170 litres capacity.

Contents not binding.
Subject to alterations.

Daimler-Benz AG Werk Gaggenau