

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 axes of equal strength.
- Ideal weight distribution (60% front and 40% rear).
- Front and rear implement attachment areas, each with power lift and a f.o. connection, mounting space to carry containers for bulk fertilizer, seed, spray mixtures, and also implements.
- Good, 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 name: Mercedes-Benz.

Side wings and seat can be folded down completely (cross tractors).

Convertible 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 PTO (front optional) can be engaged under load using an automatic clutch control.

Standard power lift system with three-point linkage category 2 or 3 with "force lift" lifting power 60/70 N (5,7/70 kg). Lower control can be performed. Hydraulic lift control available as an optional extra.

Multi-range box with a maximum of 20/22 gears. Optional extra: high-speed gear.



The MB Trac concept is the  
most powerful way of converting engine  
output into tractive power.

Hydraulic and vertical control  
for hydraulic work and hook-up  
apply for clutching at  
optional extra.

Hydraulic power steering

Single wheel drive and  
steering

System for two-wheel drive  
can be fitted without re-  
wiring. (Optional  
steering gear and control)



Hydraulic connections front  
and rear

All-wheel drive at a cost-  
and weight. Trac 1300 can be  
used. Total weight including  
80 to 1000, 40% less.

Area drive with planetary  
gear. Full drive and power  
available during all directions  
turning from any

Changing gears on all four  
wheels. Controlled by remote  
control system available as  
an option extra.

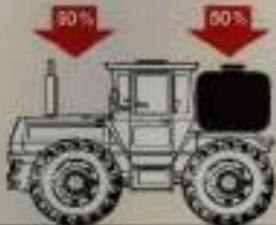
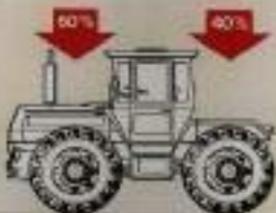
Front wheel drive can be  
engaged and disengaged  
while driving.

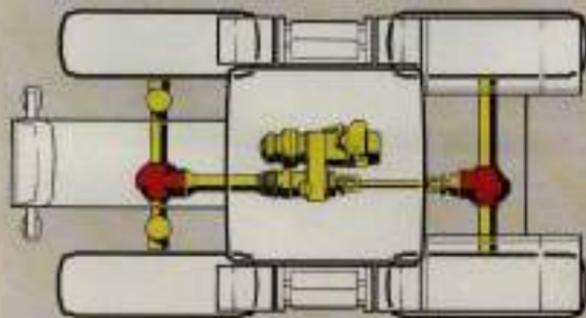
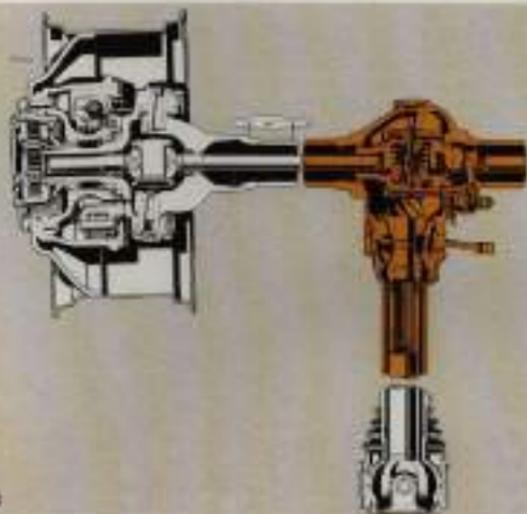
# The MB trac concept is the best way of converting engine output into tractive power.

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 differential locks on both axles can be locked while the vehicle is traveling. There is no torque split on the front axle drive. The optional hub drive wheels are equipped with drum brakes. The large wheels allow exceptional high ground clearance. Under static conditions, 65% of the gross vehicle weight is on the front axle and 35% on the rear axle. 80% of 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 load weight distribution of 52% to 48%. Identical wheel tracks and tyre width on the front and rear axles ensure the best possible grip on the ground, thus causing as little damage as possible to the soil.





1. The axle's tapered roller bearings and the axle housing shaft make a rigid structure that long.
2. Weight distribution away from the front axle improves load distribution.
3. Steerer through axle axle drive with differential drive.
4. All wheel drive and differential drive in both axles can be engaged and disengaged while driving.
5. Low steady high ground clearance being in place.

# A comfortable place to work in - the safety cab.

The roomy, OECQ-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 vibration dampers to increase comfort. Excellent insulation results in an unusually low noise level. Wide, step-aid 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 of 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

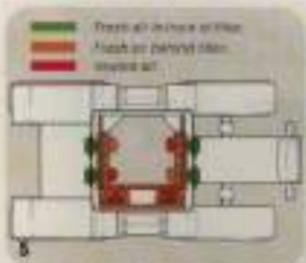
heating and ventilation system with filtered fresh air intake raises the pressure inside the cab slightly so that hardly any dust can penetrate. The air distribution can be controlled to suit individual requirements by several eyelid vents front and rear.

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 M8 has 1100 and 1300 hrs after all the comfort and safety for which Mercedes-Benz commercial vehicles are renowned.





- 1 Easy access, non-slip steps
- 2 Good view maximizing due to narrow wheelbase
- 3 Full-time locking axle
- 4 2000mm wheel way width
- 5 Effective hooding and ventilation
- 6 Adjustable control panel
- 7 Spring-mounted axle
- 8 Crashes into the rear
- 9 Drum brakes with steel fenders

# Powerful diesel engines of proven design from Mercedes-Benz.

**M**ercedes-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 great Xerox more than 100,000 OM 302 engines — the heart of the big MB tractor models — are built every year. The MB tractor 1100 is powered by the OM 302. Output: 81 kW (110 DIN-HP).

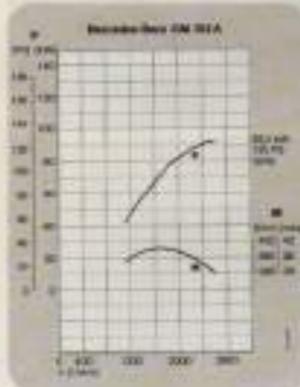
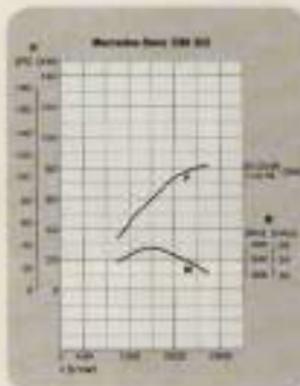
The maximum torque of 362 Nm or 27 mkg is obtained at 1000/min. The OM 302 A, which is basically the same engine but comes in turbo-charged form here, is used for the MB tractor 1300. Output: 50 kW (125 DIN-HP). Torque: 308 Nm or 40 mkg at 1600/min.

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 wipe-dry air filter with integral prefilter.

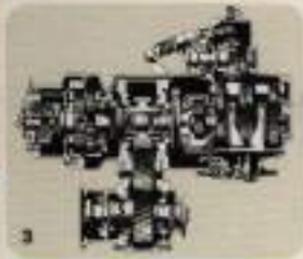


# Fully synchronized transmission with job-matched gear steps.

The newly developed fully synchronized transmission consists of 8 main gears plus 8 working gears. The version up to 35 km/h thus has 14 speeds in all. A high-speed gear up to 38 km/h is also available. As an option, this transmission can be complemented by a rear-positoned 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

**50 kW 1130**  
with 16 x 30 tires

Gear	Main gear km/h	Working gear km/h	Crawler gear km/h
1	12.0	0.9	0.12
2	15.0	1.0	0.13
3	18.0	1.2	0.15
4	21.0	1.4	0.17
5	24.0	1.6	0.19
6	27.0	1.8	0.21
7	30.0	2.0	0.23
8	33.0	2.2	0.25
9	36.0	2.4	0.27
10	38.0	2.5	0.28
11	39.0	2.6	0.29
12	40.0	2.7	0.30
13	41.0	2.8	0.31
14	42.0	2.9	0.32
15	43.0	3.0	0.33
16	44.0	3.1	0.34
17	45.0	3.2	0.35
18	46.0	3.3	0.36
19	47.0	3.4	0.37
20	48.0	3.5	0.38
21	49.0	3.6	0.39
22	50.0	3.7	0.40
23	51.0	3.8	0.41
24	52.0	3.9	0.42
25	53.0	4.0	0.43
26	54.0	4.1	0.44
27	55.0	4.2	0.45
28	56.0	4.3	0.46
29	57.0	4.4	0.47
30	58.0	4.5	0.48
31	59.0	4.6	0.49
32	60.0	4.7	0.50
33	61.0	4.8	0.51
34	62.0	4.9	0.52
35	63.0	5.0	0.53
36	64.0	5.1	0.54
37	65.0	5.2	0.55
38	66.0	5.3	0.56
39	67.0	5.4	0.57
40	68.0	5.5	0.58
41	69.0	5.6	0.59
42	70.0	5.7	0.60
43	71.0	5.8	0.61
44	72.0	5.9	0.62
45	73.0	6.0	0.63
46	74.0	6.1	0.64
47	75.0	6.2	0.65
48	76.0	6.3	0.66
49	77.0	6.4	0.67
50	78.0	6.5	0.68
51	79.0	6.6	0.69
52	80.0	6.7	0.70
53	81.0	6.8	0.71
54	82.0	6.9	0.72
55	83.0	7.0	0.73
56	84.0	7.1	0.74
57	85.0	7.2	0.75
58	86.0	7.3	0.76
59	87.0	7.4	0.77
60	88.0	7.5	0.78
61	89.0	7.6	0.79
62	90.0	7.7	0.80
63	91.0	7.8	0.81
64	92.0	7.9	0.82
65	93.0	8.0	0.83
66	94.0	8.1	0.84
67	95.0	8.2	0.85
68	96.0	8.3	0.86
69	97.0	8.4	0.87
70	98.0	8.5	0.88
71	99.0	8.6	0.89
72	100.0	8.7	0.90

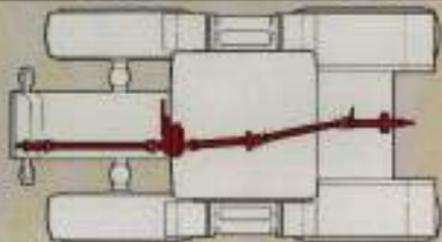
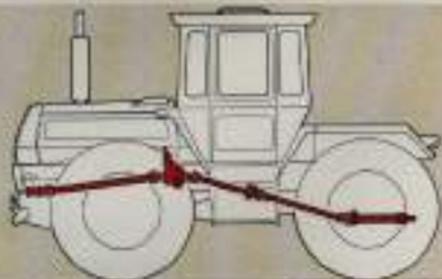
**60 kW 1200**  
with 16 x 30 tires

Gear	Main gear km/h	Working gear km/h	Crawler gear km/h
1	12.0	0.9	0.12
2	15.0	1.0	0.13
3	18.0	1.2	0.15
4	21.0	1.4	0.17
5	24.0	1.6	0.19
6	27.0	1.8	0.21
7	30.0	2.0	0.23
8	33.0	2.2	0.25
9	36.0	2.4	0.27
10	39.0	2.6	0.29
11	42.0	2.8	0.31
12	45.0	3.0	0.33
13	48.0	3.2	0.35
14	51.0	3.4	0.37
15	54.0	3.6	0.39
16	57.0	3.8	0.41
17	60.0	4.0	0.43
18	63.0	4.2	0.45
19	66.0	4.4	0.47
20	69.0	4.6	0.49
21	72.0	4.8	0.51
22	75.0	5.0	0.53
23	78.0	5.2	0.55
24	81.0	5.4	0.57
25	84.0	5.6	0.59
26	87.0	5.8	0.61
27	90.0	6.0	0.63
28	93.0	6.2	0.65
29	96.0	6.4	0.67
30	99.0	6.6	0.69
31	102.0	6.8	0.71
32	105.0	7.0	0.73
33	108.0	7.2	0.75
34	111.0	7.4	0.77
35	114.0	7.6	0.79
36	117.0	7.8	0.81
37	120.0	8.0	0.83
38	123.0	8.2	0.85
39	126.0	8.4	0.87
40	129.0	8.6	0.89
41	132.0	8.8	0.91
42	135.0	9.0	0.93
43	138.0	9.2	0.95
44	141.0	9.4	0.97
45	144.0	9.6	0.99
46	147.0	9.8	1.01
47	150.0	10.0	1.03
48	153.0	10.2	1.05
49	156.0	10.4	1.07
50	159.0	10.6	1.09
51	162.0	10.8	1.11
52	165.0	11.0	1.13
53	168.0	11.2	1.15
54	171.0	11.4	1.17
55	174.0	11.6	1.19
56	177.0	11.8	1.21
57	180.0	12.0	1.23
58	183.0	12.2	1.25
59	186.0	12.4	1.27
60	189.0	12.6	1.29
61	192.0	12.8	1.31
62	195.0	13.0	1.33
63	198.0	13.2	1.35
64	201.0	13.4	1.37
65	204.0	13.6	1.39
66	207.0	13.8	1.41
67	210.0	14.0	1.43
68	213.0	14.2	1.45
69	216.0	14.4	1.47
70	219.0	14.6	1.49
71	222.0	14.8	1.51
72	225.0	15.0	1.53
73	228.0	15.2	1.55
74	231.0	15.4	1.57
75	234.0	15.6	1.59
76	237.0	15.8	1.61
77	240.0	16.0	1.63
78	243.0	16.2	1.65
79	246.0	16.4	1.67
80	249.0	16.6	1.69
81	252.0	16.8	1.71
82	255.0	17.0	1.73
83	258.0	17.2	1.75
84	261.0	17.4	1.77
85	264.0	17.6	1.79
86	267.0	17.8	1.81
87	270.0	18.0	1.83
88	273.0	18.2	1.85
89	276.0	18.4	1.87
90	279.0	18.6	1.89
91	282.0	18.8	1.91
92	285.0	19.0	1.93
93	288.0	19.2	1.95
94	291.0	19.4	1.97
95	294.0	19.6	1.99
96	297.0	19.8	2.01
97	300.0	20.0	2.03
98	303.0	20.2	2.05
99	306.0	20.4	2.07
100	309.0	20.6	2.09
101	312.0	20.8	2.11
102	315.0	21.0	2.13
103	318.0	21.2	2.15
104	321.0	21.4	2.17
105	324.0	21.6	2.19
106	327.0	21.8	2.21
107	330.0	22.0	2.23
108	333.0	22.2	2.25
109	336.0	22.4	2.27
110	339.0	22.6	2.29
111	342.0	22.8	2.31
112	345.0	23.0	2.33
113	348.0	23.2	2.35
114	351.0	23.4	2.37
115	354.0	23.6	2.39
116	357.0	23.8	2.41
117	360.0	24.0	2.43
118	363.0	24.2	2.45
119	366.0	24.4	2.47
120	369.0	24.6	2.49
121	372.0	24.8	2.51
122	375.0	25.0	2.53
123	378.0	25.2	2.55
124	381.0	25.4	2.57
125	384.0	25.6	2.59
126	387.0	25.8	2.61
127	390.0	26.0	2.63
128	393.0	26.2	2.65
129	396.0	26.4	2.67
130	399.0	26.6	2.69
131	402.0	26.8	2.71
132	405.0	27.0	2.73
133	408.0	27.2	2.75
134	411.0	27.4	2.77
135	414.0	27.6	2.79
136	417.0	27.8	2.81
137	420.0	28.0	2.83
138	423.0	28.2	2.85
139	426.0	28.4	2.87
140	429.0	28.6	2.89
141	432.0	28.8	2.91
142	435.0	29.0	2.93
143	438.0	29.2	2.95
144	441.0	29.4	2.97
145	444.0	29.6	2.99
146	447.0	29.8	3.01
147	450.0	30.0	3.03
148	453.0	30.2	3.05
149	456.0	30.4	3.07
150	459.0	30.6	3.09
151	462.0	30.8	3.11
152	465.0	31.0	3.13
153	468.0	31.2	3.15
154	471.0	31.4	3.17
155	474.0	31.6	3.19
156	477.0	31.8	3.21
157	480.0	32.0	3.23
158	483.0	32.2	3.25
159	486.0	32.4	3.27
160	489.0	32.6	3.29
161	492.0	32.8	3.31
162	495.0	33.0	3.33
163	498.0	33.2	3.35
164	501.0	33.4	3.37
165	504.0	33.6	3.39
166	507.0	33.8	3.41
167	510.0	34.0	3.43
168	513.0	34.2	3.45
169	516.0	34.4	3.47
170	519.0	34.6	3.49
171	522.0	34.8	3.51
172	525.0	35.0	3.53
173	528.0	35.2	3.55
174	531.0	35.4	3.57
175	534.0	35.6	3.59
176	537.0	35.8	3.61
177	540.0	36.0	3.63
178	543.0	36.2	3.65
179	546.0	36.4	3.67
180	549.0	36.6	3.69
181	552.0	36.8	3.71
182	555.0	37.0	3.73
183	558.0	37.2	3.75
184	561.0	37.4	3.77
185	564.0	37.6	3.79
186	567.0	37.8	3.81
187	570.0	38.0	3.83
188	573.0	38.2	3.85
189	576.0	38.4	3.87
190	579.0	38.6	3.89
191	582.0	38.8	3.91
192	585.0	39.0	3.93
193	588.0	39.2	3.95
194	591.0	39.4	3.97
195	594.0	39.6	3.99
196	597.0	39.8	4.01
197	600.0	40.0	4.03
198	603.0	40.2	4.05
199	606.0	40.4	4.07
200	609.0	40.6	4.09
201	612.0	40.8	4.11
202	615.0	41.0	4.13
203	618.0	41.2	4.15
204	621.0	41.4	4.17
205	624.0	41.6	4.19
206	627.0	41.8	4.21
207	630.0	42.0	4.23
208	633.0	42.2	4.25
209	636.0	42.4	4.27
210	639.0	42.6	4.29
211	642.0	42.8	4.31
212	645.0	43.0	4.33
213	648.0	43.2	4.35
214	651.0	43.4	4.37
215	654.0	43.6	4.39
216	657.0	43.8	4.41
217	660.0	44.0	4.43
218	663.0	44.2	4.45
219	666.0	44.4	4.47
220	669.0	44.6	4.49
221			

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

**T**he 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 avoid difficulties in selecting existing implements.



1. PTO shafts are available in two versions for the high and low speed.

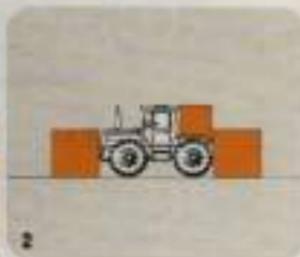
2. Both shafts are made of a high-strength alloy. They can be engaged and disengaged under load and operate only in 1000/min.

# Efficient hydraulic system - no problems even with heavy implements.

**H**draulic pumps for 45 or 60 ltr/min are available. The working pressure is 250 bar, permitting fast and efficient operation of the power lift or mounted implements (e.g. front loader, semi-mounted or 2-yrms 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 connectors front and rear are available to operate implements mounted in any of the three attachment areas. Standard 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 kg) or with stronger hydraulic cylinder, 60,000 N (6,000 kg). Besides the standard power lift with the "Sensorex" mechanical wheel pressure loader a lower link controlled hydraulic

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

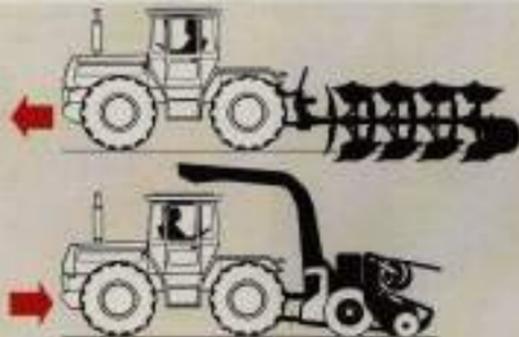


**Item 1** Lift to the loader using control valve with dual wheel stop components are available to operate implements in the three attachment areas.

**Item 4** Optional rear category combination front power lift with a lifting power of 14,000 Nm (1,400 kg) or which lifts with cat. III speed of 20,000 Nm (2,000 kg). A counterweight power lift with "Sensorex" mechanical wheel pressure loader is a standard feature. A lower link controlled hydraulic shaft control systems available as an optional extra.

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

The control and driver 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 362 B1-6A (110 DIN HP), total displacement 3,370 cc

## Engine MB trac 1300

Mercedes-Benz 6-cylinder direct injection diesel engine type OM 352A (130 DIN HP), total displacement 3,370 cc

## Transmission

Fully split terminal synchrony-Benz transmission with 6 road gears and 8 working gears. All gears can be used forward and reverse.

## P.L.O.

Lubrication: 140 and 1,600 l/min  
Filter: 1.0 (optimal value)

## Hydraulic system

Pump capacity: 40 or 60 litres/min  
Arrangement of 4 300-bar-acting control cylinders and two 40-bar control cylinders (separate return lines)

## Rear power lift

Standard three-point linkage, cat. II or II-Lift power: 60,000 N (6,000 kg) or 40,000 N (4,000 kg) "Servotek" mechanical wheel pressure booster  
Hydraulic lift 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. Steering front axle

## Steering

Hydrostatic power steering

## Brakes

Servotek brake. Air-over-hydraulic expanding brake on all four wheels  
Hydrostatic 2-speed retarder CVT lock

## Tires

14.0-38 (MB trac 1100)  
16.5-38 (MB trac 1300)

## Cab

OECD-rated, entry sideways. Noise-reduced. Airflow from both sides. Comfort and safety entering down completely. Rotary unit (rear steering pedals, instruments and controls) permits working forward and reverse 2-way tractor. Entry handles on roof. Air vents in door seat. Co-driver's seat. Heating and ventilator system

## Weights

**MB trac 1100**  
Kern weight approx. 5,000 kg  
GVW 8,000 kg

**MB trac 1300**  
Kern weight approx. 5,800 kg  
GVW 8,000 kg

## Fuel tank

110 litres capacity

Over 20 driving hours on battery

**Deister-Benz AG, Werk Gaggenau**