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SINCE 1921

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# MG 2000

**TYRE HYDRAULIC CRANE GRAB**  
**MACARA GRAIFĂR**

- **GRAB-BUCKET CAPACITY** 0,4 / 0,6 m<sup>3</sup>  
**CAPACITATE GRAIFĂR**
- **OPERATING WEIGHT** 22,5 t  
**MASA DE SERVICIU**



## HEAT ENGINE

Model .....DEUTZ BF 4M 1013E  
Power.....90 Kw/2300 rev/min acc. to DIN ISO 030461FN  
Type.....Diesel, 4 stroke, with direct injection  
Bore/Stroke..108/130 mm  
Capacity.....4764 cm<sup>3</sup>  
Cylinders.....4  
Cooling water cooled  
OPTIONAL motor 97 KW – PERKINS

## HYDRAULIC SYSTEM

Closed center type, pump swinging at maximum pressure adjusted by control and electric power controller.  
Permanent monitoring by means of a board PC and a process PC

### Main pumping unit

- two tandem pumps with tapered disk, variable capacity, proportional electronic control and power controller.

- Maximum flow.....2 x 164 l/min

- Max. working pressure.....315 bar

- Return filter.....10 µm

### Control circuit

- pump type with gear wheels

- flow.....30 l/min

- max. pressure.....35 bar

### Steering circuit

- pump type with gear wheels

- flow.....50 l/min

- max. pressure.....160 bar

### Hydraulic cylinders (pcs. no. x bore)

- main boom.....2 x 120

- balancer.....2 x 115

- grab.....5 x 63

- cab hoisting.....1 x 115

- pressing on.....4 x 115

## ELECTRIC SYSTEM

Voltage.....24 V

Batteries.....2 x 143 Ah/12V

Alternator.....24 V – 55 A

Starter.....24 V – 4 KW

## CAB AND CONTROL STATION

- telescoping with strength structure FOPS type according ISO 10262

- dimensions according to ISO

- lined with sound absorbing panels

- security glass all round

- perfect visibility for operator

- heating and ventilation system, optional air conditioning

- ergonomic seat with proportional electric remote controls integrated

- safety handle for controls cancellation when leaving the cab

- display showing the main operation parameters of the machine

- board for conventional controls located in the ergonomic field of operator

## MOMENT LIMIT SWITCH

- Electronic type for pressure limitation controlled by board PC and process PC

## PLATFORM SLEWING

- Hydraulic motor with axial pistons, fixed capacity and planetary gearbox

- Disk brake, normal closed, hydraulic driven, supporting and slewing bearing with internal toothing

- Centralized lubrication

- Slewing speed.....0.....10 rev/min

## MOTOR TERMIC

Model .....DEUTZ BF4M1013E  
Putere .....90 KW/2300 rot/min. conf. DIN ISO 3046 IFN  
Tip .....Diesel in 4 timpi cu injectie directa  
Alezaaj/cursa .....108/130 mm  
Cilindru .....4764 cm<sup>3</sup>  
Numar cilindri ...4  
Racire cu apa  
Optional motor 97 KW – PERKINS

## SISTEM HIDRAULIC

Tip centru inchis, basculare pompe la presiunea maxima reglata cu comanda si regulator electric de putere.  
Control permanent cu ajutorul unui calculator de bord si a unui calculator de proces.

### Grup de pompe principal

- doua pompe tandem cu disc inclinat, cilindree variabila, comanda electronica proportionala si regulator de putere

- debit maxim.....2x164 l/min.

- presiunea maxima de lucru.....315 bar

- filtru de retur.....10 µm

### Circuitul de comanda

- tip pompa cu roti dintate

- debit .....30 l / min.

- presiune maxima .....35 bar

### Circuitul de directie

- tip pomp cu roti dintate

- debit .....50 l/min.

- presiune maxima .....160 bar

### Cilindrii hidraulici ( nr. bucati x alezaj )

- brat principal .....2x120

- balansier .....2x115

- gralfar .....5x63

- ridicare cabina .....1x115

- calare .....4x115

## SISTEM ELECTRIC

Tensiune.....24 V

Baterii .....2x143 Ah/12 V

Alternator.....24 V-55A

Demaror .....24V-4KW

## CABINA SI POST DE COMANDA

-Cabina telescopabila cu structura de rezistenta tip FOPS, conform ISO 10262

-Dimensiuni conform ISO

-Tapisate cu panouri fonoabsorbante

-Geamuri securizate pe toate partile

-Vizibilitate perfecta pentru operator

-Instalatie de incalzire si ventilare, optional climatizare

-Scaun ergonomic cu telecomenzi electrice proportionale integrate

-Maneta de siguranta pentru anularea comenzilor la parasirea cabinei

-Display cu afisarea parametrilor principali de functionare ai masinii

-Pupitru pentru comenzi conventionale amplasat in câmpul ergonomic al operatorului

## LIMITATOR DE MOMENT

- Tip electronic pe limitare presiune, dirijat de calculatorul de bord si calculatorul de proces.

## ROTIRE PLATFORMA

- Motor hidraulic cu pistoane axiale cu cilindree fixa si reductor planetar.

- Frana cu discuri normal inchisa actionata hidraulic

- Rulment de sprijin si rotire cu dantura interioara

- Ungere centralizata

- Viteza de rotire ..... 0 .....10 rot/min.

## TRAVELLING

- Undercarriage, modular structure, with 4 pressing on legs or leveller blade and 2 pressing on legs
- Hydraulic motor with variable capacity, four variable speed stages, two mechanical and two hydraulic
- All-wheel service disk brake, hydraulic driven
- Hydraulic driven parking brake
- Two driving axles, front axle is oscillating with possibility of locking during operation and rear axle is fixed
- Tyres.....10.00 – 20 solid
- Max. travelling speed...20 Km/h
- Gradeability.....40 %

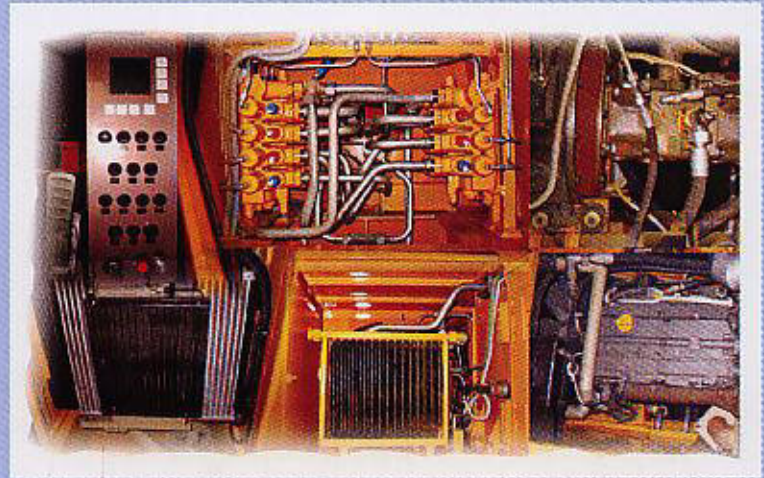
## CAPACITIES

- fuel tank.....230 l
- hydraulic tank.....270 l
- hydraulic system.....120 l

OPERATING WEIGHT.....22.5 t

## CRANE EQUIPMENT

- Main boom.....L = 6000 mm
- Balancer.....L = 4200 mm
- Grapple - capacity.....0.4 / 0.6 m<sup>3</sup>
- Possibility for mounting of excavator equipment with bucket of 0.7 m<sup>3</sup> and hydraulic hammer CH 400



## DEPLASARE

- Sasiu, constructie modulata, cu 4 picioare de calare sau lama de nivelat si doua picioare de calare.
- Motor hidraulic cu cilindre variabila
- Patru trepte de viteza variabile, doua mecanice si doua hidraulice.
- Frana de serviciu pe toate rotile, cu discuri, actionata hidraulic.
- Frana de parcare actionata hidraulic
- Doua puncti motoare, puntea fata oscilanta, cu posibilitatea de blocare in timpul lucrului si puntea spate fixa .
- Pneuri .....10.00 – 20 pline
- Viteza maxima de deplasare.....20 km/h
- Rampa accesibila .....40 %

## CAPACITATI

- Rezervor combustibil .....230 l
- Rezervor hidraulic .....270 l
- Sistem hidraulic .....120 l

## MASA DE SERVICIU

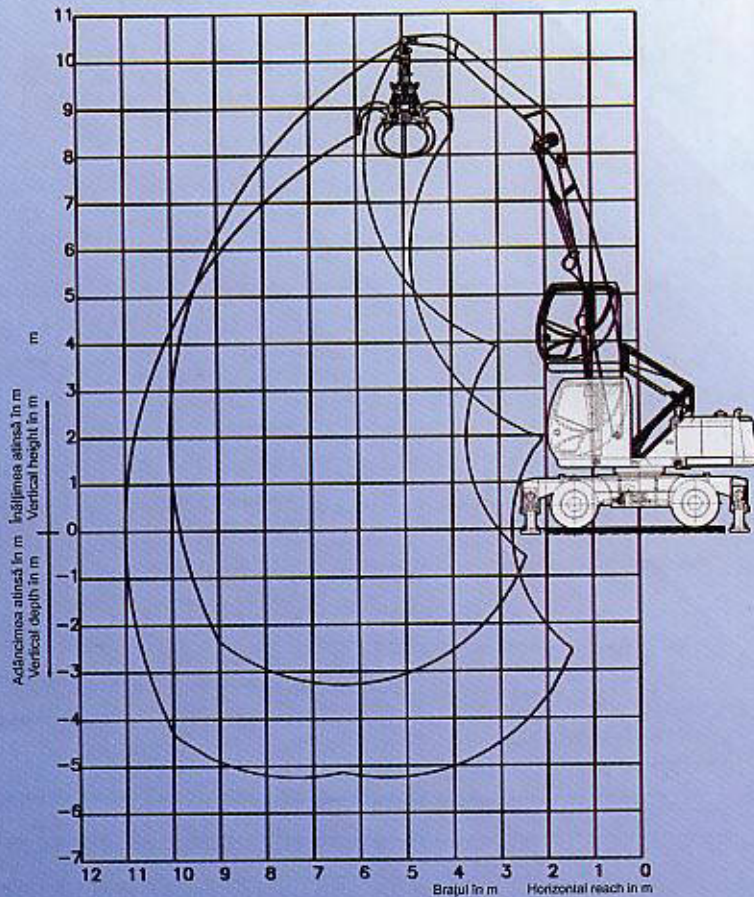
- Masa de serviciu .....22,5 t

## ECHIPAMENT MACARA

- Brat principal .....L= 6000 mm
- Balansier .....L= 4200mm
- Graifar polip - capacitate.....0,4 / 0,6m<sup>3</sup>
- Posibilitate montare echipament excavator cu cupa de 0,7 m<sup>3</sup> si ciocan hidraulic CH400



## LOAD DIAGRAM DIAGRAMĂ DE LUCRU



Înălțimea, în m	Căruțor deplasare calare	Brațul în m					
		3	4,5	6	7,5	9	10
9,5	Necalat Calat în patru puncte			(5,7)* 5,7 (5,7)*			
8	Necalat Calat în patru puncte			(5,0)* 5,0 (5,0)*	(3,4)* 4,3 (4,3)*		
6,5	Necalat Calat în patru puncte			(5,2)* 5,2 (5,2)*	(3,1)* 4,3 (4,3)*		
5	Necalat Calat în patru puncte			(5,0)* 5,4 (5,4)*	(3,3)* 4,6 (4,6)*	(2,9)* 4,0 (4,0)*	
3,5	Necalat Calat în patru puncte		(5,4)* 7,8 (7,8)*	(4,2)* 5,5 (5,5)*	(3,1)* 4,5 (4,5)*	(2,6)* 3,7 (3,8)	
2	Necalat Calat în patru puncte		(5,2)* 7,8 (7,8)*	(3,2)* 6,0 (6,0)*	(2,4)* 4,3 (4,3)*	(2,2)* 3,6 (3,6)*	(2,1)* 3,0 (3,2)*
0,5	Necalat Calat în patru puncte		(6,1)* 8,2 (8,2)*	(4,2)* 6,8 (6,8)*	(3,1)* 4,7 (5,4)*	(2,3)* 3,7 (4,4)*	
-1	Necalat Calat în patru puncte	(8,1)* 9,9 (9,9)*	(4,6)* 7,5 (7,5)*	(3,3)* 5,4 (5,4)*	(2,5)* 4,5 (4,9)*	(2,2)* 3,6 (4,3)*	
-2,5	Necalat Calat în patru puncte		(4,6)* 5,7 (5,7)*	(3,3)* 4,2 (4,2)*	(2,5)* 3,7 (3,7)*		

- Valorile sunt declarate în tone.
- Presiunea de lucru este 325 bar.
- Valorile declarate reprezintă 75% din încărcarea statică de răsturnare.
- Valorile din paranteze și cu \* sunt valabile pentru lucrul cu mașina pe direcția longitudinală.
- Valorile pentru poziția "necalat" sunt valabile când încărcătura este ridicată peste puntea față sau spate.
- Greutatea dispozitivelor de ridicare (graifir, magnet, cârlig) trebuie dedusă din valorile sarcinii de ridicare.

Height in m	Undercarriage stabilizers	Reach in m					
		3	4,5	6	7,5	9	10
9,5	non supported 4-pt. supported			(5,7)* 5,7 (5,7)*			
8	non supported 4-pt. supported			(5,0)* 5,0 (5,0)*	(3,4)* 4,3 (4,3)*		
6,5	non supported 4-pt. supported			(5,2)* 5,2 (5,2)*	(3,1)* 4,3 (4,3)*		
5	non supported 4-pt. supported			(5,0)* 5,4 (5,4)*	(3,3)* 4,6 (4,6)*	(2,9)* 4,0 (4,0)*	
3,5	non supported 4-pt. supported		(5,4)* 7,8 (7,8)*	(4,2)* 5,5 (5,5)*	(3,1)* 4,5 (4,5)*	(2,6)* 3,7 (3,8)	
2	non supported 4-pt. supported		(5,2)* 7,8 (7,8)*	(3,2)* 6,0 (6,0)*	(2,4)* 4,3 (4,3)*	(2,2)* 3,6 (3,6)*	(2,1)* 3,0 (3,2)*
0,5	non supported 4-pt. supported		(6,1)* 8,2 (8,2)*	(4,2)* 6,8 (6,8)*	(3,1)* 4,7 (5,4)*	(2,3)* 3,7 (4,4)*	
-1	non supported 4-pt. supported	(8,1)* 9,9 (9,9)*	(4,6)* 7,5 (7,5)*	(3,3)* 5,4 (5,4)*	(2,5)* 4,5 (4,9)*	(2,2)* 3,6 (4,3)*	
-2,5	non supported 4-pt. supported		(4,6)* 5,7 (5,7)*	(3,3)* 4,2 (4,2)*	(2,5)* 3,7 (3,7)*		

- The values are stated in tons (t)
- The pump pressure is 325 bar.
- The stated values are representing 75% of the static tipping load
- The values in brackets and with \* are valid in the lengthwise direction of the undercarriage.
- The values for the "non-supported" position are valid when the load is hoisted above the front or rear axle.
- The weight of the attached load hoisting implement (grab, magnet, load hook) must be deducted from the carrying capacity values.

## TRANSPORT DIMENSIONS DIMENSIUNI DE TRANSPORT

