H4 SERIES HMK140 LC

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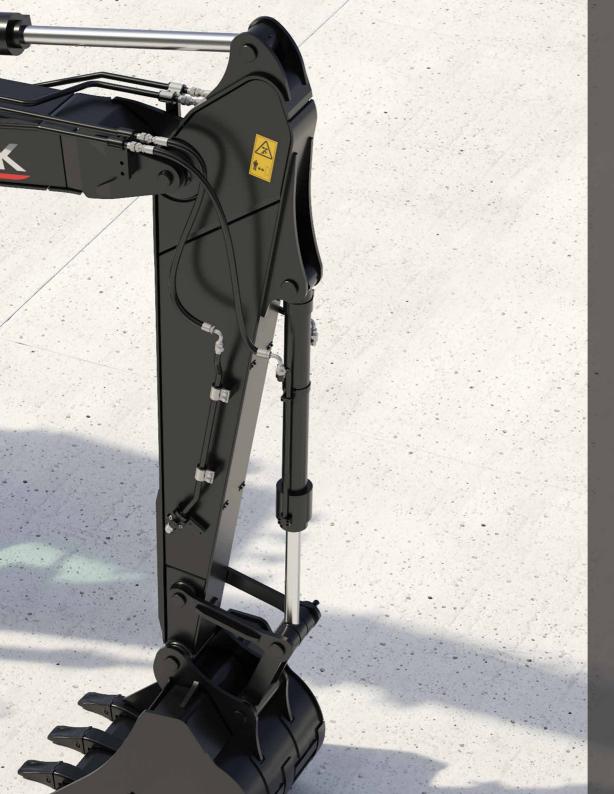
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HMK140LC

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New H4 Series Innovation coming from experience

Being produced with developed hydraulic system design, **HMK 140 LC** crawler excavator belonging to HİDROMEK's new H4 Series excavators offer an outstanding performance by working fast, productively and efficiently.

Providing the required power for the job with the advantage of having high performance in different working fields, **HMK 140 LC** offers durability, easy usage, operator comfort and safety together with an enjoyable working environment.



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The information and images, and equipment presented in this brochure are either standard or optional depending on the configuration. HIDROMEK has the right to modify the specifications and the designs of the model indicated in this brochure without prior notice.







HMK 140 LC Strong!

Being produced as heavy duty type, HMK 140 LC provides problem-free and constant work in all fields and conditions due to its balanced and durable structure, engine with high performance, power and technological equipment.

Dynamic!

With its cycle times, operating weight and dimensions, HMK 140 LC offers high productivity and efficiency in any field conditions in the city or in the field.

Innovative!

Having developed hydraulic system design of H4 Series, HMK 140 LC facilitates the job in the field offering easy operation, operator safety and comfort with its superior technology and equipment.

More durable

Produced to have reinforced heavy duty construction considering maximum performance, long life and smooth operation in severe field conditions, HİDROMEK excavators ensure more durability with the improvements made in the new H4 Series.





More durable anti-wearing plates (Hardox 450 HB)



Optimized bucket form



Reinforced arm supporting parts





Heavy duty arm



Reinforced boom structure



Reinforced boom cylinder cast bearing



Reinforced lowerframe and undercarriage components

Reinforced heavy duty construction

With their reinforced heavy duty construction produced at HİDROMEK's modern production facilities and going through sensitive quality-control processes, H4 Series excavators have excellent durability.

Bronze-Graphite Bushings



(5)

(4)

Bronze-graphite bushings used in boomarm and boom-frame connection points increase the lubrication period, and greatly prevent the wear of the pins because of graphite, having a very high grease absorption and retention capability, embedded in the inner structure of the bushings.



Safeworkingenvironment

ROPS&FOPS cabin

Having the standards of ROPS (Roll Over Protective Structure) & FOPS (Falling Object Protective Structure), H4 Series excavators provide maximum safety and durability.

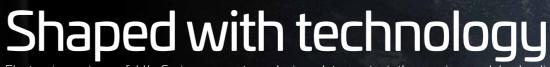
Wide vision capacity

Designed with giving special importance to occupational safety, H4 Series ensure excellent vision by minimizing the blind spot on the side and rear cameras. Along with the increase in the number of led headlights, the night vision is significantly improved on H4 Series excavators; in addition, there are also red handles and warning labels providing maximum safety for the operator.

Audio warning systems

H4 Series excavators enable safer working environment with their automatic starting horn, swing warning system and travel warning system.





Electronic system of H4 Series excavators designed to protect the engine and hydraulic components to provide fuel saving and superior performance.

Automatic stop system

In the new series, automatic stop system through configurable idling and stopping times provides fuel saving by stopping the engine after the machine is on idle. Automatic stop system in H4 Series helps to decrease the operational costs to minimum, and contributes to saving the environment.

Safe fuel transfer pump

"Safe fuel transfer pump" added to H4 Series stops the pump automatically when the tank is full and this feature gets activated also when the pump does not transfer fuel for 30 seconds, and ensures that the pump stops automatically.

Power boost technology

In H4 Series, power boost technology gets activated automatically in the conditions when the machine needs extra power, and ensures that the machine has the proper performance for the work.

8" Touch control panel

8 inch touch control panel is positioned ergonomically at a point that the operator can easily reach it. Touch control panel having high quality hardware and a large screen easily enables to control the machine features and access to machine information.

- The features of touch control panel:
- It offers multi-language option
- Music system is integrated into 8 "touch control panel.
- It allows the operator to adjust the flow required for the attachment without leaving the cab and save this information for 20 different attachments.
- Selection of double or single acting line can also be done over the user panel.
- During travel, rear and side view cameras with improved image quality and activated automatically can be controlled.
- Information on the average and instant fuel consumption can be obtained.
- Information on status such as atmospheric pressure, turbo boost pressure, fuel pressure and hydraulic pump pressure can be obtained.
- User can acquire working hour information such as work, attachment and travel.
- Maintenance registries can be obtained, and the user is warned when the maintenance time approaches.
- Failure codes and registries can be obtained.
- Audio warning systems can be controlled

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TIDROM

OPERA, the guide of the field

H4 Series excavators are equipped with Opera (HİDROMEK Operator Interface) for the operator to use the machine easily, and feel comfortable and relaxed as he is in an office environment.

Functions to be controlled by means of Opera

HIDROMEK

- •Engine RPM control
- Access to control panel menu
- Functions of lights, windshield wipers and rear view camera
 Music system control
- •Auto stop control of the engine to ensure maximum fuel economy during low idle
- •On H4 Series machines, the preheating system available to protect the engine and hydraulic systems can be controlled via Opera.

The aesthetic design of power

The seat ergonomic, heated, air suspended and having 35 degrees adjustable backrest angle is provided in H4 Series, and it enables the operator to work comfortably and without getting tired for long working hours.

H4 Series which has many features* such as proportional control pedals and joysticks, throttle control dial, operator touch screen, interior light, cup holder and heating-cooling box give more importance to user comfort. HIDROMEK



* Other features for user comfort on H4 Series machines can be found on page 21.

Office comfort in construction equipment

Automatic air conditioning system

Air vents and air conditioning system which can automatically adjust itself according to the ambient heat located in the redesigned cabin provide the best cooling performance in its class by 30%.

Wide angle view

On the new series machines, the new two-piece windshield wiper system designed for creating more comfortable work environment provides a wide angle view which increases the work efficiency of the user.

Led headlights for night vision

Led headlights on new H4 Series machines improve the night vision, and enable the operator to work more safely and comfortably.

Dampers

By using 6 silicone dampers on H4 Series excavators, noise, shock and vibration are absorbed and prevented from being transmitted to the cabin under any working condition.

You have the control with HIDROMEK Smartlink

Telematic system HİDROMEK Smartlink allows the user to easily access to machine location and technical information via computer and mobile phone.

Follow the work time and location of your machine through HİDROMEK Smartlink!

Through GPS tracking system, it is possible to track the location and the work time intervals of the machine.

Analyze your fuel consumption through HİDROMEK Smartlink!

It is possible to analyze fuel consumption according to the working conditions of the machine and daily fuel parameters.

Check the works for which your machine has been used through HİDROMEK Smartlink!

Through working mode information, it is possible to see the daily and total working hours of the machine for excavation and leveling and with crusher or with other optional attachments besides the power mode information and the speed ranges.

Follow your machine's maintenance through HİDROMEK Smartlink!

Under the Alerts list, the machine's upcoming maintenance can be checked while the information of the nearest authorized service can be obtained, and it can be contacted.

Contact the nearest authorized service or regional service through HİDROMEK Smartlink!

With the application, it is possible to obtain the information on Regional and Authorized Services of HİDROMEK After Sales Services as well as the directions to them.

Have performance reports for the selected periods of time for your machines through HIDROMEK Smartlink!

For any selected periods of time, it is possible to have a report on daily fuel consumption, average fuel consumption, power and working modes, daily work time intervals and locations.



To download Smartlink application



Easy maintenance and fast service for H4 Series through safe and easy access

H4 Series excavators, designed considering fast access to hydraulic and engine equipment, provide easy maintenance and service. Most of the maintenance can be easily carried out without getting on the machine, which shortens the service time and increases machine work time.

Automatic greasing system ensures that all parts of the machine can be lubricated from one single center.



ENGINE

ENGINE		
Brand & Mo	odel	ISUZU AJ-4JJIX
Туре		Water cooled, 4 cycles, 4 cylinders, inline, diesel engine with direct injection, turbocharger and intercooler
Power	Gross	98 HP (73 kW) @2000 rpm / SAE J1995
Power	Net	95 HP (70,9 kW) @2000 rpm / SAE J1349
Maximum	Gross	385 Nm @1600 rpm
Torque	Net	378 Nm @1600 rpm
Displaceme	ent	2999 сс
Bore x Stroke		95,4 mm x 104,9 mm
Emission Class		Stage IIIA / Tier 3 (EU/EPA)

LOWER FRAME	
Construction	"X" type lower frame with pentagon shaped box type side frames
Shoe	Triple grouser - 500 mm
No. of Shoes	2 x 46 pieces
No. of Lower Rollers	2 x 7 pieces
No. of Upper Rollers	2 x 2 pieces
Track Tensioner	Hydraulic type with spring cushioning

ELECTRICAL SYSTEM		
Voltage	24 V	
Battery	2 x 12 V / 100 Ah	
Alternator	24 V / 50 A	
Starter Motor	24 V / 4 kW	

MAIN PUMP	
Туре	2 axial piston pumps with variable displacement and swashplate
Max. Flow Rate	2 x 129 L/min
Pilot Pump	Gear type 20 L/min
WORKING PRESS	URE
Attachment	320 kgf/cm ²
Power Boost	350 kgf/cm ²
Travel	350 kgf/cm ²
Swing	300 kgf/cm ²
Pilot	40 kgf/cm ²
HYDRAULIC CYLI	NDERS
Boom	2 x ø110x ø75x 1080 mm
Arm	1 x ø115x ø80x 1225 mm

TRAVELAND	BRAKES	
Travel		Fully hydrostatic
Travel Motor		Axial piston motor with 2 speed stages and swashplate
Reduction		2 stage, planetary gear type
Travel Speed	High Speed	5,6 km/h
Travel Speed	Low Speed	3,3 km/h
Max. Traction		11.385 kgf
Gradeability		35° (%70)
Parking Brake		Hydraulic disc type, pilot operated and automatically released
Ground Pressure (With 500 mm Shoe)	0,44 kgf/cm ²

FILLING CAPACITIES				
Fuel Tank	280 L	Engine Cooling System	20 L	
Hydraulic Tank	115 L	Engine Oil	16 L	
Hydraulic System	210 L			

SWING SYSTEM		
	Swing motor	Fixed swashplate piston motor integrated with super shock absorber valve
	Reduction	2 stage, planetary gear type
	Swing Brake	Hydraulic disc type, pilot operated and automatically released
	Swing Speed	11,1 rpm

1x ø100x ø70x 910 mm

OPERATING WEIGHT (kg)		
	Mono Boom	Two Pieces Boom
HMK 140 LC	14.650	14.950

Bucket

EQUIPMENT

HMK 140 LC

Engine	Standard	Optional
Water cooled diesel engine with turbocharger and intercooler	•	
Engine pre-heat function	•	
Automatic idling	•	
One touch auto-idle system	•	
Automatic stop function	•	
Two-stage air filter	•	
Air filter clogged indicator	•	
Low engine pressure warning system	•	
Overheat warning system	•	
Adjustable power modes	•	
High altitude working function	•	
Electronical engine control	•	

Hydraulic System		
Boom and arm regenaration valve	•	
Automatic power boost	•	
Smooth boom feature		0
Main hydraulic filter	•	
Backup ports (valve)	•	
Cylinder cushioning and contamination seals	•	
Single-acting hydraulic line, breaker		0
Double- acting hydraulic line, crusher		0
Additional line		0
Quick coupling line		0
Attachment settings through instrument panel		0

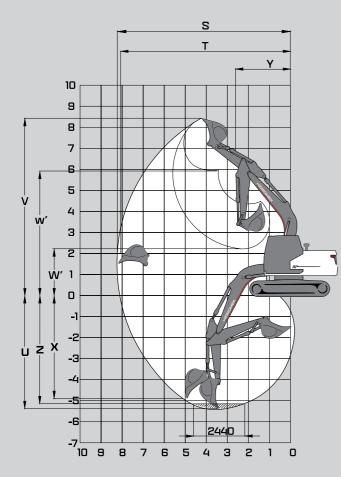
OPERATOR'S CAB

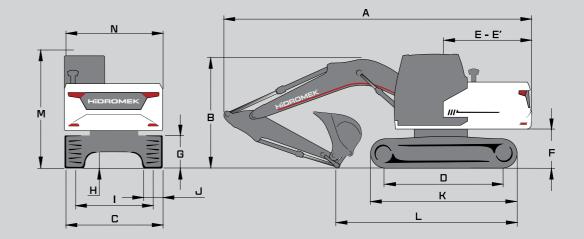
OPERATOR 3 CAB		
Pressurized and sound isolated cabin	•	
Air-conditioning	•	
Air-suspension seat	•	
Heated seat		0
Operator touch screen	•	
Opera control system	•	
Throttle control dial	•	
Automatic travel speed (low / high)	•	
4 different working modes	•	
Sliding windscreen and removable lower windscreen	•	
Openable left door window	•	
Upper and lower windshield wiper	•	
Joysticks and pedals	•	
Travel pedals and control levers	•	
Proportional controlled pedals and joysticks		0
Electric horn	•	
Intrerior light	•	
Cup-holder	•	
Convenient storage	•	
Convenient storage (for equipment)	•	
Heating & Cooling box	•	
Easy-cleaned floor	•	
12V power socket	•	
Computer connection port	•	
Radio / mp3 / usb / Aux	•	

Lower Frame	Standard	Optional
Optional track shoes width 600/700		0
Rubber shoe		0
Lubricated and sealed track components	•	
Lifting bracket	•	

Safety	
ROPS (Roll Over Protective Structure)	
FOPS (Falling Object Protective Structure)	
Rear view camera	
Side view camera	0
Right and left rear view mirrors •	
Working lamps •	
LED working lamps	0
Rotating beacon	0
Swing and travel alarm	0
Emergency engine stop switch •	
Pilot operated and automatically released swing brake	
Boom and arm cylinder safety valve	0
Overload warning system	0
Battery cut-off switch •	
Handrails by the steps and on the upper frame •	
Perforated metal non-slip plates •	
Safety locking device	
Safety glass •	
Emergency hammer •	
Lockable fuel tank cover	
Upper and lower guards for windshield	0
Operator's cab ceiling guard	0

Miscellaneous	
Telematic system (HİDROMEK Smartlink)	0
GEO System	0
Fuel transfer pump with automatic stop •	
Water sensor on fuel pre-filter •	
Bio oil B7 •	
Alternator - Battery •	
Battery Charge Indicator •	
Automatic lubrication system	0
Working lamp guards	0
Hydraulic breaker return line filter	0
Double pump combination function	0
Choosing single or double acting attachment on the instrument panel	0
Choosing the control method for the optional attachment	0
Boom cylinder piping guard	0
Bucket cylinder rod guard	0
Warning horn •	
Counterweights	0





		AENGIONE										
	DIN	AENSIONS										
					1	Two Piec						
	_	0M (m)	10.00	*4,60		*4,8						
	-	Λ (m)	*2,30	2,60	2,90	*2,30	2,60					
	A)	Overall Length	7.890	7.890	7.870	8.090	8.060					
	B)	Overall height (to top of boom)	2.830	2.950	3.030	2.800	2.920					
	C)	Overall Width	2.490									
	D)	Distance between tumblers	3.035									
Ē	E)	Distance from center of swing to rear end			2.245							
_ E	E´)	Tail swing radius			2.265							
GENERAL ENSIONS	F)	Counterweight Clearance	940									
ΞĢ	G)	Track Height			830							
E S	H)	Ground Clearance			430							
¥	I)	Track Gauge			1.990							
	J)	Shoe Width			500							
	K)	Track Length	3.780									
	L)	Length on ground (transport)	4.650	4.500	4.260	5.070	4.950					
	M)	Overall height of cab			2.880							
	N)	Overall width of upperstructure			2.500							
	S)	Maximum Digging Reach	8.220	8.520	8.810	8.480	8.790					
	T)	Maximum Digging Reach on Ground Level	8.070	8.380	8.670	8.340	8.650					
רי <u>ב</u>	U)	Maximum Digging Depth	5.360	5.660	5.960	5.330	5.640					
ΞE	V)	Maximum Digging Height	8.430	8.680	8.860	9.210	9.490					
Ϋ́ Ϋ́	W)	Maximum Dumping Height	5.920	6.150	6.330	6.640	6.900					
WORKING RANGES (mm	W′)	Minimum Dumping Height	2.220	1.920	1.610	2.700	2.420					
Z <	X)	Maximum Vertical Digging Depth	4.890	5.180	5.480	4.600	4.940					
	Y)	Minimum Swing Radius	2.620	2.670	2.690	2.590	2.700					
	Z)	Maximum Digging Depth (2440 mm level)	5.140	5.460	5.780	5.210	5.520					

FORCE	FORCES													
			Mono Boom		Two Piec	es Boom								
	B00M (m)		4,60	4,80										
	ARM (m)	*2,30	2,60	2,90	*2,30	2,60								
	Bucket Digging Force			8.300										
SAE	Bucket Digging Force (Power Boost)			9.100										
	Arm Crowd Force	6.600	6.100	5.600	6.600	6.100								
	Arm Crowd Force (Power Boost)	7.300	6.700	6.100	7.300	6.700								
	Bucket Digging Force			9.600										
ISO	Bucket Digging Force (Power Boost)			10.500										
	Arm Crowd Force	6.900	6.300	5.800	6.900	6.300								
	Arm Crowd Force (Power Boost)	7.600	6.900	7.600	6.900									

A- Material density less than 2.000 kg/m³ B- Material density less than 1.800 kg/m³ C- Material density less than 1.500 kg/m³ D- Material density less than 1.200 kg/m³

	STANDAR	D BUCKET			OPTIONAL BUCKET SELECTION SCHEME										
DUTY			a a a a a a a a a a a a a a a a a a a		General F	Purpose Bud	:ket	(•				
Ч Б		Width	1.000	0 mm	600) mm	810	mm	890) mm	1.14	5 mm	1.210 mm		
HEAVY		Capacity (SAE)	0,6	m ³	0,3	0 m³	0,4	5 m³	0,5	0 m³	0,7	0 m³	0,7	5 m³	
出		Weight	525	5 kg	35	0 kg	45() kg	49	0 kg	560) kg	580) kg	
		Number of Teeth	L	÷		3		3		4	!	5	i.	5	
			*2P BOM	4.6 BOM	2P BOM	4.6 BOM	2P BOM	4.6 BOM	2P BOM	4.6 BOM	2P BOM	4.6 BOM	2P BOM	4.6 BOM	
		2,00 m	А	А	А	А	А	А	А	А	С	А	С	В	
	ARM	*2,30 m	В	A	А	А	А	A	А	A	С	В	D	С	
	PARIVI	2,60 m	С	В	А	А	А	A	А	А	D	С	D	С	
		2,90 m	С	С	А	A	А	А	В	A	D	D	D	D	

Standard





CLEANING BUCKET





LOG GRAPPLE



LIFTING	CAPACIT	Y (kg)												НМ	K 140 LC
	Boom	: 4,6 m	Arm:	2,3 m	Without	t bucket	STD, 500 r	nm Crawler		CW: 23	300 kg		: Fron	t 🗰	🛥 : Side
A, m	1,5		З,	.0	4,5		6,0		7	,5	9	,0	Ma	aximum Rea	ch
B, m	l	#	i i	#		H	J	#	J	#	J.	#	i.	#	R, m
6,0					*4100	4000							*3450	3100	5.23
4,5					*4350	3950	3800	2450					*3200	2300	6.24
3,0			*7600	6900	*5350	3700	3700	2400					3050	1950	6.77
1,5					5600	3400	3600	2250					2900	1850	6.93
O (Ground)			*6800	5800	5350	3250	3500	2200					2950	1850	6.75
-1,5	*5750	*5750	*10950	5800	5300	3150	3500	2150					3350	2050	6.19
-3,0	*11150	*11150	*9450	5950	5400	3250							4400	2700	5.15

LIFTING	LIFTING CAPACITY (kg) HMK 14														
	Boom	:4,6 m	Arm:	2,6 m	Withou	t bucket	STD, 500 r	nm Crawler		CW: 23	300 kg		i : Fron	t 🗰	🛶 : Side
A, m	1,5 3,0		,0	4,5		6,0		7,5 9,0			,0	Maximum Reach			
B, m	J	#	i	#	j.	#	J	#	j	#	Į.	#	i i	#	R, m
6,0													*2950	2750	5.63
4,5					*4000	4000	3850	2500					*2750	2100	6.57
3,0			*6850	*6850	*5050	3750	3750	2400					*2700	1800	7.07
1,5			*8200	6150	5600	3450	3600	2250					2700	1700	7.23
O (Ground)			*7050	5800	5350	3200	3500	2150					2750	1700	7.06
-1,5	*5200	*5200	*10750	5750	5300	3150	3450	2100					3050	1900	6.53
-3,0	*9700	*9700	*9900	5850	5300	3200							3900	2400	5.55

LIFTING	LIFTING CAPACITY (kg) HMK 140 LC														
	Boom	: 4,6 m	Arm:	2,9 m	Withou	t bucket	STD, 500 r	mm Crawler		CW: 2	300 kg		: Fron	🛶 : Side	
A, m	1,	5	З,	.0	4,5		6,0		7,5		9,0		Maximum Reach		
B, m	i	#	i	#	J	#	J	#	i.	#	j	#	i.	#	R, m
7,5													*3000	*3000	4.42
6,0													*2500	*2500	5.99
4,5							*3750	2500					*2300	1950	6.88
3,0			*6050	*6050	*4700	3750	3750	2400					*2300	1700	7.36
1,5			*9550	6300	5650	3450	3600	2250	*2450	1600			*2400	1600	7.51
0 (Ground)			*7550	5800	5400	3200	3500	2150					2600	1600	7.34
-1,5	*4900	*4900	*10200	5700	5250	3100	3400	2100					2850	1750	6.84
-3,0	*8650	*8650	*10300	5800	5250	3150							3550	2150	5.92
-4,5			*7400	6050									*4800	3550	4.29

LIFTING	LIFTING CAPACITY (kg) HMK 140 L														
	Boom	:4,8 m	Arm:	2,3 m	Without bucket		STD, 500 r	nm Crawler		CW : 2	300 kg		🖥 : Fron	it 🗰	🛶 : Side
A, m	1,	,5	З,	0	4,5		6,0		7,5		9	,0	м	aximum Rea	ch
B, m	Ţ	#	Į.	**- *	Į.	#	Ţ	#	Į.	#	J	#	L L	#	R, m
7,5													*4500	*4500	3.83
6,0					*5200	4050							*3550	2750	5.58
4,5					*5650	3900	3800	2450					*3300	2100	6.53
3,0					5850	3650	3700	2350					2850	1800	7.04
1,5					5500	3300	3550	2200					2700	1700	7.19
0 (Ground)					5300	3150	3450	2100					2750	1700	7.02
-1,5			*9000	5700	5250	3100	3450	2100					3100	1900	6.49
-3,0					*4700	3150									

LIFTING	LIFTING CAPACITY (kg) HMK 140 LC														
	Boom	:4,8 m	Arm:	2,6 m	Without	t bucket	STD, 500 r	nm Crawler		CW: 2	300 kg		🖥 : Fron	: Side	
A, m	1,	,5	З,	0	4,5		6,0		7,5		,0	M	aximum Rea	ch	
B, m	Ţ	#	i.	#	i.	#	Į.	#	Ţ	#	Į.	#	1	#- -	R, m
7,5													*3700	*3700	4.39
6,0					*4500	4100							*3000	2500	5.97
4,5					*4750	3950	3850	2450					*2800	1900	6.87
3,0			*9200	6900	5900	3650	3700	2350					2650	1650	7.35
1,5					5550	3350	3550	2200					2550	1550	7.49
0 (Ground)			*4900	*4900	5300	3150	3450	2100					2600	1600	7.33
-1,5			*8500	5650	5200	3050	3400	2050					2850	1750	6.83
-3,0			*6950	5750	5150	3100							*3150	2200	5.90

HIDROMEK

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