HMK 500 LCHD

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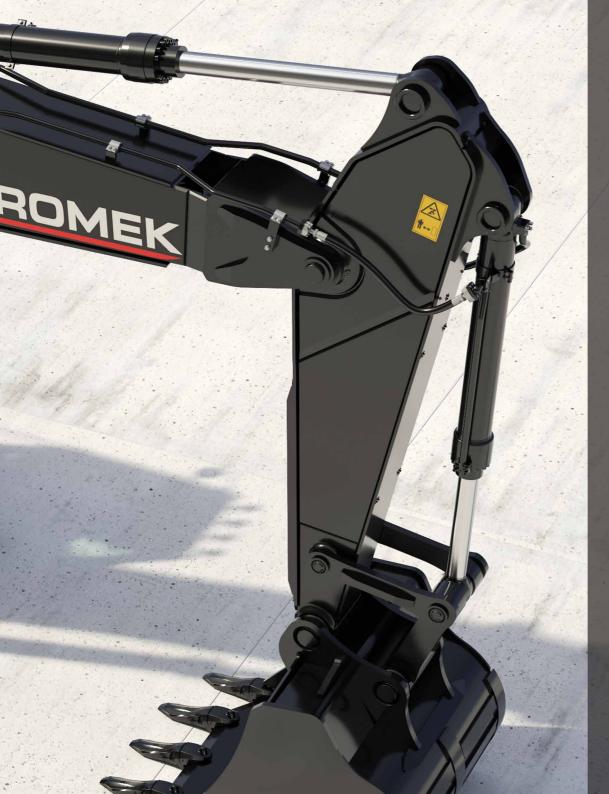
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HIDROW

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New H4 Series Innovation coming from experience

Being produced with developed hydraulic system design, HİDROMEK's new H4 Series excavators offer an outstanding performance by working faster, more productively and more efficiently. H4 Series excavators produce more work with less fuel; hence, they are more profitable for their users than ever.



Performance	6-7
Durability	8-11
Safety	12-13
Technology	14-15
Comfort	16-17
HİDROMEK Smartlink - Ease of Service	18-19
Technical Features	20-25

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.



Powerful. Strong. Balanced.

HMK 500 LCHD crawler excavator provides more durability, maximum performance, operator comfort and easy usage due to the strengthened heavy duty type construction in H4 Series and its developed technology. With its robust and balanced structure, it offers smooth and constant working for its user in severe field conditions.

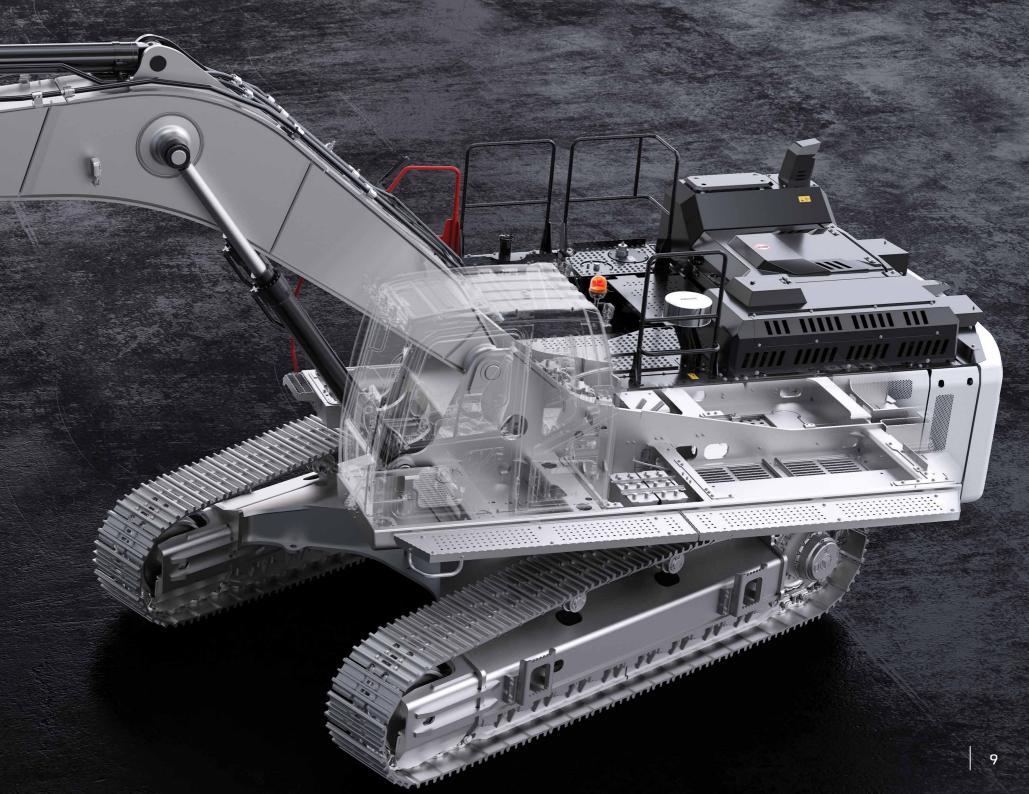
More Sturdier

Owing to the improvements made in arm and boom structure, undercarriage and attachment groups by using more durable materials in H4 Series, HMK 500 LCHD has a more durable structure and offers high performance and long-life usage providing the strength and durability needed in marble quarries, mines and large construction sites.



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



Reinforced casting tip



Heavy duty arm

(5)



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)

(1)

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.



Safe working environment

FOPS cabin

Having the standard of 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.

Flame holder system

Where sparks are dangerous, regeneration inhibit feature is activated from the cabin, so flame from the exhaust is prevented temporarily.



Shaped with technology

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.
- 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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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

MOROMER

- •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

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 HİDROMEK 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.

HMK500LCHC

ENGINE Brand & Model ISUZU-AQ-6UZ1X Water cooled, 4 cycles, 6 cylinders, inline, diesel engine with direct injection, Туре turbocharger and intercooler Gross 362 HP (270 kW) (a)1950 rpm / SAE J1995 Power Net 348 HP (260 kW) @1950 rpm / SAE J1349 Gross 1435 Nm @1500 rpm Maximum Torque Net 1400 Nm @1500 rpm Displacement 9838 cc Bore x Stroke ø 120 mm x 145 mm

U.S. EPA Tier 4 and EU Stage IV

LOWER FRAME	
Construction	"X" type lower frame with pentagon shaped box type side frames
Shoe	Triple grouser
No. of Shoes	2 x 50 pieces
No. of Lower Rollers	2 x 9 pieces
No. of Upper Rollers	2 x 2 pieces
Full Trackguard	Complete
Track Tensioner	Hydraulic type with spring cushioning

ELECTRICAL SYST	EM
Voltage	24 V
Battery	2 x 12 V / 165 Ah
Alternator	24 V / 50 A
Starter Motor	24 V / 5,5 kW

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	4,60 km/h	
riavel Speed	Low Speed	2,80 km/h	
Max. Traction		35.880 kgf	
Gradeability		35° (%70)	
Parking Brake		Hydraulic disc type, pilot operated and automatically released	
Ground Pressure (With 600 mm Shoe)		0,91 kgf/cm²	

FILLING CAPACITIES				
Fuel Tank	655 L	Engine Cooling System	65 L	
Hydraulic Tank	370 L	Engine Oil	41 L	
Hydraulic System	615 L	Urea	33 L	

OPERATING WEIGHT (kg)	
HMK 500 LCHD	52.000

HYDRAULIC SYSTEM

N	A	IN	Р	UI	WF	

Emission Class

Туре	2 axial piston pumps with variable displacement and swashplate
Max. Flow Rate	2 x 376 L/min
Pilot Pump	Gear type, 29 L/min
WORKING PRESS	SURE
Attachment	330 kgf/cm ²
Power Boost	355 kgf/cm ²
Travel	330 kgf/cm ²
Swing	330 kgf/cm ²
Pilot	40 kgf/cm ²
HYDRAULIC CYL	INDERS
Boom	2 x ø 170 x ø 115 x 1.650 mm
Arm	1 x ø 190 x ø 130 x 1.870 mm
Bucket	1 x ø 170 x ø 120 x 1.335 mm

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	8,10 rpm

EQUIPMENT

HMK 500 LCHD

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	•	

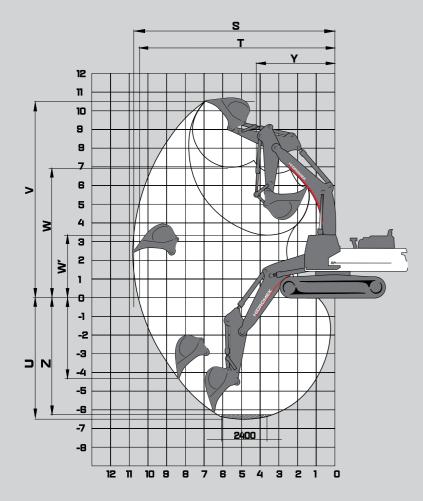
Hydraulic System		
Boom and arm regenaration valve	•	
Automatic power boost	•	
Smooth boom feature		0
Main hydraulic filter	•	
Backup ports (valve)	•	
Cylinder cushioning and contamination seals	•	
Single-acting hydraulic line, breaker		0
Double- acting hydraulic line, crusher		0
Additional line		0
Quick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

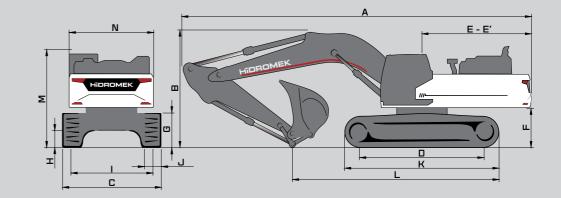
OPERATOR'S CAB		
Pressurized and sound isolated cabin	•	
Air-conditioning	•	
Air-suspension seat	•	
Heated seat		0
Operator touch screen	•	
Opera control system	•	
Throttle control dial	•	
Automatic travel speed (low / high)	•	
3 different working modes	•	
Sliding windscreen and removable lower windscreen	•	
Openable left door window	•	
Upper and lower windshield wiper	•	
Joysticks and pedals	•	
Travel pedals and control levers	•	
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
Track width options 600 HD / 750		0
Lubricated and sealed track components	•	
Dozer blade		0
Mooring points for shipment	•	

Safety		
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	
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	





	DIA	MENSIONS								
				LCI	HD					
	BOO	DM (m)	*6,3	30	6,9	0				
	ARM	Λ (m)	*2,60	2,90	2,90	3,30				
	A)	Overall Length	11.840	11.850	12.450	12.440				
	B)	Overall height (to top of boom)	3.860	3.990	3.950	4.160				
	C)	Overall Width		3.50	00					
	D)	Distance between tumblers		4.4(00					
Ē	E)	Distance from center of swing to rear end		3.98	35					
ے ق	E´)	Tail swing radius		4.0	05					
GENERAL DIMENSIONS (mm)	F)	Counterweight Clearance		1.38	35					
Щ Щ	G)	Track Height		1.23	30					
E S	H)	Ground Clearance	600							
	I)	Track Gauge	2.900							
	(כ	Shoe Width	600							
	K)	Track Length	5.470							
	L)	Length on ground (transport)	6.910	6.740	7.500	7.310				
	M)	Overall height of cab	3.360							
	N)	Overall width of upperstructure		2.99	70					
	S)	Maximum Digging Reach	10.770	11.040	11.680	12.040				
	T)	Maximum Digging Reach on Ground Level	10.490	10.770	11.430	11.800				
٦	U)	Maximum Digging Depth	6.480	6.780	7.180	7.580				
Z S	V)	Maximum Digging Height	10.520	10.630	11.340	11.530				
Ϋ́Ξ	W)	Maximum Dumping Height	6.940	7.060	7.710	7.880				
WORKING RANGES (mm	W′)	Minimum Dumping Height	3.340	3.040	3.590	3.190				
A A	X)	Maximum Vertical Digging Depth	4.470	4.740	5.280	5.740				
	Y)	Minimum Swing Radius	4.320	4.380	4.660	4.750				
	Z)	Maximum Digging Depth (2440 mm level)	6.300	6.610	7.020	7.430				

* Standard

FORCE	S										
		LCHD									
	BOOM (m)	*6,3	30	6,9	20						
	ARM (m)	*2,60	2,90	2,90	3,30						
	Bucket Digging Force	21.700									
SAE	Bucket Digging Force (Power Boost) 23.700										
	Arm Crowd Force	23.600	22.100	22.100	20.500						
	Arm Crowd Force (Power Boost)	25.700	24.200	24.200	22.400						
	Bucket Digging Force	25.300									
ISO	Bucket Digging Force (Power Boost)		27.6	00							
	Arm Crowd Force	25.000	23.400	23.400	21.600						
	Arm Crowd Force (Power Boost)	27.300	25.600	25.600	23.600						

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

* Standard

	standar	DBUCKET			OPTIONAL	OPTIONAL BUCKET SELECTION SCHEME												
HEAVY DUTY					General Purpo	ose Bucket			Heavy Duty Type Bucket									
₹		Width	1.980) mm	1.900) mm	0 mm	1.800 mm		1.800 mm		1.950 mm		1.900 mm				
포		Capacity (SAE)	*3,2	2 m³	2,70	D m ³	2,70 m ³		2,70 m ³		2,70 m ³		3,00 m ³		3,00 m ³			
		Weight	3.10	0 kg	2.81	.0 kg	2.70	2.700 kg		2.720 kg		2.780 kg		2.850 kg		2.950 kg		
		Number of Teeth	5	5	!	5		5		4		5	4		5	5		
			6.3 BOOM	6.9 BOOM	6.3 BOOM	6.9 BOOM	6.3 BOOM	6.9 BOOM	6.3 BOOM	6.9 BOOM	6.3 BOOM	6.9 BOOM	6.3 BOOM	6.9 BOOM	6.3 BOOM	6.9 BOOM		
	ARM	ARM *2,60 m B D		А	В	A	В	А	В	А	В	В	С	В	С			
		2,90 m	С	D	А	С	А	С	А	С	А	С	В	D	В	D		

* Standard









LIFTING	CAPACIT	Y (kg)												HMK 5	00 LCHD
	Boom	: 6,3 m	Arm:	2,6 m	Withou	t bucket	STD, 600 m	STD, 600 mm, 3500 mm		CW : 86	600 kg		: Front		: Side
A, m	1,	,5	З,	.0	4,5		6,0		7,5		9,0		Maximum Reach		
B, m	J	#	j.	#	J	#	j.	#	Į.	#	J	#	J	#	R, m
9,0													*13800	*13800	5,54
7,5							*13100	*13100					*13000	*13000	7,00
6,0							*14050	*14050	*12900	11500			*12800	10550	7,90
4,5					*20750	*20750	*15900	15650	*13650	11150			*12900	9250	8,44
3,0							*17950	14800	*14600	10750			*13100	8650	8,69
1,5							*19450	14150	*15450	10400			13100	8500	8,66
0 (Ground)					*27000	21200	*19950	13800	*15700	10150			13650	8800	8,36
-1,5			*25350	*25350	*26350	21350	*19250	13800	*14950	10200			*14250	9750	7,76
-3,0			*28450	*28450	*22100	21750	*19600	14050					*14400	11950	6,77

LIFTING	CAPACIT	Y (kg)												HMK 5	00 LCHD
	Boom	Boom: 6,3 m Arm: 2,9 m		Without	t bucket	STD, 600 m	STD, 600 mm, 3500 mm		CW : 86	600 kg		: Front 🗰 : Side			
A, m	1	,5	3,0		4,5		6	6,0		.5	9,0		Maximum Reach		
B, m	Ţ	#	L.	#	1	#	i.	#	Į.	#	Ţ	#	J	#	R, m
9,0													*12900	*12900	5,96
7,5													*12300	12200	7,33
6,0							*13400	*13400	*12400	11600			*12200	9950	8,20
4,5					*19650	*19650	*15300	*15300	*13200	11200			*12300	8800	8,72
3,0					*24250	22700	*17450	14900	*14250	10750			12550	8250	8,95
1,5					*26850	21500	*19150	14200	*15200	10350			12450	8100	8,93
0 (Ground)					*27100	21150	*19850	13800	*15600	10100			12950	8350	8,64
-1,5			*24300	*24300	*25800	21200	*19450	13700	*15150	10050			*13750	9200	8,06
-3,0			*30500	*30500	*22950	21550	*17500	13900					*14050	11050	7,11
-4,5					*17350	*17350							*13600	*13600	5,60

LIFTING	CAPACIT	Y (kg)												HMK 5	00 LCHD	
	Boom	: 6,9 m	Arm:	2,9 m	Withou	t bucket	STD, 600 m	m, 3500 mm		CW : 8	600 kg		: Front 🗰 : Sid			
A, m	1,	,5	З,	,0	4	,5	6,	0	7,5		9,0		Maximum F		Reach	
B, m	Ţ	#	L.	#	L.	#	1	#	Į.	# =	Ţ	# =	Ţ	# =	R, m	
9,0													*11700	*11700	6,90	
7,5									*11300	*11300			*11250	10200	8,11	
6,0							*13300	*13300	*11800	11400			*11150	8550	8,90	
4,5							*15300	15300	*12750	10950	*11400	8200	*11250	7650	9,38	
3,0							*17400	14300	*13850	10400	*11900	7950	11150	7200	9,60	
1,5							*18850	13550	*14750	10000	12050	7750	11000	7050	9,58	
O (Ground)							*19350	13200	*15150	9700	11900	7600	11350	7250	9,31	
-1,5					*24600	20500	*18850	13150	*14850	9650			*12200	7850	8,77	
-3,0			*29750	*29750	*22050	20850	*17250	13350	*13450	9800			*12350	9150	7,91	
-4,5					*17750	*17750	*13750	13750					*12050	*12050	6,60	
LIFTING	CAPACIT	Y (kg)												HMK 5	00 LCHD	
	Boom	: 6,9 m	Arm:	3,3 m	Withou	t bucket	STD, 600 m	m, 3500 mm		CW : 8	600 kg		: Fron	it 🗰	🛥 : Side	
A, m	1,	,5	3,0		4,5		6,	6,0		7,5		.0	Maximum Reach			
B, m		#	Į.	#	J	#	1	#	Ţ	#	J	#	Ţ	#	R, m	
9,0													*10850	*10850	7,40	

*12500

*14550

*16750

*18400

*19150

*18950

*17700

*19300

*21850

*25150

*22950

*16350

*27600

*24750

*16350

*27600

A Load Radius

B Load Point Height

C Lifting Capacity

*19300

20200

20250

20550

*12500

*14550

14400

13600

13150

13050

13150

7,5

6,0

4,5

3,0

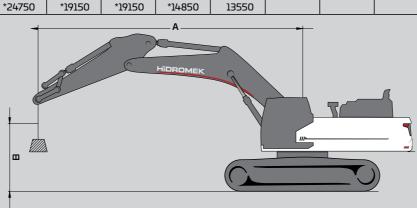
1.5

O (Ground)

-1,5

-3,0

-4,5



- 1. The above loads are in compliance with SAE J1097 and ISO 10567 Hydraulic Excavator Lifting Capacity Standards
- **2.** The load point is the center-line of the bucket pivot mounting pin on the arm

*10600

*11200

*12250

*13400

*14400

*14950

*14900

*13850

*10600

*11200

11000

10450

9950

9650

9500

9600

*10550

*10950

*11550

12000

11800

11750

*10550

*10500

*10600

10500

10350

10650

11450

*11900

*11800

8450

8250

7950

7650

7500

7450

9400

8000

7200

6750

6650

6800

7300

8350

10700

8,54

9,29

9,75

9,96

9,94

9,68

9,17

8,35

7,12

- **3.** Lifting capacity cannot exceed 75% of tipping capacity or 87% of hydraulic capacity.
- 4. (*) indicates load limited by hydraulic capacity.

HIDROMEK

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