











# HIDROMEK NEW K4 SERIES

# The Newest and The Best Solution For Your Work!

HİDROMEK's fourth generation backhoe loaders new K4 Series are your new assistants at your work with their perfect digging and loading performance.

K4 Series backhoe loaders drawing attention with their innovations and superior technology offer high performance with easy and safe usage and comfortable cabin in the fields and in the city.

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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.







### Superior Performance

K4 Series backhoe loader offers versatile solutions with the advantage of being used for different works!

K4 Series enables you to work efficiently and productively thanks to its equipment. HMK 102B with its small front wheel and HMK 102S four-wheel equal models exceed your expectations offering the advantage of being used for many different works.

K4 Series, designed for severe geographical conditions and heavy working conditions, increases your productivity with its strong structure and efficient hydraulic system providing maximum breakout force even at lower revolutions and having high oil flow.

HİDROMEK K4 Series backhoe loaders facilitating works in excavation, infrastructure, superstructure, agriculture, forestry, landscaping and industrial areas thanks to their use with different attachments such as leveling shovel, forklift, hammer, auger, log, pendulum bucket, snow plow, scrap and paper collection bucket, bottom opening (big bag) bucket, stone collecting bucket, trapeze bucket, ripper and polyp attachment provide the benefits you expect.

### 20% Faster

K4 series backhoe loaders with accelerated movements through improved loader cylinder design do a lot of work in a short time during loading and unloading operations.

### 3% More Efficient

K4 Series backhoe loaders produce more work with less fuel as a result of the improvements made in cylinder design.

Strong heavy - duty type steel construction

# 4

More durable front loader bucket reinforced with hardox



Looader boom support device



Backhoe bucket form optimized and designed

Durable teeth structure

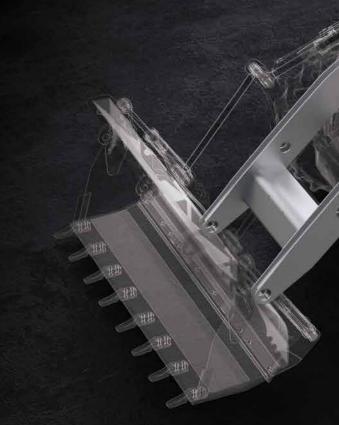
for better performance



Durable engine front grille and protection bumper

# Strong Steel Construction, Superior Durability!

K4 Series backhoe loaders, produced with advanced technology and advanced welding methods in HİDROMEK's modern production facilities, offer maximum performance, long life and trouble-free usage in tough field conditions with their strong steel construction. Powerful loader and excavator boom constructions and their arm and chassis are designed in accordance with severe conditions for long-term durability.





# Power and Technology Together

Strong technological infrastructure of K4 Series ensures superior performance and fuel economy

# Joystick Integrated Seats

Joysticks integrated to the seat enable the operator to work comfortably in backhoe and loader positions including the side angles.

### **Autotilt**

In the cabin of K4 Series, which adjusts comfortably to the backhoe and loader positions, the Autotilt feature of the seat, patented by HİDROMEK, allows the steering wheel to lift up automatically while rotating back, and allows easy access to the backhoe position.

# Shifter Button for Backhoe or Loader Function

Allows the operator to control backhoe or loader functions when needed without changing the direction of the seat.

\* The Image indicates **ALPHA** model cabin interior.







Front Information Screen



Rear Information Screen

# Screens

In the cabin, there are 2 different screens on the backhoe and loader sides. In Supra model, through rear screen controlled by HiDROMEK Opera, access to features such as speed adjustment according to the attachment type of the machine and periodic maintenance information screen is easily possible.

Front Information Screen Joystick Integrated Autotilt (2) Shifter Button for Backhoe or Loader Function





Fully Automatic Transmission



**Tipshift** 



Return-to-dig Function



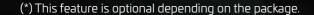
Opera Control Button Integrated in the Seat (\*\*)

### Auto Idle (\*)

Auto-Idle provides fuel saving by reducing idle automatically when the machine is working on backhoe side and be stationary for a certain period of time.

### Load Sensing Hydraulic Pump (\*)

FLOWSHARING featured valves offered together with piston pump allow simultaneous boom, arm and bucket movements even at low engine speeds regardless of load and user ability.





Tilting of the left joystick to some extend for the operator to work more comfortably on the loader side





Electronic Handbreak (\*\*)



Hand Throttle with Electronic Rotary Control (\*)



**USB** Socket



Automatic Control of Stabilizers (\*\*)

### LSD (Limited Slip Differential)

Thanks to LSD system, providing the most effective traction force on difficult grounds with the risk of skidding, tire changing periods of machine is extended while the work cycle times and fuel efficiency are significantly improved.

### MSS (Motion Stabilizing System) (\*)

Thanks to the MSS system, maximum productivity is achieved by preventing the fall of the load in the front bucket on rough terrain.

### Automatic MSS (Motion Stabilizing System) (\*)

Automatic MSS enables ease of use by being activated automatically at determined speeds.

# Safe Working Environment!

- ROPS & FOPB cabin
- Wide view angle
- LED lighting (\*)
- •LED Beacon (\*)
- Overload warning system (\*)
- •Boom and arm safety valves (\*)
- Automatic Boom Lock activated after rotating to the loader side while working on the backhoe side. (\*)
- For maintenance and access to the engine, boom lock integrated in loader arm cylinder
- Safety valves on the outriggers that can be used for safety while the machine is in stationary operation
- Mechanical driven rear excavator lock that ensures safe driving by keeping the rear boom of the machine stable during travel.
- Thanks to the braking system and emergency brake support even in extraordinary situations such as engine stalling, the machine comes to a safe stop with little pedal force.
- Immobilizer



<sup>(\*)</sup> This feature is optional depending on the package.





# OPERA, the guide of the field

K4 Series backhoe loaders 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. Via Opera, which is controlled through the rear screen, operator can access many features easily.

- Speed adjustment through the back screen according to the type of the attachment.
- Bluetooth radio control (\*)
- Language selection
- Data on operating hours and details
- Machine status information
- Maintenance time control through periodic maintenance screen
- Access to service page for authorized services
- Control of features such as volume, touch-tone and time through adjustment menu

### Besides these features, in K4 Series:

- Control of breaker line valve from inside of the cabin (\*)
- Adjustment of backhoe side from inside of the cabin through hydraulic table shifting system (\*)
- Easy attachment changing through quick coupler
- Automatic fuel transfer pump (\*)
- Additional installation which the hydraulic hand tools needed by the operator can be used with the help of machine hydraulic line (\*)
- Compressor that provides instant elimination of pressure losses that may occur in tires (\*)





(\*) This feature is optional depending on the package.



# 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.





To download Smartlink application

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

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



Follow the work time and location of your machine through HİDROMEK Smartlink! Current and remaining fuel amount of the machine can be followed.



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

During loading, digging and traveling operations, daily and total working hours and traction mode information can be seen.

# 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 HIDROMEK After Sales Services as well as the road directions to them.



### 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.



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

According to the date range, information can be determined such as daily working hours of the machine and in which locations it has worked can be obtained as a report.



# Easy Maintenance and Service!

K4 Series, designed considering fast access to hydraulic and engine equipment, provide easy maintenance and service reducing service times and increasing machine downtime.

Service points where pump and transmission pressures are measured are located in easily accessible areas so that easy and fast maintenance is possible.

# Openable Radiator Block For Quick and Safe Access

It offers easy maintenance and service by providing fast and safe access to hydraulic and engine equipment with its openable and easily cleanable radiator block and openable hood and right - left covers. In K4 Series, cleaning of the radiator is done more easily, the performance and health of the engine are always kept at a high level while efficient operation is provided.





### **ENGINE**

Brand, Model	Perkins, 904J-E36TA
Number of cylinders	4
Max. Power	74,4 kW (100 HP) @2200 rpm
Max. Torque	430 Nm @1500 rpm
Displacement	3,621 cc
Bore & Stroke	ø 98 x 120 mm
Emission Class	EU:Stage 5, US: Tier 4 final

#### HYDRAULIC SYSTEM System Type Open Centre System Close Centre System Piston Pump Pump Type Gear Pump Gear Pump Pump 1 90 L/min 90 L/min Max. Flow 162 L/min @2200 rpm Pump 2 57,2 L/min 58 L/min 227 bar 255 bar 255 bar Main pump pressure Auxiliary pump pressure 170 bar

### TIRES

	HMK102B	HMK 102S
Front	16.70-20	16.9/14-28
Rear	16.9/14-28	16.9/14-28

### **ELECTRICAL SYSTEM**

Voltage	12 V	Starter Motor	4 Kw
Battery	140 A	Alternator	120 A

### **DRIVING SPEED**

	HMK102B	HMK102S	
1 <sup>st</sup> gear	4	4	km/h
2 <sup>nd</sup> gear	7	7	km/h
3 <sup>rd</sup> gear	9	9	km/h
4 <sup>th</sup> gear	15	15	km/h
5 <sup>th</sup> gear	22	24	km/h
6 <sup>th</sup> gear	40	40	km/h

### **BRAKES**

Service Brake	Self adjusting, multi disc oil bath type, hydraulic actuated brakes are located in the rear axle and act on 4 wheels
Parking Brake	Hand lever operated mechanical brake acts on the rear axle differential
raikiiiy blake	Button operated electrical brake acts on the rear axle differential (SUPRA)

### **TRANSMISSION**

Autoshift transmission	for heavy dut	y service
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Torque converter with 2,38:1 stall ratio

Electrically controlled 2 Wheel drive or 4 Wheel Drive selection

6 forward, 3 reverse gears (Lock-Up is option)

Transmission oil cooler

A neutral circuit allows starting only when the control lever is in neutral position for safety.

### FILLING CAPACITIES

	HMK102B	HMK102S
Engine oil pump	10 L	10 L
Engine cooling system	16 L	16 L
Fuel Tank	140 L	140 L
Hydarulic oil tank	70 L	70 L
Transmission oil	16 L	16 L
Ad Blue	19 L	19 L

### AXLES

	HMK 102B	HMK102S
Front Axle	Torque proposal	Torque proposal
Rear Axle	Limited Slip Differential (LSD)	Differential lock
Real Axie	Differential lock (Option)	

### LOADER PERFORMANCE

	Open Type hydraulic Sys.	Close Type hydraulic Sys.
6 in 1 bucket capacity	1.1	m³
Max. bucket breakout force	7230 kgf	7380 kgf
Max. loading arm breakout force	6460 kgf	7380 kgf
Lifting capacity to max. height	3140 kg	3660 kg

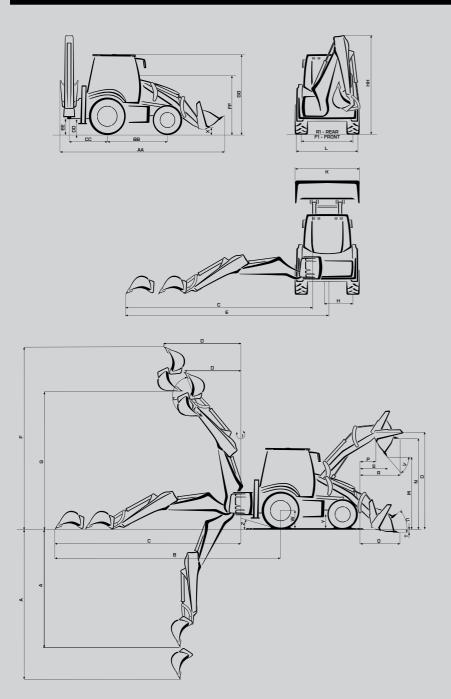
### **BACKHOE PERFORMANCE**

	Standard arm		Telescopic arm extended		Telescopic arm retracted	
	Open Type sys.	Close Type sys.	Open Type sys.	Close Type sys.	Open Type sys.	Close Type sys.
Bucket capacity	0.18 m³					
Max. bucket breakout force	6111 kgf	6865 kgf	6252 kgf	7020 kgf	6252 kgf	7020 kgf
Max. arm breakout force	2928 kgf	3290 kgf	1986 kgf	2230 kgf	2814 kgf	3160 kgf

### **OPERATING WEIGHT**

	HMK102B	HMK 102S
Operating weight with standard equipment	9300 kg	9650 kg

HMK 102B - 102S TECHNICAL FEATURES



		10				
		TO	102B		1025	
		TB (extended)	TB (retracted)	TB (extended)	TB (retracted)	
Α	Maximum digging depth	5606	4484	5610	4362	
В	Ground level to rear wheel centre	8188	7070	8237	7007	
С	Ground level to slew centre	6819	5691	6834	5759	
D	Loading distance	3150	2278	3150	2173	
Е	Distance to machine central line	7423	6282	7432	6173	
F	Operating height	6589	5667	6560	5635	
G	Max. loader height	5598	4705	4651	4651	
Н	Total kingpost travel	11	41	111	40	
J	Bucket rotation (°)	18	37	18	37	
K	Shovel width	24	22	24	20	
L	Rear frame width	22	70	22	67	
М	Dump height	25	96	26	71	
N	Load over height	32	95	33	65	
0	Pin height	34	45	35	15	
Р	Front arm pin – bumper distance	54	<u>+2</u>	4)	15	
Ó	Grab lug – bumper distance	14	92	14	10	
R	Max. reach at full height	14	91	13	71	
S	Unloading distance	10	05	88	39	
Т	Digging depth	18	35	11	.0	
U	Roll back at ground (°)	4	3	4	3	
V	Dump angle (°)	47	<b>'</b> ,3	47	',5	
Υ	Front wheel centre to the ground	40	70	68	30	
Z	Departure angle (°)	22		23,3		
W	Rear wheel centre to ground	650		630		
Х	Distance between pin centre and ground	250		250		
AA	Total travel length	6017		6088		
BB	Axle centreline distance	2219		2272		
CC	Slew centre to rear axle centre distance	1339		1403		
DD	Stabilizer feet clearance	323		350		
EE	Kingpost clearance	467		490		
FF	Steering wheel centre height	2043		2122		
GG	Cab roof height	2860		2887		
нн	Total travel clearance	36	04	35	13	

HMK 102B - 102S EQUIPMENT

ENGINE / TRANSMISSION	ALPHA	SUPRA
Water cooled, turbo diesel engine	<u> </u>	•
Foldable cooling pack	•	•
Full view engine pre cleaner filter	•	0
Turbo type engine pre cleaner filter	0	•
Engine glow plug	•	•
6 forward automatic transmission	•	•
Transmission oil cooler	•	•
Lock up	0	•
Auto throttle	•	•
Auto stop	•	•
Automatic reversible fan	0	0

CAB	ALPHA	SUPRA
Joystick control	0	•
Phone holder	•	•
USB charging port	•	•
LED interior lights	•	•
4.3" front display	•	•
7" rear side display	-	•
Auto tilt steering wheel	•	•
Pool type floor mat	•	•
Cooling box	0	•
Tipshift /FNR	•	•
RTD (Return to dig)	•	•
Multi purpose bucket proposal control	•	•
Floating	•	•
Air conditioner	0	•
Roof rack	•	•
MP3 radio	•	•
Bluetooth	•	•
Side steps lights	-	•
Air suspension seat	0	•
Interior reaerview mirror	0	0

SECURITY	ALPHA	SUPRA
FOPS/ROPS	•	•
Electronic park brake	-	•
Loader boom lock	•	•
Hydraulic backhoe boom	-	•
Immobilizer	•	•
Halogen working lights	•	-
LED working lights	0	•
Side working lights	-	•
Auto boom lock	-	•
Reverse camera	0	0
Halogen cab light	•	-
LED cab light	0	•
Multimod cab light	0	0
Over load warning system	0	0
Double brake system	•	•
Emergency brake system	•	•

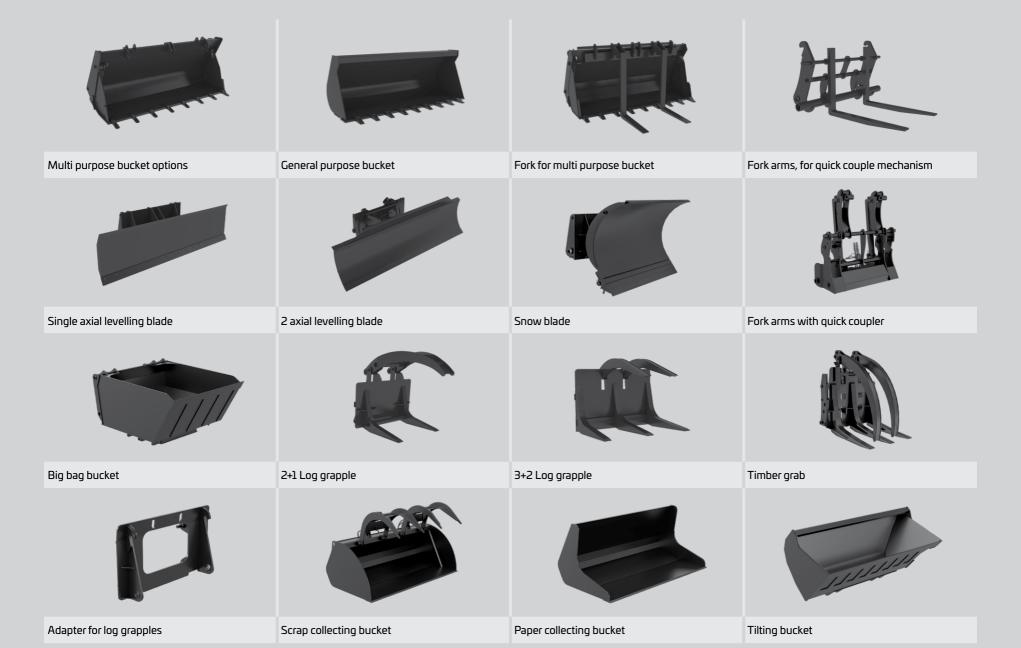
AXLES	HMK 102B	HMK 102S
Tork proposal type, front	•	•
Limited Slip Differential (LSD) type, rear	•	0
Differantial lock	0	•

TYRES	ALPHA	SUPRA
16.70-20 (HMK 102B)	•	•
16.9/14-28 (HMK 102S)	•	•
14.5-20 (HMK 102B)	0	0
16.9-R28 Radial (HMK 102S)	0	0

HYDRAULIC SYSTEM	ALPHA	SUPRA
Bi-directional working	0	•
Proposal stabilisers control	-	•
Automatic stabilisers control system	-	•
MSS (Motion Stabilizer System)	0	•
Auto MSS	0	•
Mechanical Cross Control Lever	0	-
SAE / ISO control type	0	•
Cylinders with Cushion	•	•
Hose Burst Valve (Stabiliser Cylinder)	0	0
Hose Burst Valve (Backhoe arm cylinder)	0	0
Hose Burst Valve (Loader arm cylinder)	•	•
Unloader	•	•
Service Point for transmission and hydraulic pressure measurement	•	•
Piston pump	0	•
Extendable Arm	0	•
Extendable Narrow Arm	0	0
Articulated Boom	0	0
Wing type stabiliser	0	0
Hydraulic quick coupler	0	0
Single line brekaer line	•	•
Double acting line	0	0
Double acting additional line	0	0
Power slider	0	0
Biodegradable Hydralic Oil	0	0

OTHERS	ALPHA	SUPRA
Smartlink	0	•
Fuel transfer pump	0	0
Working lights cover	0	0
Tunnel application ( Breaker line filter, bucket cylinder protecion, boom stopper)	0	0
Single acting / double acting line selection from inside the cabin (with extendable arm)	0	0
Electrical breaker line valve (with standard arm)	0	0
Double acting additional line selecting at cab	0	0
Air compressor	0	0
Hand breaker line	0	0
Tool kit	•	•

HMK 102B - 102S OPTIONALATTACHMENTS



HMK 102B - 102S OPTIONALATTACHMENTS





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