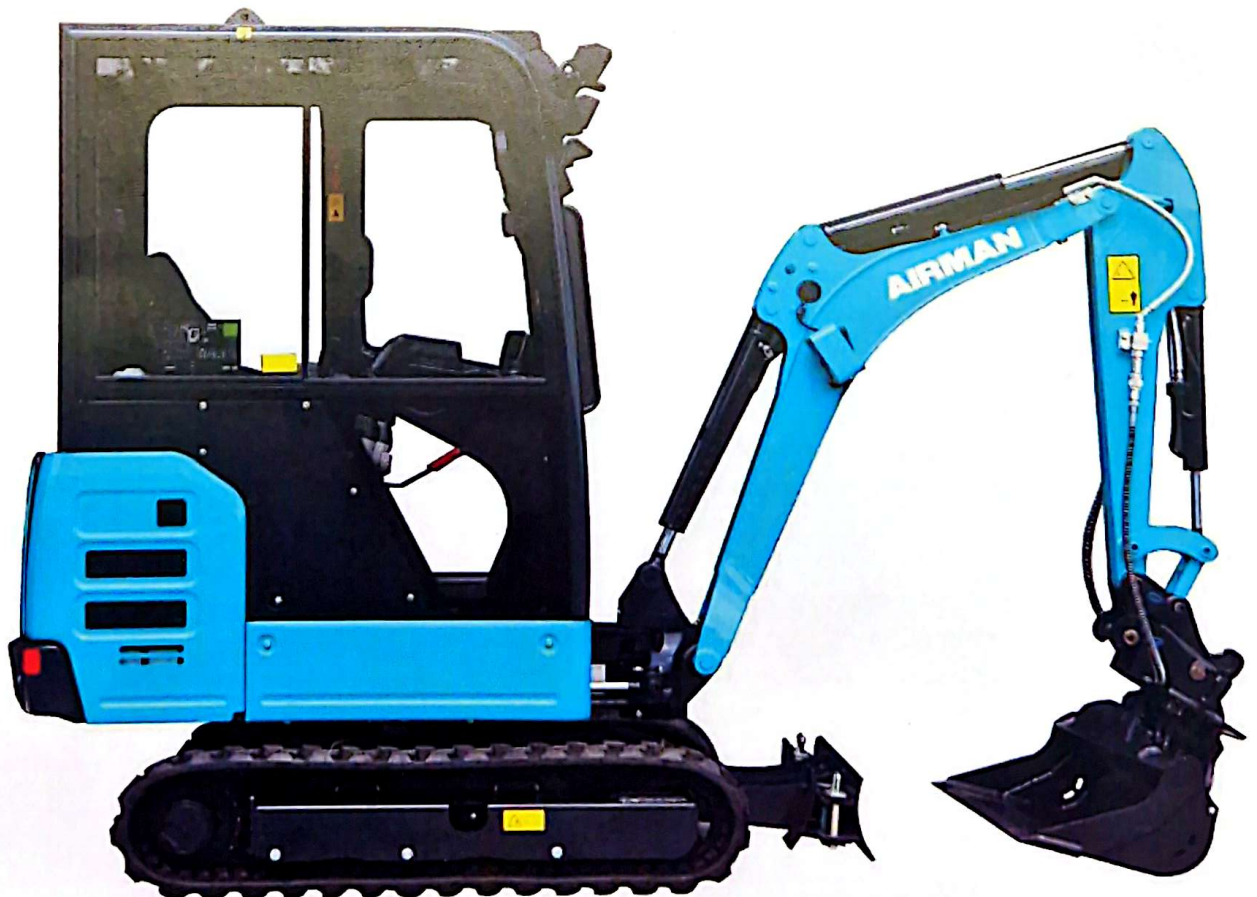


AIRMAN®

 **JAPANESE QUALITY SINCE 1938**

Mini-excavator AX19-7

 **Compliant with the EU Stage V-emission regulations**



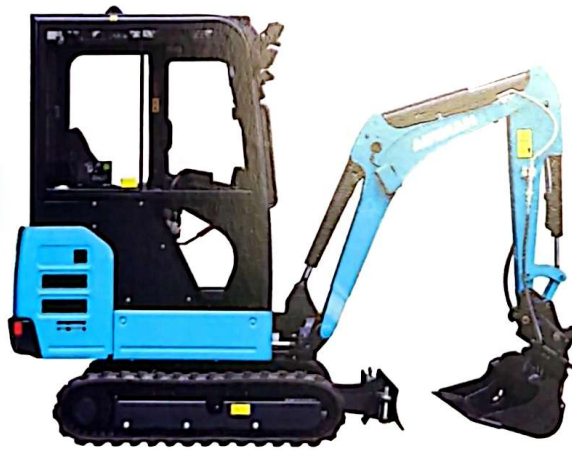
HOKUETSU INDUSTRIES EUROPE B.V.

Mini-excavator AX19 -7



High performance

Overall height
2380 mm



Rear-end swing radius
1140 mm

Dumping height
2380 mm

Cutting height
3430 mm

Digging reach
3900 mm

Digging depth
2380 mm

Neutral Engine Start System

The engine cannot be started unless the shut-off lever is in the lock position for safe operation.

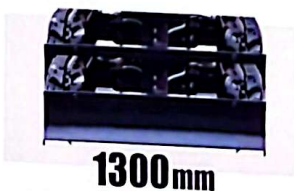


Hydraulic Pilot Control

Hydraulic pilot control levers provide light, smooth control of the front, blade, swing and travel. The levers are ergonomically arranged for easier and less tiring operation.

Adjustable Crawlers and Blade

Tracks can be extended and retracted by control lever: retracted for truck transport and easy access to narrow job sites; and extended for surefooted excavation.



Easy to transport by trailer due to its compact dimensions and low weight





Easy to maintain



Vertically Sliding Engine Cover

The upright engine cover, upgraded from the conventional model, slides vertically with less rearward projection for ease of maintenance in confined spaces.



Enlarged Fuel inlet

Large fuel port has been fitted as per larger Airman models for quick filling.



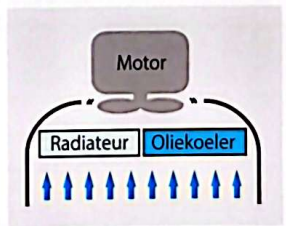
Easy Access for Engine Maintenance

With the seat tilted up, the top of engine is exposed for easy maintenance.



Easy to clean Radiator

The radiator and oil cooler are arranged side by side for easy cleaning. Ventilation ports on the radiator cover are enlarged for more efficient cooling.



SPECIFICATIONS AX19-7

ENGINE

Model	3TNV70
Type	Water-cooled, 4-cycle, swirl combustion chamber injection type diesel engine
No. of cylinders	3
Rated power	
ISO 14396, netto	11.5 kW op 2 400 min ⁻¹
ISO 9249, netto	10.6 kW op 2 400 min ⁻¹
SAE J1349, netto	10.6 kW op 2 400 min ⁻¹
Maximum torque	48.8 Nm op 1 800 min ⁻¹
Piston displacement	0.854 L
Bore and stroke	70 mm x 74 mm
Battery	1 x 12 V / 36 Ah

HYDRAULIC SYSTEM

Hydraulic pumps

Main pumps	2 variable displacement axial piston pumps t
	1 gear pump
Maximum oil flow	2 x 19.2 L/min
	1 x 10.8 L/min
Pilot pump	1 tandwielpomp
Maximum oil flow	6.5 L/min

Hydraulic motors

Travel	2 variable displacement axial piston motors
Swing	1 gear motor

Relief valve settings

Implement circuit	20.6 MPa (210 kgf/cm ²)
Swing circuit	13.7 MPa (140 kgf/cm ²)
Travel circuit	20.6 MPa (210 kgf/cm ²)
Swing circuit	3.9 MPa (40 kgf/cm ²)

Hydraulic cylinders

	Quantity	Bore	Rod diameter	Stroke
Boom	1	65 mm	35 mm	490 mm
Arm	1	60mm	35(30)mm	368 mm
Bucket	1	55 mm	30 mm	311 mm
Blade	1	70 mm	40 mm	94 mm
Boom swing	1	60 mm	30 mm	298 mm
Span	1	50 mm	30 mm	312 mm

UPPERSTRUCTURE

Swing device

Swing circle is single-row. Swing parking brake is spring-set / hydraulic released disc type.

Swing speed	9.4 min ⁻¹
Swing torque	1.4 kNm

BUCKET AND ARM DIGGING FORCE

	Arm length	1.08 m
Bucket digging force ISO		16.0 kN (1 632 kgf)
Bucket digging force SAE : PCSA		12.6k N (1 285kgf)
Arm crowd force ISO		8,4 kN (855 kgf)
Arm crowd force SAE : PCSA		7,8kN (794 kgf)

UNDERCARRIAGE

Rubber tracks

Tractor-type undercarriage. Welded track frame using selected materials, n. Side frame extended by cylinder span..

Number of rollers on each side

Lower rollers	3
---------------------	---

Travel Device

Each track is driven by a 2-speed axial piston motor.

Parking brake is of the spring-set/hydraulic-released disc type.

Travel speeds	High : 0 tot 4.2 km/h
	Low : 0 tot 2.4 km/h
Maximum traction force	11.4 kN (1 160 kgf)
Gradeability	47% (25 degrees) continuous

SERVICE REFILL CAPACITIES

Fuel tank	22.0 L
Engine coolant	3.5 L
Engine oil	3.1 L
Travel motor (each side)	0.25 L
Hydraulic system	26.0 L
Hydraulic oil tank	14.0 L

WEIGHTS AND GROUND PRESSURE

Operating weight and Ground Pressure

Including boom of 1.700 m and 0.044 m bucket (ISO volgeladen).

Type of shoes	Shoe width	Arm length	kg	kPa(kgf/cm ²)
Rubber shoes	230 mm	1.08 m	1 920	30.6(0.31)

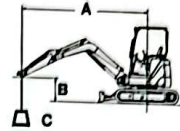
* Operating weight with fully serviced, + 75 kg operator, ISO 6016.

SOUND LEVEL

Sound level cabin according to ISO 6396	LpA 78 dB(A)
External soundlevel according to ISO 6395 en	
EU-Directive 2000/14/EC	LwA 93 dB(A)

LIFTING CAPACITIES (Without bucket)

- Remarks:
1. Ratings are based on ISO 10567.
 2. Lifting capacity does not exceed 75% of tipping load with the machine on firm, level ground or 87% full hydraulic capacity.
 3. The load point is the center-line of the bucket pivot mounting pin on the arm.
 4. *Indicates load limited by hydraulic capacity.
 5. 0 m = ground.



A: Load radius
B: Load point height
C: Lifting capacity

For lifting capacities, subtract bucket and quick hitch weight from lifting capacities without bucket.

cabine, blade above ground

Conditions	Load point height m	Rating over-front						Rating over-side or 360 degrees Unit: 1 000 kg		
		Load radius						At max. reach		
		1.0 m		2.0 m		3.0 m		meter		
Boom 1.70 m Arm 1.08 m	1.0			0.581	0.475	0.389	0.270	0.335	0.233	3.33
	0 (Ground)			0.440	0.300	0.378	0.259	0.333	0.230	3.29
Rubber shoes 230 mm	-1.0	*1.317	*1.079	0.354	0.278			0.355	0.278	2.83

cabine, blade on the ground

Conditions	Load point height m	Rating over-front						Rating over-side or 360 degrees Unit: 1 000 kg		
		Load radius						At max. reach		
		1.0 m		2.0 m		3.0 m		meter		
Boom 1.70 m Arm 1.08 m	1.0			0.581	0.475	0.419	0.270	0.335	0.233	3.33
	0 (Ground)			0.497	0.300	0.429	0.259	0.362	0.230	3.29
Rubber shoes 230 mm	-1.0	*1.317	*1.079	0.354	0.278			0.355	0.278	2.83

EQUIPMENT

Standard and optional equipment may vary by country, so please consult your Hokuetsu-dealer for details.

● : Standard equipment

ENGINE

Alternator 12V-40A	●
Cartridge-type engine oil filter	●
Fuel main filter	●
Radiator reserve tank	●
Water-separator for engine fuel	●

HYDRAULIC SYSTEM

Full-flow filter	●
Hydraulic pilot type control levers	●
Pilot control shut-off lever with neutral engine start system	●
Pilot filter	●
Suction filter	●
Swing parking brake	●
Travel parking brake	●
Two speed travel system with auto kickdown function	●
Valve for extra piping	●
Auxiliary function lever (AFL)	●

CAB

AM-/FM-radio	●
Anti-slip plate	●
Arm rests	●
Defroster	●
Cup holder	●
Elektric horn	●
Floor mat	●
Heater	●
12V-power outlet	●
Switch and wiring for beacon light	●
Cab complies with ROPS/OPG regulations	●
Seat belt	●
Rear view mirror (right, left side)	●
Suspension seat	●
Window washer	●
Wiper	●
Front window power-assisted with gas damper	●
Tool box	●
Travel pedal	●

LIGHTS

2 working lights on the cab and 1 light on the boom	●
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UPPERSTRUCTURE

Battery 1 X 36 Ah	●
Battery disconnect swithc	●
Counter weight (cabine) 210 kg	●
Pilot accumulator	●

ONDERWAGEN

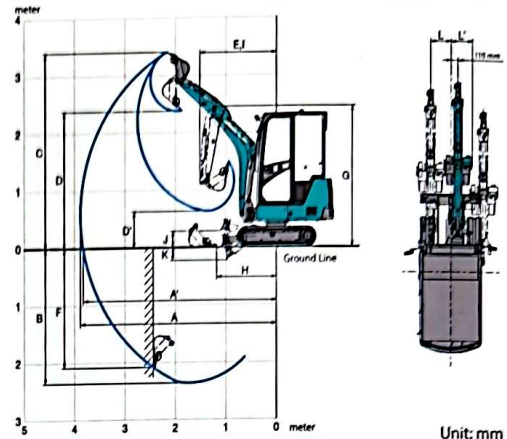
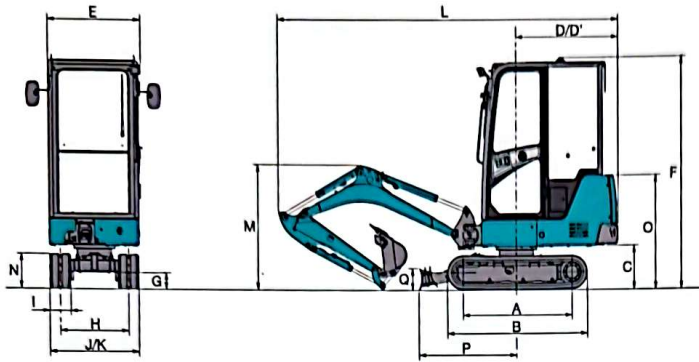
Uitschuifbare onderwagen	●
Rubberen rupsschoen 300 mm	●

HULPSTUKKEN

Graafarm 1.30 m	●
Giek 2.10 m	●
Extra leidingwerk	●
HN-bussen	●

DIMENSIONS AX19-7

WORKING RANGES AX19-7



This illustration shows with 1.08 m arm, 0.044 m³ bucket and 230 mm rubber shoes.

DIMENSIONS	AX19-7	WORKING RANGES	AX19-7
A Distance between tumblers	1 210	A Max. digging reach	3 900
B Undercarriage length	1 570	A' Max. digging reach (on ground)	3 840
C Counterweight clearance	450	B Max. digging depth	2 380
D Rear-end swing radius	680	C Max. cutting height	3 430
D' Rear-end length	680	D Max. dumping height	2 380
E Overall width of upperstructure	990	D' Min. dumping height	630
F Overall height of cab	2 380	E Min. swing radius	1 540
G Min. ground clearance	165	F Max. vertical wall digging depth	2 090
H Track gauge (Retract / Extend)	750 / 1 050	G Front height at Min. swing radius	2 470
I Track shoe width	230	H Min. level crowding distance	1 160
J Undercarriage (Blade) width (Retract / Extend)	980 / 1 280	I Working radius at Min. swing radius (Max. boom-swing angle)	1 250
K Overall width (Retract / Extend)	990 / 1 280	J Blade bottom highest position above ground	230
L Overall length	3 500	K Blade bottom lowest position above ground	260
M Overall height of boom	1 210	L/L' Offset distance	330 / 520
N Track height	360	Max. boom-swing angle (deg.)	70 / 50
O Engine cover-height	1 150		
P Horizontal distance to blade	1 090		
Q Blade height	260		



SAFETY

- Operate safely in accordance with the proper operation manual.
- To prevent troubles and accidents, make sure to perform daily and preventive maintenance checks.

AIRMAN®
HOKUETSU INDUSTRIES EUROPE B.V.

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