

# SPECIFICATIONS

## ENGINE

Model .....	Isuzu AQ-6UZ1X
Type .....	4-cycle water-cooled, common rail direct injection
Aspiration .....	Variable geometry turbocharged, intercooled, cooled EGR
Aftertreatment .....	DOC and SCR system
No. of cylinders .....	6
Rated power	
ISO 14396 .....	270 kW at 2 000 min <sup>-1</sup>
ISO 9249, net .....	270 kW at 2 000 min <sup>-1</sup>
SAE J1349, net .....	270 kW at 2 000 min <sup>-1</sup>
Maximum torque .....	1 435 Nm at 1 500 min <sup>-1</sup>
Piston displacement .....	9.839 L
Bore and stroke .....	120 mm x 145 mm
Batteries .....	2 x 12 V / 170 Ah

## HYDRAULIC SYSTEM

### Hydraulic Pumps

Main pumps .....	2 variable displacement axial piston pumps
Maximum oil flow .....	2 x 400 L/min
Pilot pump .....	1 gear pump
Maximum oil flow .....	34 L/min

### Hydraulic Motors

Travel .....	2 variable displacement axial piston motors
Swing .....	2 axial piston motors

### Relief Valve Settings

Implement circuit .....	31.9 MPa
Swing circuit .....	28.4 MPa
Travel circuit .....	35.3 MPa
Pilot circuit .....	3.9 MPa
Power boost .....	35.3 MPa

### Hydraulic Cylinders

	Quantity	Bore	Rod diameter
Boom	2	170 mm	115 mm
Arm	1	190 mm	130 mm
Bucket	1	170 mm	120 mm

## UPPERSTRUCTURE

### Revolving Frame

D-section frame for resistance to deformation.

### Swing Device

Axial piston motor with planetary reduction gear is bathed in oil. Swing parking brake is spring-set/hydraulic-released disc type.

Swing speed .....	9.5 min <sup>-1</sup>
Swing torque .....	148 kNm

### Operator's Cab

Independent spacious cab, 1 025 mm wide by 1 675 mm high, conforming to ISO\* Standards.

\* International Organization for Standardization

## UNDERCARRIAGE

### Tracks

Track shoes with triple grousers made of induction-hardened rolled alloy. Heat-treated connecting pins with dirt seals. Hydraulic (grease) track adjusters with shock-absorbing recoil springs.

### Numbers of Rollers and Shoes on Each Side

Upper rollers .....	3
Lower rollers .....	9
Track shoes .....	53
Track guards .....	2

### Travel Device

Each track driven by axial piston motor through reduction gear for counterrotation of the tracks. Parking brake is spring-set/hydraulic-released disc type.

Automatic transmission system: High-Low.

Travel speeds .....	High : 0 to 5.5 km/h
	Low : 0 to 3.9 km/h

### Maximum traction

force .....	329 kN
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Gradeability .....	70% (35 degree) continuous
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## SOUND LEVEL

Sound level in cab according to ISO 6396 ..... LpA 71 dB(A)

External sound level according to ISO 6395 and

EU Directive 2000/14/EC ..... LwA 107 dB(A)

## SERVICE REFILL CAPACITIES

Fuel tank .....	675.0 L
Engine coolant .....	62.0 L
Engine oil .....	41.0 L
Swing device (each side) .....	6.5 L
Travel device (each side) .....	11.0 L
Hydraulic system .....	510.0 L
Hydraulic oil tank .....	310.0 L
DEF/AdBlue® tank .....	95.0 L

## WEIGHTS AND GROUND PRESSURE

### Operating Weight and Ground Pressure

Boom type	Arm type	Shoe grouser type	Shoe width	Operating weight	Ground pressure
7.0 m H	3.4 m H	Triple or double	600 mm	49 400 kg	84 kPa
		Triple	750 mm	50 200 kg	68 kPa
		Triple	900 mm	50 900 kg	58 kPa

Including 2.1 m<sup>3</sup> rock bucket (ISO heaped)

Boom type	Arm type	Shoe grouser type	Shoe width	Operating weight	Ground pressure
7.0 m H	2.9 m BE	Triple or double	600 mm	49 300 kg	84 kPa
		Triple	750 mm	50 100 kg	68 kPa
		Triple	900 mm	50 800 kg	57 kPa

Including 2.1 m<sup>3</sup> rock bucket (ISO heaped)

Boom type	Arm type	Shoe grouser type	Shoe width	Operating weight	Ground pressure
6.3 m BE	2.5 m BE	Triple or double	600 mm	49 700 kg	84 kPa
		Triple	750 mm	50 500 kg	68 kPa
		Triple	900 mm	51 200 kg	58 kPa

Including 2.5 m<sup>3</sup> rock bucket (ISO heaped)

Boom type	Arm type	Shoe grouser type	Shoe width	Operating weight	Ground pressure
6.3 m BE	2.9 m BE	Triple or double	600 mm	49 600 kg	84 kPa
		Triple	750 mm	50 400 kg	68 kPa
		Triple	900 mm	51 000 kg	58 kPa

Including 2.5 m<sup>3</sup> rock bucket (ISO heaped)

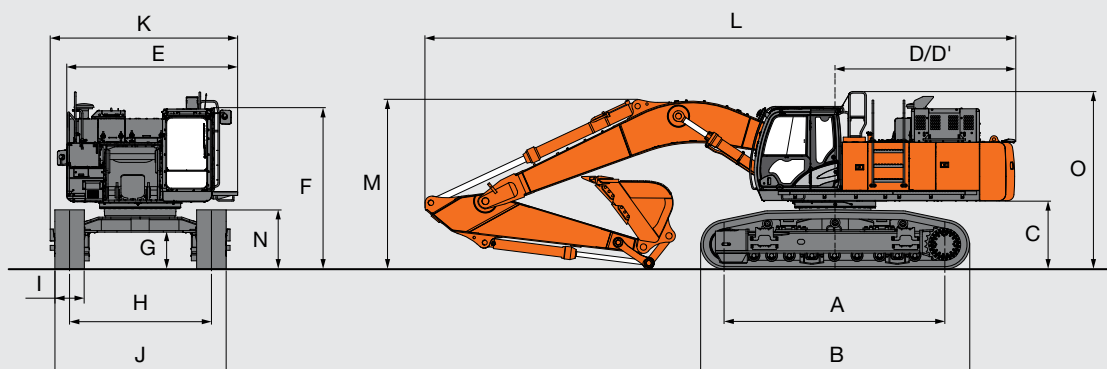
## BUCKET AND ARM DIGGING FORCE

Boom length	ZAXIS 490LCH			
	Boom 6.3 m BE		Boom 7.0 m H	
	Arm 2.5 m BE	Arm 2.9 m BE	Arm 2.9 m BE	Arm 3.4 m H
Bucket digging force* ISO	295 kN			296 kN
Bucket digging force* SAE : PCSA	266 kN			257 kN
Arm crowd force* ISO	302 kN	263 kN		224 kN
Arm crowd force* SAE : PCSA	294 kN	256 kN		215 kN

\* At power boost

# SPECIFICATIONS

## DIMENSIONS



Unit: mm

	ZAXIS 490LCH <sup>2</sup>		
A Distance between tumblers	4 470		
B Undercarriage length	5 470		
<sup>1</sup> C Counterweight clearance	1 360		
D Rear-end swing radius	3 670		
D' Rear-end length	3 660		
E Overall width of upperstructure	3 480		
F Overall height of cab	3 330		
<sup>1</sup> G Min. ground clearance	737		
H Track gauge : Extended / Retracted	2 890 / 2 390		
I Track shoe width	G 600		
J Undercarriage width : Extended / Retracted	G 600 3 490 / 2 990	G 750 3 640 / 3 140	G 900 3 790 / 3 290
K Overall width	3 820		
L Overall length	12 010		
M Overall height of boom	3 480		
N Track height	1 220		
O Overall height of base machine	3 530		

<sup>1</sup> Excluding track shoe lug G: Grouser shoe

<sup>2</sup> Equipped with H-boom 7.8 m and H-arm 3.4 m

## Backhoe Buckets

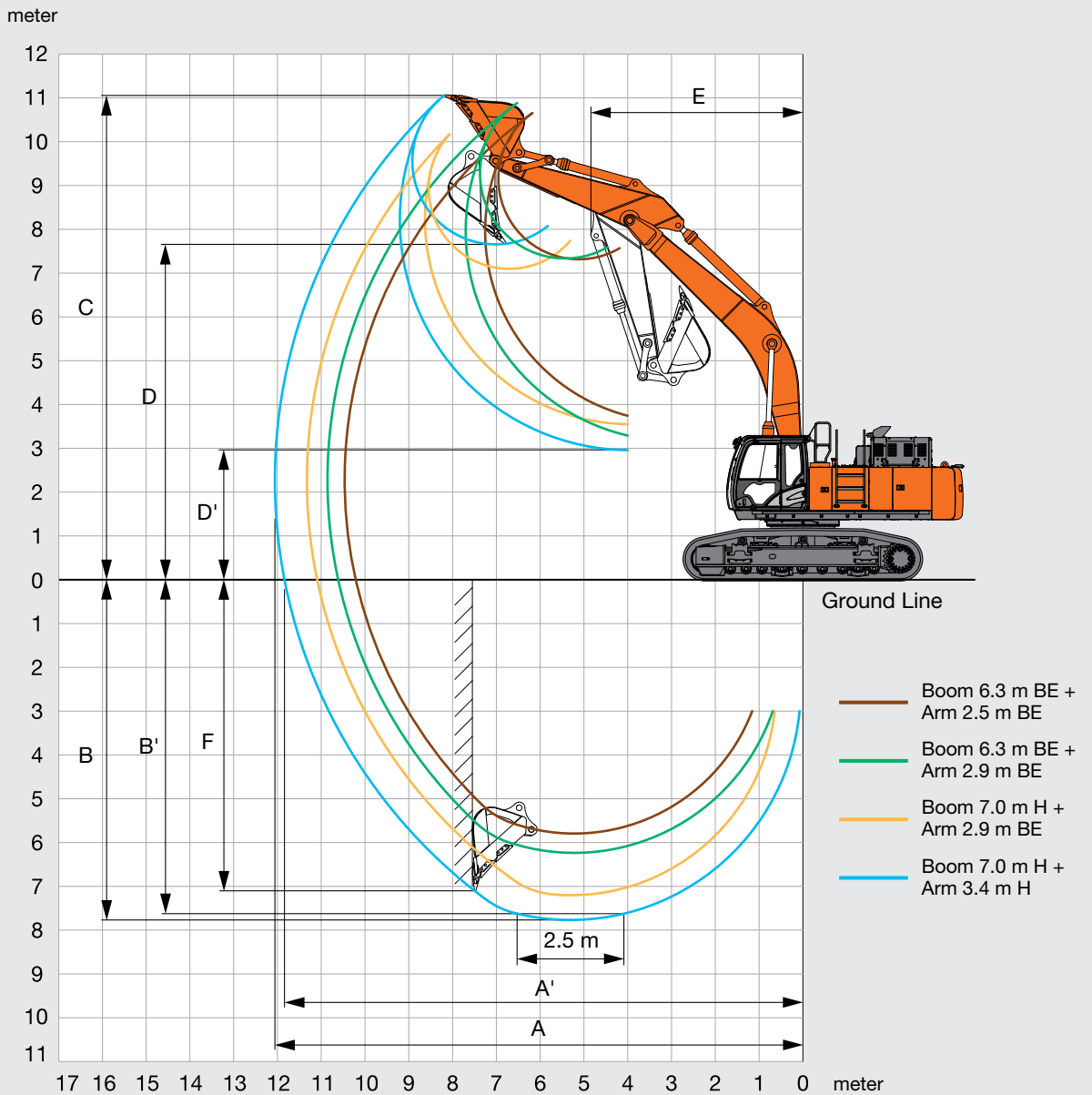
Capacity		Width		No. of teeth	Weight	Recommendation			
						ZAXIS 490LCH			
ISO heaped	CECE heaped	Without side cutters	With side cutters			Boom 6.3 m BE		Boom 7.0 m H	
						Arm 2.5 m BE	Arm 2.9 m BE	Arm 2.9 m BE	Arm 3.4 m H
<sup>1</sup> 1.9 m <sup>3</sup>	1.7 m <sup>3</sup>	1 480 mm	1 500 mm	5	2 070 kg	●	●	●	●
<sup>1</sup> 2.1 m <sup>3</sup>	1.8 m <sup>3</sup>	1 560 mm	1 580 mm	5	2 170 kg	●	●	●	●
<sup>1</sup> 2.3 m <sup>3</sup>	2.0 m <sup>3</sup>	1 680 mm	1 700 mm	5	2 260 kg	●	●	–	–
<sup>1</sup> 2.5 m <sup>3</sup>	2.2 m <sup>3</sup>	1 800 mm	1 820 mm	5	2 360 kg	●	●	–	–
<sup>2</sup> 1.3 m <sup>3</sup>	1.2 m <sup>3</sup>	1 170 mm	–	3	2 330 kg	●	●	●	●
One-point ripper				1	1 260 kg	●	●	●	●

<sup>1</sup> Rock bucket ● Heavy-duty service

<sup>2</sup> Ripper bucket – Not applicable

● Heavy-duty service  
– Not applicable

## WORKING RANGES



Unit: mm

Arm length	ZAXIS 490LCH			
	Boom 6.3 m BE		Boom 7.0 m H	
	Arm 2.5 m BE	Arm 2.9 m BE	Arm 2.9 m BE	Arm 3.4 m H
A Max. digging reach	10 460	10 750	11 330	12 060
A' Max. digging reach (on ground)	10 210	10 500	11 090	11 840
B Max. digging depth	5 790	6 130	7 200	7 770
B' Max. digging depth for 2.5 m level	5 620	5 970	7 000	7 630
C Max. cutting height	10 660	10 790	10 170	11 060
D Max. dumping height	7 320	7 440	7 100	7 650
D' Min. dumping height	3 670	3 250	3 520	2 940
E Min. swing radius	4 090	3 930	5 020	4 840
F Max. vertical wall	4 260	4 650	4 270	7 100

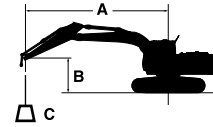
Excluding track shoe lug

# LIFTING CAPACITIES

Notes: 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.

For lifting capacities, subtract bucket and quick hitch weight from lifting capacities.



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

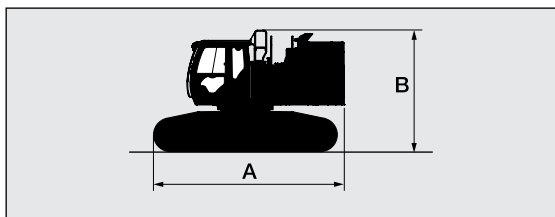
## ZAXIS 490LCH

Rating over-front Rating over-side or 360 degrees Unit : kg

Conditions	Load point height m	Load radius										At max. reach		
		3.0 m		4.5 m		6.0 m		7.5 m		9.0 m				meter
Boom 7.0 m H Arm 3.4 m H Counterweight 9 080 kg Shoe 600 mm	7.5							*11 640	11 460			*7 710	*7 710	8.7
	6.0							*12 260	11 200	*10 920	8 330	*7 590	*7 590	9.4
	4.5			*20 820	*20 820	*15 830	15 090	*13 320	10 790	*11 870	8 150	*7 690	6 960	9.9
	3.0			*23 560	21 480	*18 040	14 220	*14 500	10 330	*12 460	7 900	*8 010	6 580	10.1
	1.5			*15 310	*15 310	*19 670	13 540	*15 480	9 930	12 250	7 680	*8 580	6 470	10.1
	0 (Ground)			*18 350	*18 350	*20 330	13 130	15 800	9 650	12 070	7 510	*9 490	6 600	9.9
	-1.5	*13 430	*13 430	*25 370	20 030	*19 970	12 990	15 650	9 520	12 010	7 460	*10 970	7 030	9.4
	-3.0	*21 880	*21 880	*23 700	20 220	*18 540	13 040	*14 650	9 560			*11 900	7 940	8.7
	-4.5	*24 740	*24 740	*19 780	*19 780	*15 620	13 310	*11 580	9 830			*11 530	9 800	7.5
Boom 7.0 m H Arm 2.9 m BE Counterweight 9 080 kg Shoe 600 mm	7.5													
	6.0					*14 570	*14 570	*12 840	11 000			*11 040	8 600	8.7
	4.5			*22 370	*22 370	*16 570	14 740	*13 800	10 590	*12 260	8 000	*11 440	7 690	9.2
	3.0					*18 690	13 880	*14 850	10 140	12 380	7 780	*11 450	7 210	9.5
	1.5					*19 900	13 260	*15 650	9 770	12 150	7 580	*11 290	7 060	9.5
	0 (Ground)			*19 760	*19 760	*20 190	12 940	15 670	9 530	12 010	7 450	*11 630	7 230	9.2
	-1.5	*16 120	*16 120	*24 850	19 920	*19 480	12 870	*15 470	9 460			12 600	7 790	8.7
	-3.0	*26 480	*26 480	*22 100	20 200	*17 640	13 010	*13 860	9 570			*12 940	9 010	7.9
	-4.5			*17 630	*17 630	*14 010	13 390					*12 430	11 780	6.6
Boom 6.3 m BE Arm 2.9 m BE Counterweight 9 080 kg Shoe 600 mm	7.5					*14 000	*14 000					*7 980	*7 980	7.2
	6.0					*14 870	*14 870	*13 590	11 090			*7 750	*7 750	8.1
	4.5			*21 170	*21 170	*16 610	15 200	*14 290	10 790			*7 850	*7 850	8.6
	3.0			*25 410	21 960	*18 590	14 400	*15 220	10 410			*8 230	8 060	8.9
	1.5			*27 710	20 810	*20 070	13 750	*15 990	10 050			*8 940	7 910	8.9
	0 (Ground)			*27 650	20 400	*20 550	13 370	16 010	9 820			*10 170	8 140	8.6
	-1.5	*24 230	*24 230	*25 930	20 400	*19 780	13 270	*15 400	9 770			*12 350	8 900	8.1
	-3.0	*28 670	*28 670	*22 490	20 680	*17 350	13 420					*13 630	10 600	7.2
	-4.5													
Boom 6.3 m BE Arm 2.5 m BE Counterweight 9 080 kg Shoe 600 mm	7.5					*14 660	*14 660					*12 280	*12 280	6.8
	6.0					*15 410	*15 410	*14 050	10 900			*11 890	10 260	7.8
	4.5			*22 060	*22 060	*17 050	14 930	*14 590	10 620			*12 020	8 980	8.3
	3.0					*18 890	14 150	*15 410	10 250			*12 600	8 360	8.6
	1.5					*20 170	13 530	*16 030	9 920			13 150	8 200	8.6
	0 (Ground)			*27 110	20 200	*20 370	13 210	15 910	9 720			13 680	8 480	8.3
	-1.5			*24 990	20 290	*19 290	13 170	*14 860	9 730			*14 110	9 350	7.7
	-3.0			*21 130	20 650	*16 350	13 400					*13 640	11 370	6.8
	-4.5													
Boom 7.0 m BE Arm 3.4 m H Counterweight 9 080 kg Shoe 600 mm	7.5							*11 640	*11 640			*7 710	*7 710	8.7
	6.0							*12 260	11 480	*10 920	8 560	*7 590	*7 590	9.4
	4.5			*20 820	*20 820	*15 830	15 460	*13 320	11 070	*11 870	8 370	*7 690	7 160	9.9
	3.0			*23 560	22 050	*18 040	14 600	*14 500	10 610	*12 460	8 130	*8 010	6 780	10.1
	1.5			*15 310	*15 310	*19 670	13 910	*15 480	10 210	12 630	7 900	*8 580	6 660	10.1
	0 (Ground)			*18 350	*18 350	*20 330	13 510	*15 980	9 930	12 450	7 740	*9 490	6 800	9.9
	-1.5	*13 430	*13 430	*25 370	20 590	*19 970	13 360	*15 790	9 800	12 380	7 680	*10 970	7 250	9.4
	-3.0	*21 880	*21 880	*23 700	20 790	*18 540	13 420	*14 650	9 840			*11 900	8 180	8.7
	-4.5	*24 740	*24 740	*19 780	*19 780	*15 620	13 680	*11 580	10 110			*11 530	10 090	7.5

# TRANSPORTATION

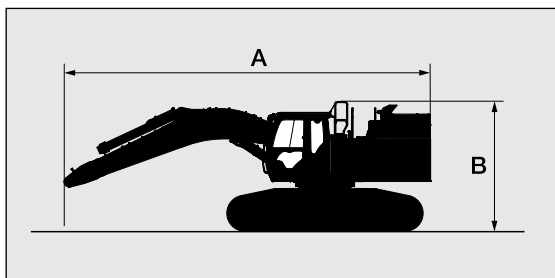
## BASIC MACHINE (WITHOUT COUNTERWEIGHT)



Shoe width	A	B	Overall width <sup>1</sup>	Weight
600 mm	5 690 mm	3 530 mm	2 990 mm	29 400 kg
750 mm			3 140 mm	30 200 kg
900 mm			3 290 mm	30 900 kg

<sup>1</sup> Undercarriage retracted

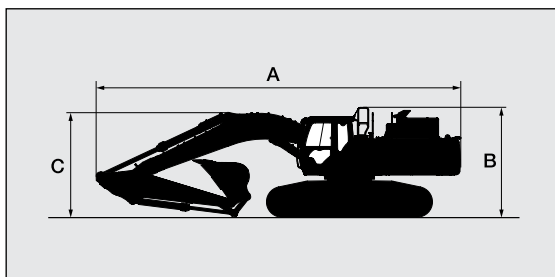
## BASIC MACHINE FITTED WITH BOOM AND NO SIDEWALK



Boom length	Shoe width	A	B	Overall width <sup>1</sup>	Weight
6.3 m BE	600 mm	9 150 mm	3 530 mm	2 990 mm	34 800 kg
	750 mm			3 140 mm	35 600 kg
	900 mm			3 290 mm	36 300 kg
7.0 m H	600 mm	9 910 mm	3 530 mm	2 990 mm	34 700 kg
	750 mm			3 140 mm	35 500 kg
	900 mm			3 290 mm	36 200 kg

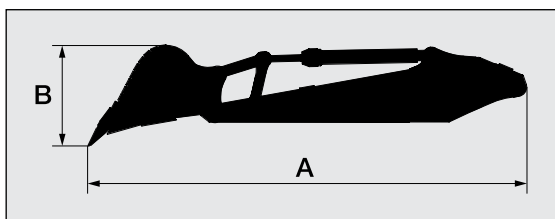
<sup>1</sup> Undercarriage retracted

## BASIC MACHINE FITTED WITH FRONT AND SIDEWALK



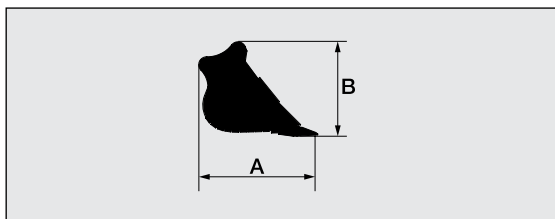
Boom length	6.3 m BE		7.0 m H	
	2.5 m BE	2.9 m BE	2.9 m BE	3.4 m H
Arm length				
A	11 660 mm	11 320 mm	12 100 mm	12 010 mm
B	3 530 mm			
C	4 300 mm	3 740 mm	3 600 mm	3 480 mm

## ARM AND BUCKET



Arm	Bucket		A	B	Overall width	Weight
	ISO heaped	CECE heaped				
2.5 BE	2.5 m <sup>3</sup>	2.2 m <sup>3</sup>	5 650 mm	1 470 mm	1 820 mm	5 000 kg
2.9 BE	2.3 m <sup>3</sup>	2.0 m <sup>3</sup>	6 030 mm	1 340 mm	1 700 mm	4 800 kg
3.4 H	1.9 m <sup>3</sup>	1.7 m <sup>3</sup>	6 370 mm	1 470 mm	1 500 mm	4 800 kg

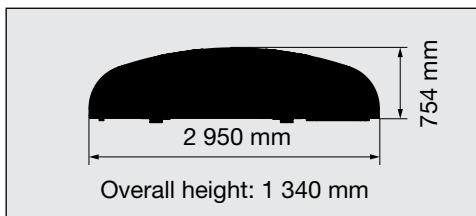
## BUCKET



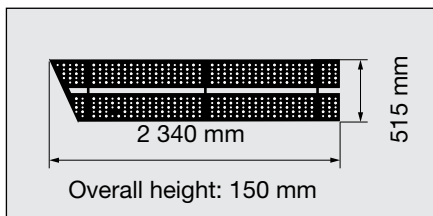
Rock bucket

Bucket		A	B	Overall width	Weight
ISO heaped	CECE heaped				
1.9 m <sup>3</sup>	1.7 m <sup>3</sup>	2 030 mm	1 480 mm	1 500 mm	2 070 kg
2.1 m <sup>3</sup>	1.8 m <sup>3</sup>	1 950 mm	1 650 mm	1 580 mm	2 170 kg
2.3 m <sup>3</sup>	2.0 m <sup>3</sup>	1 950 mm	1 650 mm	1 700 mm	2 260 kg
2.5 m <sup>3</sup>	2.2 m <sup>3</sup>	1 950 mm	1 650 mm	1 820 mm	2 360 kg

## COUNTERWEIGHT 9 080 kg



## LEFT FRONT SIDEWALK 44 kg



## LEFT REAR SIDEWALK 30 kg

