

230G W



Engine		230G W	
Manufacturer and Model	Isuzu 4HK1		
Non-Road Emission Standard	EPA Interim Tier 4/EU Stage IIIB		
Cylinders	4		
Displacement	5.2 L (317 cu. in.)		
Net Peak Power (ISO 9249)	119 kW (159 hp) at 2,000 rpm		
Off-Level Capacity	60% (31 deg.)		
Aspiration	Turbocharged, air-to-air charge-air cooler		
Cooling			
High-efficiency, direct-drive suction-type fan			
Powertrain			
2-speed propel with creeper mode and automatic shift			
Maximum Travel Speed			
Creeper	2.9 km/h (1.8 mph)		
Low	7.4 km/h (4.6 mph)		
High	27.5 km/h (17.1 mph)		
Front Axle			
All-wheel drive; can be locked hydraulically in any position			
Oscillation	± 6 deg.		
Brakes			
Maintenance-free wet-disc brakes on front and rear axles; fully hydraulic service brakes			
Tires			
Standard size, dual-traction-type 11.00-20 16PR tires			
Drawbar Pull	11 115 kgf (24,504 lbf)		
Hydraulics			
Main Pumps			
2 variable-displacement axial-piston pumps			
Pump Flow, Maximum x 2	189 L/min. (49.9 gpm)		
System Operating Pressure			
Implement Circuits	34 300 kPa (4,975 psi)		
Travel Circuits	35 300 kPa (5,120 psi)		
Swing Circuits	30 200 kPa (4,380 psi)		
Power Boost	38 000 kPa (5,511 psi)		
Controls			
Pilot levers, short stroke, low-effort hydraulic pilot controls with shutoff lever			
Cylinders			
	<i>Bore</i>	<i>Rod Diameter</i>	<i>Stroke</i>
Monoblock Boom (2)	125 mm (4.9 in.)	85 mm (3.4 in.)	1241 mm (48.9 in.)
2-Piece Boom (2)	130 mm (5.1 in.)	85 mm (3.4 in.)	1024 mm (40.3 in.)
Positioning, 2-Piece Boom (2)	180 mm (7.1 in.)	110 mm (4.3 in.)	680 mm (26.8 in.)
Arm (1)	135 mm (5.3 in.)	95 mm (3.7 in.)	1475 mm (58.1 in.)
Bucket (1)	115 mm (4.5 in.)	80 mm (3.2 in.)	1060 mm (41.7 in.)
Electrical			
Voltage	24 volt		
Number of Batteries (12 volt)	2		
Alternator Rating	50 amp		
Lights (6)	Headlights (2), top of cab (2), rear of cab (1), and boom (1)		
Driving Lights	Headlights (2), turn signals and hazard lights, brake lights, and side marker lights		
Swing Mechanism			
Speed	11.2 rpm		
Torque	61 500 Nm (45,360 lb.-ft.)		
Serviceability			
Refill Capacities			
Fuel Tank	400 L (105.7 gal.)		
Engine Coolant	25 L (6.6 gal.)		
Engine Oil with Filter	23 L (6.1 gal.)		
Hydraulic Tank	130 L (34.3 gal.)		
Hydraulic System	270 L (71.3 gal.)		
Swing Drive	6.2 L (6.6 qt.)		
Transmission	2.5 L (2.6 qt.)		



Serviceability (continued) 230G W

Refill Capacities (continued)

Differential Gear	
Front	11 L (2.9 gal.)
Rear	14.5 L (3.8 gal.)
Front and Rear Hubs	2.5 L x 2 (2.6 qt. x 2)

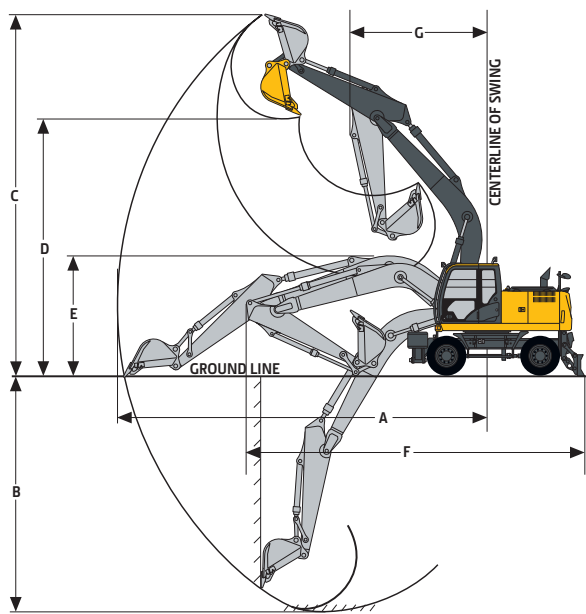
Operating Weights

With full fuel tank; 79-kg (175 lb.) operator; 0.8-m³ (1.04 cu. yd.), 900-mm (35 in.), 660-kg (1,455 lb.) general-purpose bucket; 2.91-m (9 ft. 7 in.) arm; standard gauge; and 4500-kg (9,921 lb.) counterweight

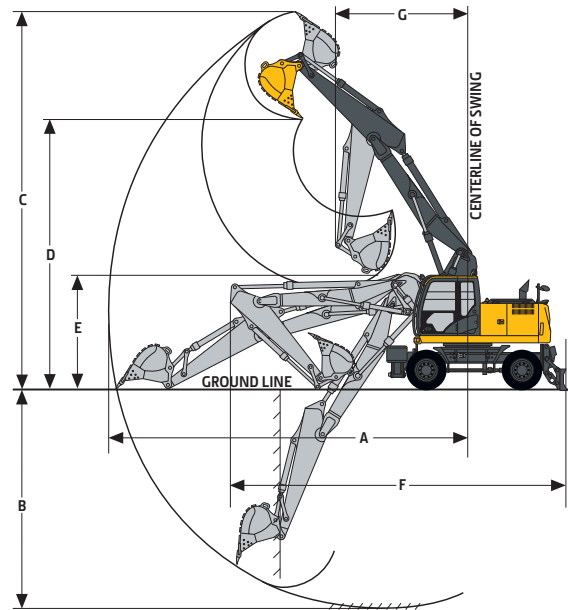
	<i>Monoblock Boom</i>	<i>2-Piece Boom</i>
Front Outrigger and Rear Outrigger	23 600 kg (52,030 lb.)	24 140 kg (53,220 lb.)
Front Blade and Rear Outrigger	23 290 kg (51,350 lb.)	23 830 kg (52,540 lb.)

Operating Dimensions

	<i>Monoblock Boom</i>	<i>2-Piece Boom</i>
Arm Digging Force		
SAE	110 kN (24,729 lb.)	110 kN (24,729 lb.)
ISO	114 kN (25,628 lb.)	114 kN (25,628 lb.)
Bucket Digging Force		
SAE	141 kN (31,698 lb.)	141 kN (31,698 lb.)
ISO	158 kN (35,520 lb.)	158 kN (35,520 lb.)
A Maximum Reach	10.28 m (33 ft. 9 in.)	10.03 m (32 ft. 11 in.)
B Maximum Digging Depth	6.31 m (20 ft. 8 in.)	6.14 m (20 ft. 2 in.)
C Maximum Cutting Height	10.25 m (33 ft. 7 in.)	10.36 m (34 ft. 0 in.)
D Maximum Dumping Height	7.38 m (24 ft. 3 in.)	7.43 m (24 ft. 5 in.)
E Overall Height	3.19 m (10 ft. 6 in.)	3.32 m (10 ft. 11 in.)
F Overall Length		
Front Outrigger and Rear Outrigger	9.96 m (32 ft. 8 in.)	9.64 m (31 ft. 7 in.)
Front Blade and Rear Outrigger	9.96 m (32 ft. 8 in.)	9.64 m (31 ft. 7 in.)
G Minimum Swing Radius	3.55 m (11 ft. 8 in.)	3.42 m (11 ft. 3 in.)



230G W EXCAVATOR WITH MONOBLOCK BOOM



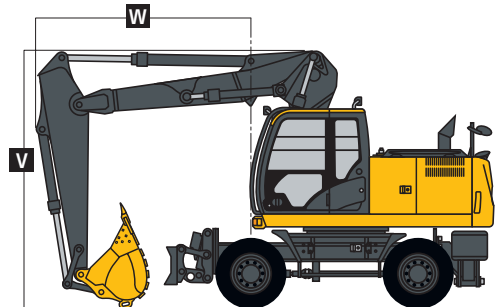
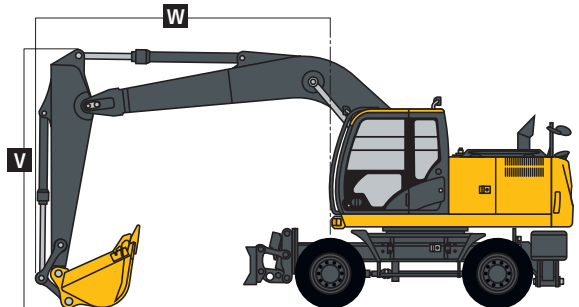
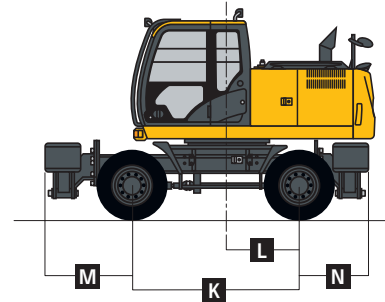
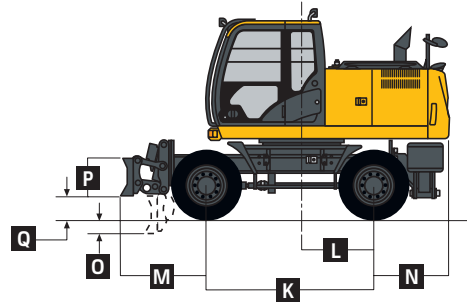
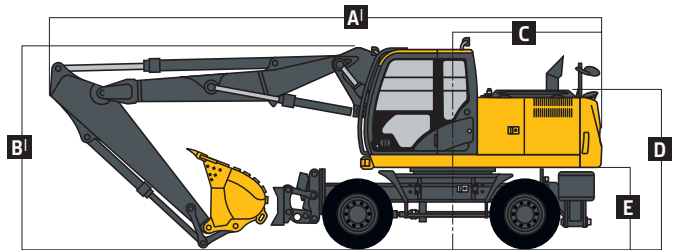
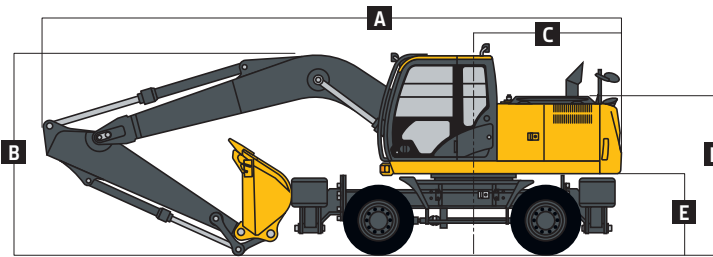
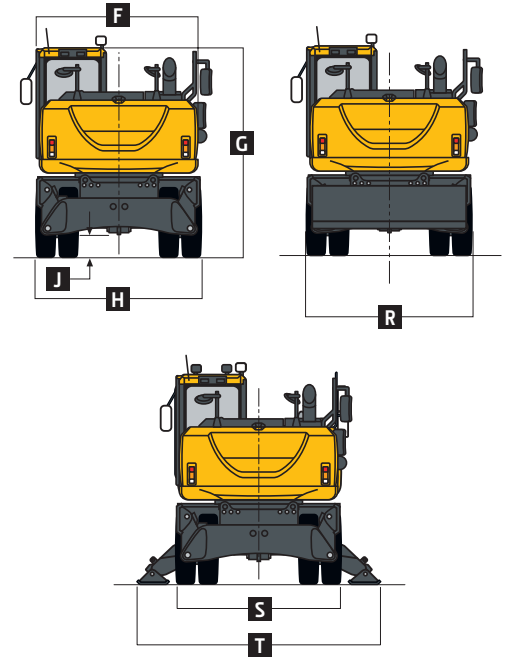
230G W EXCAVATOR WITH 2-PIECE BOOM

Machine Dimensions

230G W

With standard gauge and 2.91-m (9 ft. 7 in.) arm; dimensions are provided for both the front and rear outrigger configuration, and for the front blade and rear outrigger configuration

	<i>Monoblock Boom</i>	<i>2-Piece Boom</i>
A Overall Length	9.96 m (32 ft. 8 in.)	—
A' Overall Length	—	9.64 m (31 ft. 8 in.)
B Overall Height	3.19 m (10 ft. 6 in.)	—
B' Overall Height	—	3.32 m (10 ft. 11 in.)
C Rear-End Swing Radius	2.89 m (9 ft. 6 in.)	2.89 m (9 ft. 6 in.)
D Engine Cover Height	2.64 m (8 ft. 8 in.)	2.64 m (8 ft. 8 in.)
E Counterweight Clearance	1.25 m (4 ft. 1 in.)	1.25 m (4 ft. 1 in.)
F Overall Width of Upperstructure	2.73 m (8 ft. 11 in.)	2.73 m (8 ft. 11 in.)
G Overall Height of Cab	3.19 m (10 ft. 6 in.)	3.19 m (10 ft. 6 in.)
H Overall Width of Tires	2.75 m (9 ft. 0 in.)	2.75 m (9 ft. 0 in.)
J Minimum Ground Clearance	0.35 m (13.6 in.)	0.35 m (13.6 in.)
K Wheelbase	2.75 m (9 ft. 0 in.)	2.75 m (9 ft. 0 in.)
L Swing Center to Rear Axle	1.35 m (4 ft. 5 in.)	1.35 m (4 ft. 5 in.)
M Front Overhang		
Front Outrigger and Rear Outrigger	1.38 m (4 ft. 6 in.)	1.38 m (4 ft. 6 in.)
Front Blade and Rear Outrigger	1.34 m (4 ft. 5 in.)	1.34 m (4 ft. 5 in.)
N Rear Overhang	1.09 m (3 ft. 7 in.)	1.09 m (3 ft. 7 in.)
O Maximum Blader Lower	0.21 m (8.3 in.)	0.21 m (8.3 in.)
P Overall Height of Blade	0.60 m (23.6 in.)	0.60 m (23.6 in.)
Q Maximum Blade Raise	0.38 m (14.8 in.)	0.38 m (14.8 in.)
R Overall Width of Blade	2.73 m (8 ft. 11 in.)	2.73 m (8 ft. 11 in.)
S Overall Width with Outrigger Retracted	2.74 m (9 ft. 0 in.)	2.74 m (9 ft. 0 in.)
T Overall Width with Outrigger Extended	3.91 m (12 ft. 10 in.)	3.91 m (12 ft. 10 in.)
V Overall Height of Boom (traveling)	3.98 m (13 ft. 1 in.)	3.98 m (13 ft. 1 in.)
W Front Overhang (traveling)	3.49 m (11 ft. 5 in.)	3.49 m (11 ft. 5 in.)



Lift Capacities 230G W

Boldface type indicates hydraulically limited capacities; **lightface type** indicates stability-limited capacities, in kg (lb.). Ratings at bucket lift hook; machine equipped with 666-kg (1,468 lb.) bucket, 2.91-m (9 ft. 7 in.) arm, and standard counterweight; and situated on firm, level, uniform supporting surface. Figures do not exceed 87% of hydraulic capacity or 75% of weight needed to tip machine.

Load Point Height	1.5 m (5 ft.)		3.0 m (10 ft.)		4.5 m (15 ft.)		6.0 m (20 ft.)		7.5 m (25 ft.)		
	Horizontal Distance from Centerline of Rotation		Over Front	Over Side	Over Front	Over Side	Over Front	Over Side	Over Front	Over Side	
<i>With monoblock boom, rear outriggers, and front blade down</i>											
6.0 m (20 ft.)								5250 (11,490)	5250 (11,490)	4460 (8,700)	4460 (8,700)
4.5 m (15 ft.)					7340 (15,750)	7340 (15,750)	6080 (13,190)	6080 (13,190)	5490 (11,990)	5490 (11,990)	4530 (9,720)
3.0 m (10 ft.)					10 010 (21,440)	10 010 (21,440)	7260 (15,690)	6310 (13,580)	6030 (13,100)	6030 (13,100)	4390 (9,450)
1.5 m (5 ft.)					12 130 (26,120)	9500 (20,440)	8360 (18,070)	6040 (13,000)	6580 (14,180)	6580 (14,180)	4260 (9,160)
Ground Line					12 910 (27,900)	9260 (19,890)	9020 (19,500)	5870 (12,620)	6490 (13,950)	6490 (13,950)	4160 (8,960)
-1.5 m (-5 ft.)			7790 (17,710)	7790 (17,710)	12 610 (27,290)	9220 (19,800)	9040 (19,540)	5810 (12,490)	6460 (13,890)	6460 (13,890)	4130 (8,900)
-3.0 m (-10 ft.)			13 470 (30,720)	13 470 (30,720)	11 360 (24,520)	9320 (20,020)	8230 (17,690)	5860 (12,610)			
-4.5 m (-15 ft.)					8620 (18,240)	8620 (18,240)					
<i>With monoblock boom and 4 outriggers down</i>											
6.0 m (20 ft.)								5250 (11,490)	5250 (11,490)	4460 (8,700)	4460 (8,700)
4.5 m (15 ft.)					7340 (15,750)	7340 (15,750)	6080 (13,190)	6080 (13,190)	5490 (11,990)	5490 (11,990)	5290 (11,370)
3.0 m (10 ft.)					10 010 (21,440)	10 010 (21,440)	7260 (15,690)	7260 (15,690)	6030 (13,100)	6030 (13,100)	5160 (11,090)
1.5 m (5 ft.)					12 130 (26,120)	11 440 (24,570)	8360 (18,070)	7140 (15,370)	6580 (14,270)	6580 (14,270)	5020 (10,800)
Ground Line					12 910 (27,900)	11 180 (23,980)	9020 (19,500)	6960 (14,980)	6730 (14,470)	6730 (14,470)	4920 (10,580)
-1.5 m (-5 ft.)			7790 (17,710)	7790 (17,710)	12 610 (27,290)	11 140 (23,890)	9040 (19,540)	6900 (14,840)	6700 (14,420)	6700 (14,420)	4890 (10,530)
-3.0 m (-10 ft.)			13 470 (30,720)	13 470 (30,720)	11 360 (24,520)	11 250 (24,120)	8230 (17,690)	6950 (14,960)			
-4.5 m (-15 ft.)					8620 (18,240)	8620 (18,240)					
<i>With 2-piece boom, rear outriggers, and front blade down</i>											
7.5 m (25 ft.)								4340 (7,850)	4340 (7,850)		
6.0 m (20 ft.)								5560 (12,100)	5560 (12,100)		
4.5 m (15 ft.)					6660 (14,390)	6660 (14,390)	6330 (13,770)	6330 (13,770)	5180 (10,650)	5180 (10,650)	4700 (10,060)
3.0 m (10 ft.)			11 090 (24,530)	11 090 (24,530)	9610 (20,660)	9610 (20,660)	7310 (15,840)	6690 (14,410)	6210 (13,540)	6210 (13,540)	4690 (10,020)
1.5 m (5 ft.)			13 990 (30,920)	13 990 (30,920)	11 700 (25,220)	10 290 (22,130)	8320 (18,010)	6630 (14,290)	6660 (14,460)	6660 (14,460)	4600 (9,840)
Ground Line	8310 (18,590)	8310 (18,590)	16 790 (36,730)	16 790 (36,730)	12 710 (27,490)	10 320 (22,180)	8980 (19,450)	6660 (14,340)	6820 (14,610)	6820 (14,610)	4470 (9,570)
-1.5 m (-5 ft.)	13 890 (31,150)	13 890 (31,150)	20 290 (44,280)	20 290 (44,280)	12 880 (27,880)	10 570 (22,690)	9160 (19,830)	6490 (13,910)	6690 (14,150)	6690 (14,150)	4340 (9,290)
-3.0 m (-10 ft.)	22 540 (51,050)	22 540 (51,050)	21 550 (46,640)	21 550 (46,640)	13 250 (28,770)	10 370 (22,180)	9010 (19,160)	6250 (13,400)			
-4.5 m (-15 ft.)	31 020 (69,820)	31 020 (69,820)	19 540 (41,120)	19 540 (41,120)							

Lift Capacities (continued) 230G W

Boldface type indicates hydraulically limited capacities; **lightface type** indicates stability-limited capacities, in kg (lb.). Ratings at bucket lift hook; machine equipped with 666-kg (1,468 lb.) bucket, 2.91-m (9 ft. 7 in.) arm, and standard counterweight; and situated on firm, level, uniform supporting surface. Figures do not exceed 87% of hydraulic capacity or 75% of weight needed to tip machine.

Load Point Height	1.5 m (5 ft.)		3.0 m (10 ft.)		4.5 m (15 ft.)		6.0 m (20 ft.)		7.5 m (25 ft.)	
	Over Front	Over Side	Over Front	Over Side	Over Front	Over Side	Over Front	Over Side	Over Front	Over Side
<i>With 2-piece boom and 4 outriggers down</i>										
7.5 m (25 ft.)							4340	4340		
							(7,850)	(7,850)		
6.0 m (20 ft.)							5560	5560		
							(12,100)	(12,100)		
4.5 m (15 ft.)					6660	6660	6330	6330	5180	5180
					(14,390)	(14,390)	(13,770)	(13,770)	(10,650)	(10,650)
3.0 m (10 ft.)			11 090	11 090	9610	9610	7310	7310	6210	5440
			(24,530)	(24,530)	(20,660)	(20,660)	(15,840)	(15,840)	(13,540)	(11,640)
1.5 m (5 ft.)			13 990	13 990	11 700	11 700	8320	7600	6660	5360
			(30,920)	(30,920)	(25,220)	(25,220)	(18,010)	(16,370)	(14,460)	(11,480)
Ground Line	8310	8310	16 790	16 790	12 710	11 930	8980	7640	6970	5240
	(18,590)	(18,590)	(36,730)	(36,730)	(27,490)	(25,640)	(19,450)	(16,460)	(15,050)	(11,210)
-1.5 m (-5 ft.)	13 890	13 890	20 290	20 290	12 880	12 130	9160	7610	6810	5100
	(31,150)	(31,150)	(44,280)	(44,280)	(27,880)	(26,080)	(19,830)	(16,300)	(14,150)	(10,930)
-3.0 m (-10 ft.)	22 540	22 540	21 550	21 550	13 250	12 370	9010	7370		
	(51,050)	(51,050)	(46,640)	(46,640)	(28,770)	(26,440)	(19,160)	(15,810)		
-4.5 m (-15 ft.)	31 020	31 020	19 540	19 540						
	(69,820)	(69,820)	(41,120)	(41,120)						

Buckets
230G W

A full line of buckets is offered to meet a wide variety of applications. Digging forces are with power boost. Buckets are equipped with John Deere TK-Series Bucket Teeth standard. Replaceable cutting edges and a variety of teeth are available through John Deere Parts. Optional side cutters add 150 mm (6 in.) to bucket widths. Capacities are SAE heaped ratings.

Type Bucket	Bucket Width		Bucket Capacity		Bucket Weight		Bucket Dig Force		Arm Dig Force, 2.91 m (9 ft. 7 in.)		Bucket Tip Radius		Number of Teeth
	mm	in.	m ³	cu. yd.	kg	lb.	kN	lb.	kN	lb.	mm	in.	
General-Purpose High-Capacity	762	30	0.60	0.79	650	1,432	153.5	34,517	110.6	24,855	1473	58.00	4
	914	36	0.76	1.00	735	1,621	153.2	34,450	110.6	24,855	1473	58.00	5
	1067	42	0.93	1.22	812	1,790	153.2	34,450	110.6	24,855	1473	58.00	5
	1219	48	1.09	1.43	896	1,976	153.5	34,517	110.6	24,855	1473	58.00	6
Heavy-Duty	610	24	0.40	0.52	543	1,197	154.6	34,758	110.8	24,913	1463	57.61	4
	762	30	0.54	0.71	621	1,369	154.6	34,751	110.8	24,913	1463	57.61	4
	914	36	0.69	0.90	707	1,559	154.6	34,751	110.8	24,913	1463	57.61	5
	1067	42	0.83	1.09	785	1,731	154.6	34,751	110.8	24,913	1463	57.61	5
	1219	48	0.99	1.29	871	1,921	154.6	34,751	110.8	24,913	1463	57.61	6
Heavy-Duty High-Capacity	610	24	0.43	0.56	646	1,424	153.5	34,517	110.6	24,855	1473	58.00	4
	762	30	0.58	0.76	723	1,593	153.5	34,517	110.6	24,855	1473	58.00	4
	914	36	0.74	0.97	808	1,782	153.5	34,517	110.6	24,855	1473	58.00	5
	1067	42	0.91	1.19	885	1,951	153.5	34,517	110.6	24,855	1473	58.00	5
	1219	48	1.06	1.39	970	2,139	153.5	34,517	110.6	24,855	1473	58.00	6
Ditching	1524	60	0.87	1.14	577	1,271	214.0	48,102	122.2	27,463	1057	41.62	0
General-Purpose High-Capacity	1219	48	1.09	1.43	577	1,271	153.5	34,517	110.6	24,855	1473	57.99	6