

SNS BUCKET

- General Purpose Bucket
- Heavy Duty Bucket
- Extra Heavy Duty Bucket
- Ditch Cleaning Bucket
- Ripper Bucket
- Sand Bucket
- Rock Digging Bucket
- Skeleton Bucket



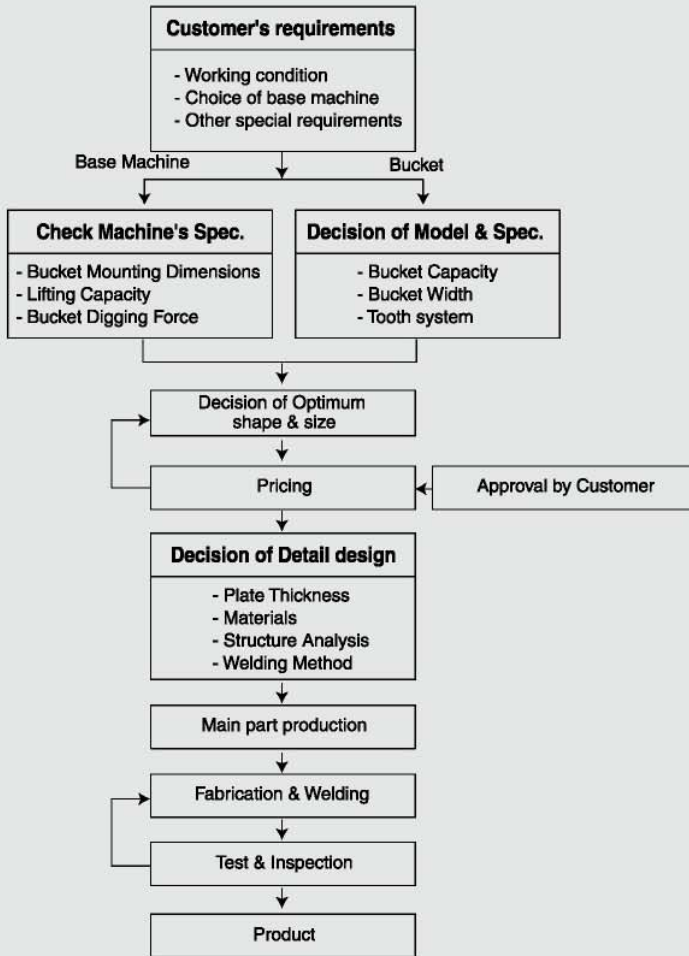
Sun & Shield
<http://www.i-sns.com>

Product Managing System

■ Consultation with Customer

Any kind of inquiries are always welcome. We try to find out solution to customer's requirements and provide the most suitable modification or new production according to the customer's intents & budget. We are always ready for high quality services corresponding to customer's request & need for each complicated & diverse working condition.

■ Special Bucket Development Process



■ Manufacturing System

To meet all the requirements of design specifications, each manufacturing stage is standardized and simplified. And cross inspection system by worker and tester is adopted.



Cutting (Plate)



Parts Welding



Fabrication



Inspection



Welding



Grinding/Machining



Painting



Product

Technical Specification

Every design processes are controlled and performed by highly experienced engineers. Characteristics of work field and working conditions are fully reflected as one of the main factors.

- Elimination of local weak point

Through the structural analysis system using Finite Element Method, optimum structures are settled and local weak points are eliminated according to the results.

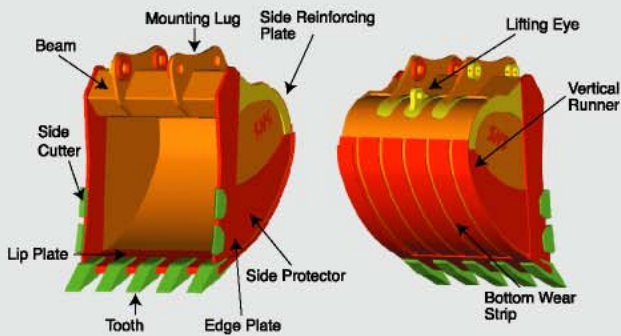
- Maximizing of working efficiency

In order to maximize working efficiency, optimum shapes are decided by simulation analysis method.

- Know-how about materials

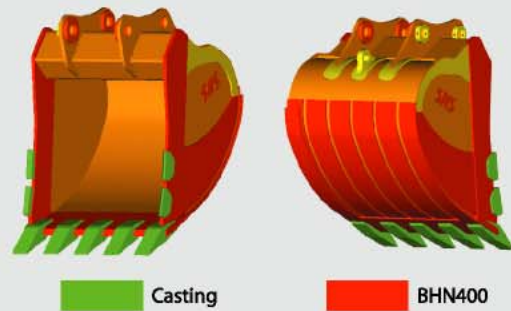
For the critical area of severe wear, we adopt highly qualified abrasion resistant materials. The outstanding know-how about materials guarantees the maximized wear life of products.

■ Name of Parts



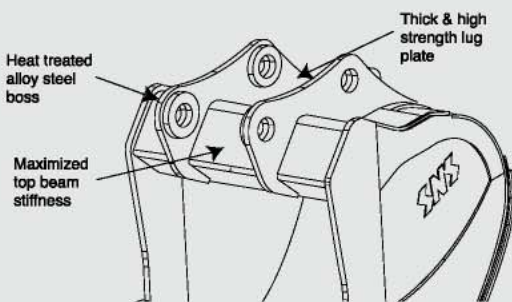
■ Wear Resistant

Properly located utmost abrasion resistant materials guarantee extreme wear lift.



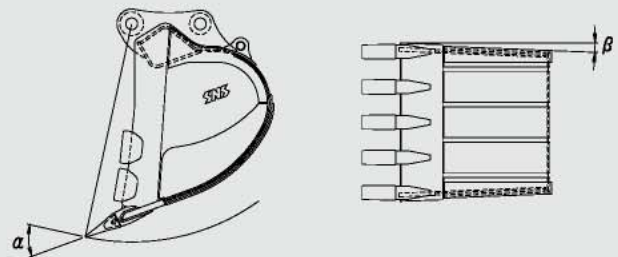
■ Strength

Sufficient stiffness provide minimum deformation of lug plate and maximum fatigue life of structure.



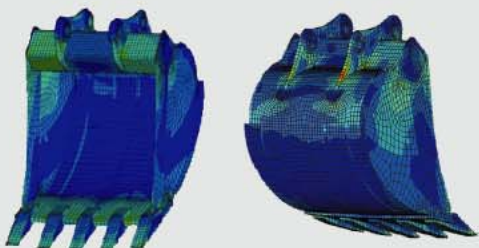
■ Digging Clearance

Optimized digging clearance provide maximum efficiency.



■ Stress distribution & Fatigue life

The weak points are checked and eliminated through FE-analysis.



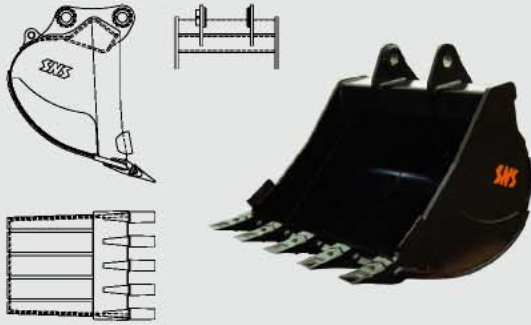
■ Natural frequency & Stiffness

Optimal structures are checked and settled through FE-analysis.

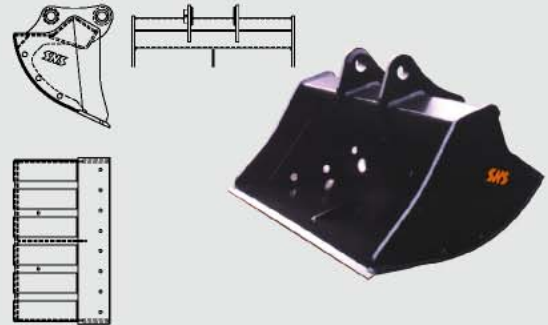
1st eigen mode	2nd eigen mode	3rd eigen mode

Main Characteristics

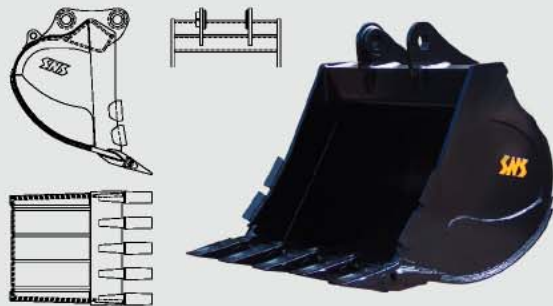
■ GP (General Purpose) Bucket



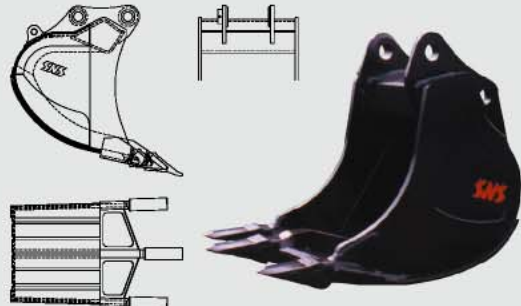
■ DC (Ditch Cleaning) Bucket



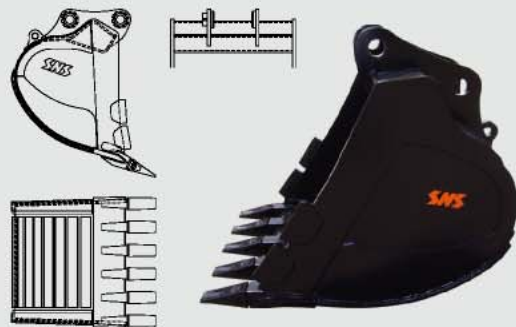
■ HD (Heavy Duty) Bucket



■ RP (Ripper) Bucket



■ XD (Extra Heavy Duty) Bucket



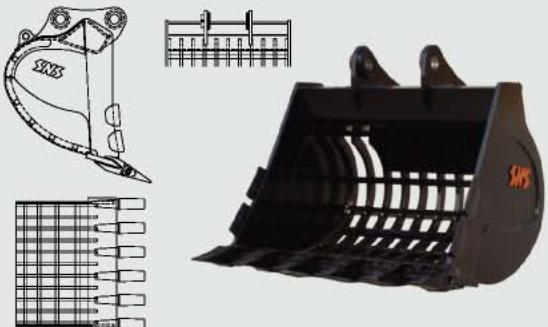
■ SD (Sand) Bucket



■ RD (Rock Digging) Bucket



■ SK (Skeleton) Bucket



■ Tooth system

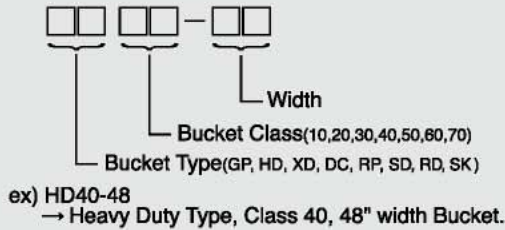
Any kind of tooth system like Esco conical type, Caterpillar side pin type, Komatsu side pin type, Hyundai, Dawoo, and Volvo's are available according to customer's preferences.

■ Other special purpose buckets are available



Specification

SNS Bucket Numbering System



BUCKET CLASS	EXCAVATOR WEIGHT
10	10 ~ 15 TON (22,000~33,000lb)
20	15 ~ 20 TON (33,000~44,000lb)
30	20 ~ 25 TON (44,000~55,000lb)
40	25 ~ 31 TON (55,000~68,000lb)
50	31 ~ 38 TON (68,000~84,000lb)
60	38 ~ 44 TON (84,000~97,000lb)
70	44 ~ 52 TON (97,000~115,000lb)

1. BUCKET CLASS 10 (10~15 Ton Class Excavator / 22,000~33,000lb)

CASE CX130B
CATERPILLAR 312CL
DOOSAN DX140LC

HITACHI ZAXIS 120-3
HYUNDAI R140LC-7
KOBELCO SK135LC

KOMATSU PC130-8
LIEBHERR R313
VOLVO EC140B

WIDTH		24"	27"	30"	33"	36"	39"	48"	60"	72"
GP	CAPA. m ³ (yd ³)	0.30(0.39)	0.35(0.46)	0.40(0.52)	0.45(0.59)	0.51(0.66)	0.56(0.73)			
	Weight kg(lb)	358(789)	390(860)	415(915)	450(992)	477(1052)	513(1131)			
HD	CAPA. m ³ (yd ³)	0.30(0.39)	0.35(0.46)	0.40(0.52)	0.45(0.59)	0.51(0.66)	0.56(0.73)			
	Weight kg(lb)	398(877)	431(950)	450(992)	490(1080)	512(1129)	550(1213)			
DC	CAPA. m ³ (yd ³)							0.45(0.59)	0.58(0.75)	0.74(0.96)
	Weight kg(lb)							410(904)	486(1071)	561(1237)
SD	CAPA. m ³ (yd ³)	0.35(0.46)	0.41(0.53)	0.47(0.61)	0.53(0.69)	0.59(0.77)	0.65(0.85)			
	Weight kg(lb)	383(844)	407(897)	431(950)	458(1010)	482(1063)	509(1122)			

2. BUCKET CLASS 20 (15~20 Ton Class Excavator / 33,000~44,000lb)

CASE CX160B
CATERPILLAR 315CL
DOOSAN DX180LC

HITACHI ZAXIS 160LC-3
HYUNDAI R180LC-7
KOBELCO SK170LC

KOMATSU PC160LC-7
LIEBHERR R317
VOLVO EC160C

WIDTH		24"	30"	36"	42"	48"	60"	72"
GP	CAPA. m ³ (yd ³)	0.38(0.49)	0.52(0.68)	0.66(0.86)	0.81(1.05)	0.96(1.25)		
	Weight kg(lb)	554(1221)	599(1321)	657(1448)	731(1612)	810(1786)		
HD	CAPA. m ³ (yd ³)	0.38(0.49)	0.52(0.68)	0.66(0.86)	0.81(1.05)	0.96(1.25)		
	Weight kg(lb)	586(1292)	633(1396)	693(1528)	769(1695)	851(1876)		
XD	CAPA. m ³ (yd ³)	0.38(0.49)	0.52(0.68)	0.66(0.86)	0.81(1.05)	0.96(1.25)		
	Weight kg(lb)	602(1327)	650(1433)	715(1576)	796(1755)	885(1951)		
DC	CAPA. m ³ (yd ³)						0.66(0.86)	0.81(1.05)
	Weight kg(lb)						641(1413)	738(1627)
RP	CAPA. m ³ (yd ³)		0.42(0.55)	0.53(0.69)				
	Weight kg(lb)		760(1675)	830(1830)				
SD	CAPA. m ³ (yd ³)	0.42(0.55)	0.57(0.74)	0.72(0.94)	0.87(1.13)	1.04(1.35)		
	Weight kg(lb)	537(1184)	570(1257)	632(1393)	695(1532)	762(1680)		

3. BUCKET CLASS 30 (20~25 Ton Class Excavator / 44,000~55,000lb)

CASE CX210B
CATERPILLAR 320DL
DOOSAN DX225LC

HITACHI ZAXIS 200LC-3
HYUNDAI R210LC-7
KOBELCO SK210LC

KOMATSU PC200LC-8
LIEBHERR R904, R914C
VOLVO EC210C

WIDTH		27"	30"	36"	42"	48"	54"	60"	72"
GP	CAPA. m ³ (yd ³)	0.52(0.68)	0.60(0.78)	0.76(0.99)	0.92(1.20)	1.09(1.42)	1.25(1.63)		
	Weight kg(lb)	620(1367)	670(1477)	745(1642)	817(1801)	901(1986)	972(2143)		
HD	CAPA. m ³ (yd ³)	0.52(0.68)	0.60(0.78)	0.76(0.99)	0.92(1.20)	1.09(1.42)	1.25(1.63)		
	Weight kg(lb)	676(1490)	712(1570)	801(1766)	890(1962)	962(2121)	1040(2293)		
XD	CAPA. m ³ (yd ³)	0.52(0.68)	0.60(0.78)	0.76(0.99)	0.92(1.20)	1.09(1.42)	1.25(1.63)		
	Weight kg(lb)	699(1541)	736(1623)	831(1832)	926(2041)	1000(2205)	1088(2399)		
DC	CAPA. m ³ (yd ³)							0.77(1.00)	0.93(1.21)
	Weight kg(lb)							719(1585)	826(1821)
RD	CAPA. m ³ (yd ³)		0.52(0.68)	0.63(0.82)	0.80(1.04)	0.95(1.24)			
	Weight kg(lb)		764(1685)	853(1881)	940(2073)	1020(2249)			
SK	CAPA. m ³ (yd ³)			0.76(0.99)	0.92(1.20)	1.09(1.42)	1.25(1.63)		
	Weight kg(lb)			920(2029)	1010(2227)	1090(2404)	1180(2602)		
RP	CAPA. m ³ (yd ³)		0.47(0.61)	0.60(0.78)					
	Weight kg(lb)		871(1920)	944(2081)					
SD	CAPA. m ³ (yd ³)	0.55(0.72)	0.64(0.83)	0.81(1.05)	0.98(1.27)	1.16(1.51)	1.34(1.74)		
	Weight kg(lb)	599(1321)	636(1402)	707(1559)	777(1713)	851(1876)	926(2041)		

Specification

4. BUCKET CLASS 40 (25~31 Ton Class Excavator / 55,000~68,000lb)

CATERPILLAR 325DL
DOOSAN DX300LC
HITACHI ZAXIS 270LC-3

HYUNDAI R290LC-7
KOMATSU PC290LC-8
LIEBHERR R924C

VOLVO EC290C
CASE CX290B
KOBELCO SK295LC

WIDTH			30"	36"	42"	48"	54"	60"	72"
GP	CAPA.	m ³ (yd ³)	0.68(0.88)	0.86(1.12)	1.05(1.37)	1.25(1.63)	1.44(1.87)	1.63(2.12)	
	Weight	kg(lb)	862(1900)	969(2136)	1050(2315)	1162(2562)	1246(2747)	1351(2978)	
HD	CAPA.	m ³ (yd ³)	0.68(0.88)	0.86(1.12)	1.05(1.37)	1.25(1.63)	1.44(1.87)	1.63(2.12)	
	Weight	kg(lb)	922(2033)	1033(2277)	1116(2460)	1232(2716)	1318(2906)	1427(3146)	
XD	CAPA.	m ³ (yd ³)	0.68(0.88)	0.86(1.12)	1.05(1.37)	1.25(1.63)	1.44(1.87)	1.63(2.12)	
	Weight	kg(lb)	950(2094)	1062(2341)	1148(2531)	1267(2793)	1356(2989)	1465(3230)	
DC	CAPA.	m ³ (yd ³)						0.92(1.20)	1.13(1.47)
	Weight	kg(lb)						929(2048)	1062(2341)
RD	CAPA.	m ³ (yd ³)		0.75(0.98)	0.91(1.19)	1.08(1.41)	1.25(1.63)		
	Weight	kg(lb)		1110(2448)	1198(2642)	1310(2889)	1405(3098)		
SK	CAPA.	m ³ (yd ³)		0.86(1.12)	1.05(1.37)	1.25(1.63)	1.44(1.88)	1.63(2.12)	
	Weight	kg(lb)		1070(2359)	1160(2558)	1280(2822)	1370(3021)	1480(3263)	
RP	CAPA.	m ³ (yd ³)		0.68(0.88)	0.83(1.08)				
	Weight	kg(lb)		1240(2734)	1340(2954)				
SD	CAPA.	m ³ (yd ³)	0.72(0.94)	0.92(1.20)	1.11(1.44)	1.33(1.73)	1.53(1.99)	1.73(2.25)	
	Weight	kg(lb)	818(1803)	904(1993)	990(2183)	1082(2385)	1171(2582)	1255(2767)	

5. BUCKET CLASS 50 (31~38 Ton Class Excavator / 68,000~84,000lb)

CASE CX330
CATERPILLAR 330DL
DOOSAN DX340LC

HITACHI ZAXIS 350LC-3
HYUNDAI R360LC-7
KOBELCO SK350 LC

KOMATSU PC350LC-8
LIEBHERR R934C
VOLVO EC360C

WIDTH			30"	36"	42"	48"	54"	60"
GP	CAPA.	m ³ (yd ³)	0.77(1.00)	0.98(1.27)	1.21(1.57)	1.42(1.85)	1.64(2.13)	1.87(2.43)
	Weight	kg(lb)	1017(2242)	1144(2522)	1241(2736)	1375(3031)	1472(3245)	1599(3525)
HD	CAPA.	m ³ (yd ³)	0.77(1.00)	0.98(1.27)	1.21(1.57)	1.42(1.85)	1.64(2.13)	1.87(2.43)
	Weight	kg(lb)	1071(2361)	1197(2639)	1295(2855)	1428(3148)	1526(3364)	1653(3644)
XD	CAPA.	m ³ (yd ³)	0.77(1.00)	0.98(1.27)	1.21(1.57)	1.42(1.85)	1.64(2.13)	1.87(2.43)
	Weight	kg(lb)	1114(2456)	1236(2725)	1339(2952)	1478(3258)	1571(3463)	1692(3730)
RP	CAPA.	m ³ (yd ³)		0.78(1.01)	0.96(1.25)			
	Weight	kg(lb)		1440(3175)	1560(3439)			
RD	CAPA.	m ³ (yd ³)		0.86(1.12)	1.05(1.37)	1.25(1.63)	1.45(1.89)	
	Weight	kg(lb)		1302(2871)	1405(3098)	1540(3396)	1635(3605)	
SK	CAPA.	m ³ (yd ³)		0.98(1.28)	1.21(1.58)	1.42(1.85)	1.64(2.14)	1.87(2.44)
	Weight	kg(lb)		1250(2756)	1350(2977)	1460(3219)	1560(3440)	1670(3682)
SD	CAPA.	m ³ (yd ³)	0.83(1.08)	1.05(1.37)	1.28(1.66)	1.52(1.98)	1.76(2.29)	1.99(2.59)
	Weight	kg(lb)	964(2125)	1067(2352)	1170(2579)	1280(2822)	1383(3049)	1486(3276)

6. BUCKET CLASS 60 (38~44 Ton Class Excavator / 84,000~97,000lb)

DOOSAN DX420LC
HITACHI EX400LC-6

KOMATSU PC400LC-6

LIEBHERR R944C

WIDTH			33"	36"	42"	48"	54"	60"
GP	CAPA.	m ³ (yd ³)	0.94(1.22)	1.06(1.38)	1.3(1.69)	1.54(2.00)	1.8(2.34)	2.05(2.67)
	Weight	kg(lb)	1210(2668)	1270(2800)	1410(3108)	1520(3351)	1660(3660)	1770(3902)
HD	CAPA.	m ³ (yd ³)	0.94(1.22)	1.06(1.38)	1.3(1.69)	1.54(2.00)	1.8(2.34)	2.05(2.67)
	Weight	kg(lb)	1310(2888)	1370(3020)	1500(3307)	1610(3549)	1750(3858)	1860(4101)
XD	CAPA.	m ³ (yd ³)	0.94(1.22)	1.06(1.38)	1.3(1.69)	1.54(2.00)	1.8(2.34)	2.05(2.67)
	Weight	kg(lb)	1420(3131)	1480(3263)	1640(3616)	1760(3880)	1920(4233)	2040(4497)
RP	CAPA.	m ³ (yd ³)		0.85(1.11)	1.06(1.38)			
	Weight	kg(lb)		1820(4012)	1940(4277)			
RD	CAPA.	m ³ (yd ³)		0.95(1.24)	1.17(1.52)	1.38(1.80)	1.6(2.08)	
	Weight	kg(lb)		1610(3550)	1730(3814)	1890(4167)	2016(4445)	
SK	CAPA.	m ³ (yd ³)			1.3(1.69)	1.54(2.01)	1.8(2.34)	2.05(2.67)
	Weight	kg(lb)			1600(3528)	1740(3836)	1890(4167)	2000(4410)
SD	CAPA.	m ³ (yd ³)	1.05(1.37)	1.16(1.51)	1.42(1.85)	1.69(2.20)	1.95(2.54)	2.22(2.89)
	Weight	kg(lb)	1238(2729)	1293(2851)	1415(3119)	1535(3384)	1659(3657)	1781(3926)

7. BUCKET CLASS 70 (44~52 Ton Class Excavator / 97,000~115,000lb)

CASE CX460
CATERPILLAR 345CL
DOOSAN DX480LC

HITACHI ZAXIS 450LC-3
HYUNDAI R450LC-7
KOBELCO SK485LC

KOMATSU PC450LC-8
LIEBHERR R954C
VOLVO EC460C

WIDTH			33"	36"	42"	48"	54"	60"
GP	CAPA.	m ³ (yd ³)	1.07(1.39)	1.19(1.55)	1.46(1.90)	1.74(2.26)	2.01(2.61)	2.29(2.98)
	Weight	kg(lb)	1455(3208)	1557(3433)	1684(3713)	1853(4085)	1980(4365)	2150(4740)
HD	CAPA.	m ³ (yd ³)	1.07(1.39)	1.19(1.55)	1.46(1.90)	1.74(2.26)	2.01(2.61)	2.29(2.98)
	Weight	kg(lb)	1571(3463)	1672(3686)	1799(3966)	1968(4339)	2095(4619)	2266(4996)
XD	CAPA.	m ³ (yd ³)	1.07(1.39)	1.19(1.55)	1.46(1.90)	1.74(2.26)	2.01(2.61)	2.29(2.98)
	Weight	kg(lb)	1610(3549)	1713(3776)	1845(4067)	2020(4453)	2152(4744)	2327(5130)
RP	CAPA.	m ³ (yd ³)		0.92(1.20)	1.13(1.47)			
	Weight	kg(lb)		1990(4387)	2150(4740)			
RD	CAPA.	m ³ (yd ³)		1.08(1.41)	1.32(1.72)	1.57(2.05)	1.82(2.37)	
	Weight	kg(lb)		1760(3881)	1892(4172)	2068(4560)	2198(4846)	
SK	CAPA.	m ³ (yd ³)		1.46(1.90)	1.74(2.27)	2.01(2.62)	2.29(2.98)	2.56(3.33)
	Weight	kg(lb)		1980(4366)	2140(4718)	2300(5071)	2450(5402)	2600(5732)
SD	CAPA.	m ³ (yd ³)	1.20(1.56)	1.33(1.73)	1.63(2.12)	1.93(2.51)	2.24(2.91)	2.55(3.32)
	Weight	kg(lb)	1388(3060)	1450(3197)	1586(3496)	1721(3794)	1856(4092)	1992(4392)

GP (General Purpose) Bucket

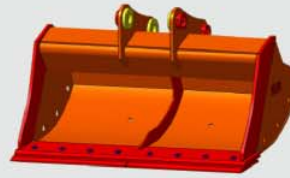
- Suitable for normal digging conditions with soft soil.
- Ideal for general excavation



- Optimal profile being capable of maximum excavation efficiently
- Eminent abrasive resistant capability ensured by adopting BHN400 in critical area
- Ultimate bending and torsional stiffness imposed on upper beam
- AR-material being used in bottom and side wear plates
- Welding typed single side cutter

DC (Ditch Cleaning) Bucket

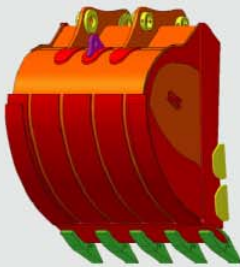
- Suitable for soft application of light material
- Ideal for use in cleaning and forming ditched and watercourses



- Optimized profile for ditch cleaning and grading
- AR-material being used in lip and edge parts
- Linner stiffener to increase overall stiffness and strength
- Additional bolting typed lip can be mounted to drilled original one, which is optional
- Drainage holes on side plates

HD (Heavy Duty) Bucke

- Suitable for hard working areas with rock scattered soil.
- Ideal for heavy excavating of dese clay and light rock.



- Increased thickness of lip plate
- Double reinforcing runner adoption in bottom edge zone
- Additional side plate being added around upper beam
- Welding typed double side cutter
- Increase of thickness in each abrasive resistant plate

RP (Ripper) Bucket

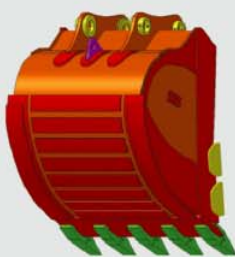
- Suitable for extremely tough applications in rocky areas.
- Ideal for ripping, quarrying and hammering of rock.



- Sharp tooth point and shank at center line suitable for ripping in rock.
- Eminent abrasive resistant capability ensured by adopting BHN400 in critical area
- Extra thick reinforcing bottom lip plate to increase wear life.

XD (Extra Heavy Duty) Bucket

- Suitable for tough and abrasive applications in rocky areas
- Ideal for handling short rock and severe digging



- Upper grade teeth being applied
- Horizontal and thicker abrasive resistant plate being applied in bottom area
- Thicker double reinforcing runner plate and side protector than those of HD bucket

SD(Sand) Bucket

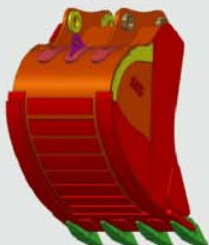
- Suitable for light working conditions with loose materials.
- Ideal for leveling and loading of light soil or sand.



- AR-material being used in bottom and side wear plates
- Reduction of weight and cost by removal of tooth adapter and point.
- Relatively light weight to increase application
- Lengthened lip plate to increase struck capacity.

RD (Rock Digging) Bucket

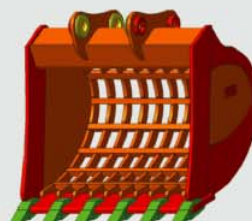
- Suitable for tough application of rocky area.
- Ideal for digging and loading earth mixed with hard stones, solid rocks



- Upper grade teeth being applied
- Horizontal and thicker abrasive resistant plate being applied in bottom area
- Additional reinforcing plate being applied on edge plate

SK(Skeleton) Bucket

- Suitable for digging and separation of materials with different sizes.
- Ideal for digging and sorting completed at the same time.



- AR-material being used in sieve.
- Thick bar-type sieve being adopted to increase wear life.
- Various size of gap being provided by customer requirement.
- Available in a wide-range of widths and capacities

Other Products

Applications



• Super Long Reach



• 2-Piece Material Handler



• 3-Piece Material Handler



• Demolition

Special Attachment



• Excavator Grapple



• Tilt Bucket



• Bucket Clamp(Thumb)



• Single Point Ripper

Grapple



• Orange Peel Grapple



• Wood Grapple



• Hydraulic Fork



• Clamshell Bucket

Loader Attachment



• Loader Bucket



• Log Grapple



• Pallet fork



• Quick Coupler

• Specifications are subject to change without prior notice.



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