

# Heavy Excavator Buckets



# **DOOSAN EXCAVATOR BUCKETS**

Doosan has combined the strengths of both Doosan, a leading manufacturer of excavator machines and Geith, a leading manufacturer of excavator attachments to develop a new series of excavator buckets. The new series of buckets are based on designs that have been developed over 50 years through customer feedback and experience in all markets throughout the world.

The series is comprised of 4 kinds of bucket types which are General Construction Bucket, Heavy Construction Bucket, Severe Mining Bucket, and Xtreme Mining Bucket.

#### **HEAVY EXCAVATOR BUCKET TOUR**

Heavy Construction Bucket, which is also called H class bucket, is the most commonly used bucket in the construction equipment market and is designed mainly for use in heavy construction but also used in low density mining and quarry application.

# Hinge Optimized reinforced construction for high strength and performance matched to the machine's power. DOOSAN **Lip Plate** (Cutting Edge) Beveled edge for better penetration and 500BHN material for high abrasion resistance.

### Adapter:

Corner adapter Positioned under cast corner to increase strength.

### Tooth (Tip)

Designed with mechanical properties that maintain hardness for long wear life in tough digging applications.

#### DOOSAN BUCKET USING THE 6 KINDS OF GOOD REASONS



#### **ONE-STOP SHOP**

ENGINEERING APPROVED

One place for complete solutions: (carrier + Bucket + parts + service)

Optimized for DOOSAN equipment high efficiency and

performance, resulting in lower running and mainte-



Broad coverage via the DOOSAN service network, fully supported by DOOSAN product specialists.



Products manufactured to highest standards.



#### WARRANTY

Avoid compatibility issues and operating differences from using Non-approved Bucket.



EASY PLUG & PLAY READINESS
Easy to install and operate.



### Wrapper (Shell)

Shape increases heel clearance and decreases wear rate.

#### **Side Wear Plates**

Side plates meet up with bottom wear plates for seamless corner protection.

#### **Cast Corner**

high strength (400HB) wear resistant material used in ground engaging area. No bolt on parts required (removes risk of losing parts).

#### **Horizontal Bottom Wear Plates**

Protects bottom section and reinforces bucket for greater strength and rigidity. Designed for easily replacement during maintenance repair.

# **GENERAL CONSTRUCTION BUCKET**

# **HEAVY CONSTRUCTION BUCKET**



GENERAL CONSTRUCTION BUCKET, which is also called G class bucket, is designed for digging and re-handling soft to medium materials e.g. materials with low wear characteristics such as top-soil, loam, coal.

### **Job Application**

Recommended applications such as: heavy construction, road works, ground clearing, trenching and loading.















#### **Feature & Benefits**

- · 34 different models
- 5-50 tons Models are available
- · Diamond folded section for greater structural strength
- · Overlapping plate for protecting Lip plate and increasing strength
- · Quick Coupler Friendly design.
- · Flat bottom shape for Multi-purpose such as damping, leveling
- · Optimized designed GD tooth point for general construction

- · Improved side cutter design for penetration and Protection
- · Optimized designed genuine Doosan GD tooth point for general
- · High grade material composition for better durability
- Used HB400 grade material on Lip plate
- Used Thicker steel wear pad than previous generation model



HEAVY CONSTRUCTION BUCKET, which is also called H class bucket, is the most commonly used bucket in the construction equipment market and is designed mainly for use in heavy construction but also used in low density mining and quarry application.

### **Job Application**

Recommended applications such as: heavy construction, road works, ground clearing, trenching and loading.







- High strength steel
- High abrasion resistant steel
- 500BHN, High abrasion resistant steel



#### **Feature & Benefits**

- · 47 different models
- 14-70 tons Models are available
- · Diamond folded section for greater structural strength
- $\cdot$  Overlapping plate for protecting Lip plate and increasing strength
- · Quick Coupler Friendly design.
- · Optimized Shape for better penetration and heel clearance
- · Deep profile for High capacity

- · Low tip radius for greater digging performance
- · Inserted casting corner design for penetration
- · Optimized designed genuine Doosan HD tooth point for penetration
- · High grade material composition for better durability
- Used HB400-500 grade material on Lip plate and wear parts

# **SEVERE MINING BUCKET**

# **XTREME MINING BUCKET**

# **COMMON PARTS**



SEVERE MINING BUCKET, which is also called S class bucket. The bucket is designed for use in high density mining and quarry application using high strength and high abrasion resistance materials. It can be used in the toughest of applications.

#### **Job Application**

Recommended applications such as: gravel, ripped basalt, caliche, shot granite, high silica sand, sharp rock and other dense materials.









High abrasion resistant steel

500BHN, High abrasion resistant steel



#### **Feature & Benefits**

- · 21 different models
- 22-70 tons Models are available
- · Diamond folded section for greater structural strength
- · Overlapping plate for protecting Lip plate and increasing strength.
- · Quick Coupler Friendly design.
- · Optimized Shape for better penetration and heel clearance
- · Deep profile for High capacity
- · Low tip radius for greater digging performance

- · Optimized designed genuine Doosan SD tooth point for strength
- · Added more patches for durability and strength
- Weld on side cutter design for Protection and material management
- Diamond folded section Wear plate for extra strength

- Wear pads and bottom section

- · High grade material composition for better durability
- Used incredible Strength with lip plate using 500HBN
- Used higher Abrasion resistance using 400HBN



XTREME MINING BUCKET, which is also called X class bucket. The bucket is designed for use in high density mining and quarry application using high strength and high abrasion resistance materials. It can be used in the toughest of applications.

### **Job Application**

Recommended applications such as: ripped basalt, caliche, shot granite, high silica sand, sharp rock and other dense materials.













High strength steel High abrasion resistant steel

500BHN, High abrasion resistant steel

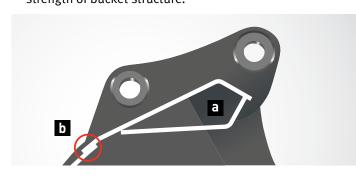
#### **Feature & Benefits**

- · 11 different models
- 34-70 tons Models are available
- Diamond folded section for greater structural strength
- · Overlapping plate for protecting Lip plate and increasing strength.
- · Quick Coupler Friendly design.
- · Optimized Shape for better penetration and heel clearance
- · Deep profile for High capacity
- · Low tip radius for greater digging performance
- · Optimized designed genuine Doosan SD tooth point for strength

- · Added more patches for durability and strength
- Weld on side cutter design for Protection and material management
- Diamond folded section Wear plate for extra strength
- Wear pads and bottom section
- Muscle Pack Heels to increase durability and protect shell from wear
- · High grade material composition for better durability
- Used incredible Strength with lip plate using 500HBN
- Used higher Abrasion resistance using 400HBN
- Internal wear-strap kit using 400BHN
- · Additional Wear parts designed for ease of replacement during bucket maintenance and protecting protect bucket structure from wear

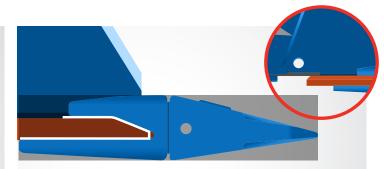
#### **Diamond folded section**

- a) 30% increase in strength by adapting Diamond shape and increasing thickness of steel
- b) Overlap of bottom section and folded section increases the strength of bucket structure.



### Lip plate (cutting edge)

High Abrasion Resistance material (400-500BHN) Structure improved by overlapping cutting edge and bottom section improved penetration by beveled shape.



#### **Bottom section**

#### G class

H, S, X class bucket

Flat bottom shape for Multi-purpose Deep profile for High capacity such as damping, leveling.





# **Arrangement of side plate, lip plate** and tooth point

Strength and digging performance improved by positioning under side plate. Improved penetration by digging angle.







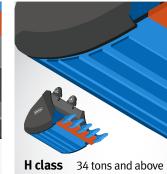


## **Wear pads & straps**

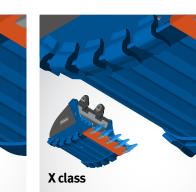
Optimized wear pads positioning for enhancing wear resistance Added more patches by usage of bucket class.











# **DOOSAN GET PORTFOLIO**

	GD (General Duty) for G class bucket											
Classification	Adapt	er	Tooth									
	Part No.	Tooth IC Code	Part No.	Length (mm)	Weight (kg)							
5 ton	430203-00034	1	230111-00080	140	1.17							
8 ton	430203-00035	2	230111-00081	181	2.97							
14~17 ton	430203-00022	3	230111-00082	205	3.82							
18~25 ton	430203-00023	4	230111-00084	230	4.89							
30 ton	430203-00024	5	230111-00083	260	6.92							
34~38 ton	430203-00036	6	230111-00085	290	9.67							
42 ton	430203-00036	6	230111-00085	290	9.67							
50 ton	430203-00048	7	230111-00087	325	14.56							

	HD (Heavy Duty) for H class Bucket												
Classification	Adap	ter	Tooth										
	Part No.	Tooth IC Code	Part No.	Length (mm)	Weight (kg)								
14~17 ton	430203-00022	3	230111-00089	217	4.17								
18~25 ton	430203-00024	5	230111-00090	265	7.65								
30 ton	430203-00024	5	230111-00090	265	7.65								
34~38 ton	430203-00036	6	230111-00092	315	12.27								
42 ton	430203-00036	6	230111-00092	315	12.27								
50 ton	430203-00037	7	230111-00093	361	19.87								
70 ton	430203-00038	8	230111-00094	390	24.8								

	SD (Severe Duty) for S/X class bucket											
Classification	Adap	ter	Tooth									
	Part No.	Tooth IC Code	Part No.	Length (mm)	Weight (kg)							
18~25 ton	430203-00049	5	230111-00124	275	9.39							
30 ton	430203-00036	6	230111-00104	325	14.09							
34~38 ton	430203-00037	7	230111-00106	365	20.4							
42 ton	430203-00037	7	230111-00106	365	20.4							
50 ton	430203-00037	7	230111-00106	365	20.4							
70 ton	430203-00038	8	230111-00107	400	28.86							

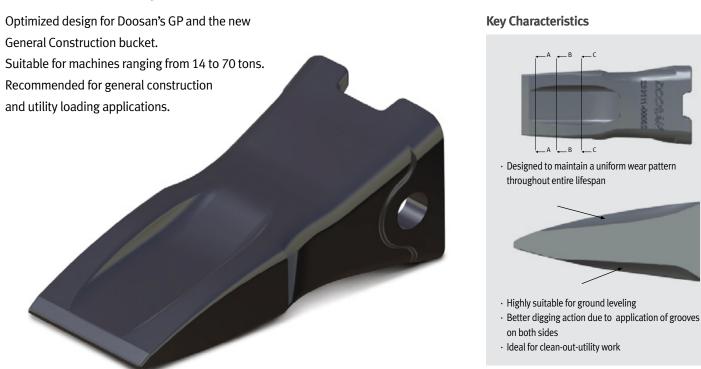
Classification	General GET										
Classification	Tooth IC Code	Pin	Locking Washer								
5 ton	1	2705-9005	2705-9006								
8 ton	2	2705-6012	2705-6013								
14~17 ton	3	2705-1022	2114-1859								
18~25 ton	4	2705-1020	2114-1848A								
30 ton	5	2705-1021	2114-1849A								
34~38 ton	6	2705-1021	2114-1849A								
42 ton	6	705-00006	114-00246								
50 ton	7	2705-1034	2114-1931								
70 ton	8	K1052231	K1052892								

<sup>\*</sup> Tooth IC code: Tooth Interchangeability Code - Tooth can be interchangeable with same number

# Designed and proven by the Doosan R&D Center

# DOOSAN UNIQUE GET SYSTEM

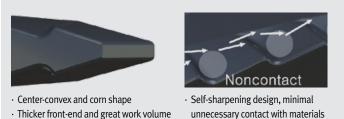
### **GD (General Duty) Tooth**



### **HD (Heavy Duty) Tooth**

Optimized design for the Heavy Construction bucket. Suitable for machines ranging from 14 to 70 tons. Recommended for most applications including excavating, trenching, loading and medium density quarries and mining.

#### **Key Characteristics**



### **SD (Severe Duty) Tooth**

Optimized design for the Severe Mining bucket and the Xtreme Mining bucket. Suitable for machines

ranging 22 to 70 tons. Recommended for extremely tough quarries and mining application.



#### **Key Characteristics**





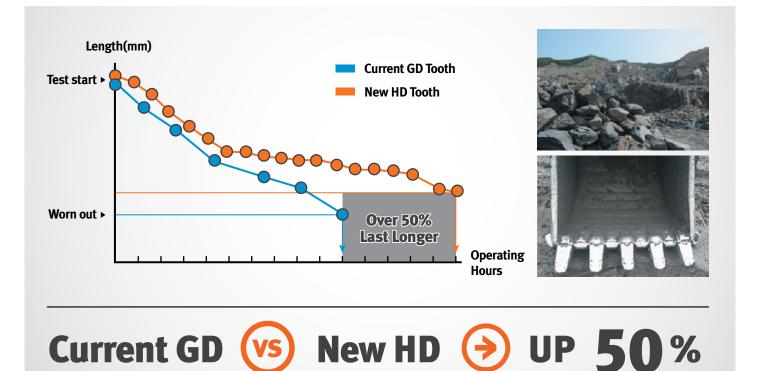


penetration throughout entire product

### **Key Feature & Benefits**

#### 1. Increased life span

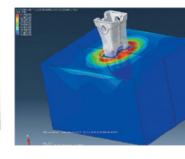
- model by modifying its shape and mechanical properties.
- · Robust design and high strength quality castings.
- · Durability has been increased by 50% compared with the previous · Appropriate steel alloys ensure strength, toughness, and resistance to wear and corrosion.
  - · High abrasion resistant material for extra durability. (HD/SD)



#### 2. Better penetration performance

- · Self-sharpening tooth The new Hd/S tooth is sharpened as they wear due to their unique design for improved penetrative power
- · Reduced digging force and enhanced penetration due to optimum body shape and angle in simulation





#### 3. Excellent GET economics

- · Greater lifespan and durability means fewer replacements
- · New tooth is interchangeable with the old type
- · Low initial investment

# **DOOSAN BUCKET PORTFOLIO**

	G class					H class						S	X class							
Classification	Part No.	Size (mm/inch)	Capacity (m³/yd³)	Rip plate (mm)	* Tooth IC Code	Part No.	Size (mm/inch)	Capacity (m³/yd³)	Rip plate (mm)	* Tooth IC Code	Part No.	Size (mm/inch)	Capacity (m³/yd³)	Rip plate (mm)	* Tooth IC Code	Part No.	Size (mm/inch)	Capacity (m³/yd³)	Rip plate (mm)	* Tooth IC Code
	230104-02066	336 / 13.23	0.07 / 0.09	20	1		(IIIII)	( / y 2 /	(11111)	ic couc		(iiiii) iiicii)	(m / yu /	()	TC COUC		(iiiii/iiicii/	(m / yu /	()	Te code
5 ton	230104-02068	678 / 26.69	0.18 / 0.23	20	1															
<b>5</b> to	230104-02070	724 / 28.50	0.19 / 0.25	20	1															
0.4	230104-02072	572 / 22.52	0.20 / 0.16	25	2															
8 ton	230104-02074	746 / 29.37	0.28 / 0.22	25	2															
						230104-01854	450 / 17.71	0.212 / 0.277	30	3										
	230104-02077	757 / 29.80	0.39 / 0.51	30	3	230104-01856	600 / 23.62	0.312 / 0.408	30	3										
	230104-02079	847 / 33.35	0.45 / 0.59	30	3	230104-01858	750 / 29.52	0.416 / 0.544	30	3										
14 ton	230104-02081	935 / 36.81	0.51 / 0.67	30	3	230104-01860	900 / 35.43	0.523 / 0.684	30	3										
	230104-02083	1,052 / 41.42	0.59 / 0.77	30	3	230104-01862	1,000 / 39.36	0.595 / 0.778	30	3										
	230104-02085	1,125 / 44.29	0.64 / 0.84	30	3	230104-01864	1,100 / 43.30	0.668 / 0.873	30	3										
	230104-02087	1,300 / 51.18	0.76 / 1.00	30	3	230104-01866	1,200 / 47.24	0.740 / 0.967	30	3										
	220404 02000	005 / 20 47	0.70 / 0.00	26		230104-01871	750 / 29.52	0.513 / 0.670	40	5										
10 ton	230104-02089	995 / 39.17	0.70 / 0.92	36	4	230104-01873	900 / 35.43	0.645 / 0.843	40	5										
18 ton	230104-02092	1,062 / 41.81 1,107 / 43.58	0.76 / 0.99 0.80 / 1.05	36 36	4	230104-01875 230104-01878	1,050 / 41.33 1,100 / 43.30	0.779 / 1.018 0.824 / 1.077	40	5										
	230104-02094	1,253 / 49.33	0.80 / 1.03	36	4	230104-01878	1,200 / 47.24	0.914 / 1.195	40	5										
	230104-02098	1,011 / 39.80	0.93 / 1.22	36	//	230104-01880	750 / 30	0.60 / 0.79	40	5										
	230104-02100	1,060 / 41.73	0.86 / 1.12	36	4	230104-01724	900 / 35	0.76 / 0.99	40	5										
	230104-02102	1,119 / 44.06	0.92 / 1.20	36	4	230104-01726	1,050 / 41	0.92 / 1.20	40	5	230104-01986	1,050 / 41.34	0.91 / 1.19	50	5					
	230104-02104	1,245 / 49.02	1.05 / 1.37	36	4	230104-01728	1,200 / 47	1.08 / 1.41	40	5	230104-02003	1,200 / 47.24	1.07 / 1.40	50	5					
22 ton	230104-02106	1,294 / 50.94	1.10 / 1.44	36	4	230104-01730	1,350 / 53	1.24 / 1.62	40	5	230104-02005	1,350 / 53.15	1.23 / 1.61	50	5					
	230104-02108	1,362 / 53.62	1.17 / 1.53	36	4	230104-01732	1,450 / 57	1.35 / 1.76	40	5			·							
	230104-02110	1,468 / 57.80	1.28 / 1.67	36	4	230104-01734	1,500 / 59	1.40 / 1.83	40	5										
						230104-01736	1,600 / 63	1.51 / 1.97	40	5										
	230104-02114	1,129 / 44.45	1.03 / 1.35	40	5	230104-01738	1,050 / 41	1.04 / 1.36	40	5										
	230104-02116	1,340 / 52.76	1.27 / 1.66	40	5	230104-01740	1,200 / 47	1.23 / 1.60	40	5	230104-01988	1,200 / 47.24	1.20 / 1.57	50	6					
30 ton	230104-02118	1,550 / 61.02	1.51 / 1.98	40	5	230104-01742	1,400 / 55	1.47 / 1.92	40	5	230104-02007	1,400 / 55.12	1.45 / 1.89	50	6					
						230104-01744	1,500 / 59	1.60 / 2.09	40	5	230104-02009	1,500 / 59.06	1.57 / 2.05	50	6					
	230104-02120	1,760 / 69.29	1.75 / 2.29	40	5	230104-01746	1,600 / 63	1.72 / 2.25	40	5										
	230104-02122	1,410 / 55.51	1.49 / 1.95	50	6	230104-01888	1,200 / 47.24	1.443 / 1.887	50	6										
24.4		1,505 / 59.25	1.61 / 2.11	50	6	230104-01900	1,350 / 53.14	1.661 / 2.173	50	6	230104-01990	1,350 / 53.14	1.559 / 2.039	60	7	230104-02167	1,350 / 53.14	1.56 / 2.04	60	7
34 ton	230104-02126	1,680 / 66.14	1.83 / 2.39	50	6	230104-02052			50	6	230104-02138	1,450 / 57.09		60	7	230104-02169	1,450 / 57.09	1.71 / 2.23	60	7
						230104-02054	1,600 / 62.99	2.03 / 2.65	50	6	230104-02139	1,600 / 62.99	1.92 / 2.52	60	7					
						230104-01906	1,800 / 70.86 1,200 / 47.24	2.319 / 3.034 1.638 / 2.142	50	6	230104-02015	1,800 / 70.86	2.217 / 2.900	60	/					
	230104-02126	1 //03 / 58 78	1.90 / 2.45	50	6	230104-01890 230104-01893		1.921 / 2.512	50	6	230104-01992	1,350 / 53.15	1.77 / 2.32	60	7	230104-02171	1,350 / 53.15	1.77 / 2.32	60	7
42 ton	230104-02130	1,667 / 65.63	2.16 / 2.83	50	6	230104-01895		2.138 / 2.797	50	6	230104-02017	1,500 / 59.06	2.02 / 2.64	60	7	250104 021/1	1,550 / 55.15	1.77   2.32		,
	25010   02150	1,00, 7 05.05	2110 / 2103			230104-01898			50	6	2,010   0201/	1,500 / 55100	2102 / 210 1		<u> </u>					
						230104-01801	1,200 / 47	1.80 / 2.35	60	7										
	230104-02132	1,587 / 62.48	2.14 / 2.80	50	7	230104-01804	1,350 / 53	2.07 / 2.71	60	7	230104-01994	1,350 / 53.15	1.94 / 2.54	60	7	230104-02173	1,350 / 53.15	1.94 / 2.54	60	7
F0.4	230104-02134	1,746 / 68.74	2.39 / 3.13	50	7	230104-01806	1,500 / 59	2.35 / 3.08	60	7	230104-02019	1,500 / 59.06	2.22 / 2.91	60	7	230104-02175	1,500 / 59.06	2.22 / 2.91	60	7
50 ton						230104-01808	1,700 / 67	2.72 / 3.56	60	7	230104-02021	1,700 / 66.93	2.53 / 3.39	60	7	230104-02177	1,700 / 66.93	2.59 / 3.39	60	7
	230104-02136	2,043 / 80.43	2.86 / 3.74	50	7	230104-01810	1,800 / 70	2.91 / 3.80	60	7	230104-02023	1,800 / 70.87	2.78 / 3.63	60	7	230104-02179	1,800 / 70.87	2.78 / 3.63	60	7
						230104-01812	2,000 / 79	3.28 / 4.29	60	7	230104-02025	2,000 / 78.74	3.15 / 4.12	60	7					
						230104-01926	1,500 / 59.05	2.923 / 3.824	70	8										
						230104-01928	1,700 / 66.92	3.424 / 4.478	70	8										
						230104-01930	1,800 / 70.86	3.676 / 4.808	70	8										
70 ton											230104-01996	1,600 / 62.99	3.75 / 4.90	70	8	230104-02181	1,600 / 62.99	3.75 / 4.90	70	8
, 0 (011						230104-01932	1,700 / 66.92	4.045 / 5.291	70	8	230104-02027	1,700 / 66.93	4.05 / 5.29	70	8	230104-02183	1,700 / 66.93	4.05 / 5.29	70	8
						230104-01934	2,100 / 82.67	4.433 / 5.798	70	8										
						230104-01937	1,900 / 74.80	4.640 / 6.069	70	8	230104-02029	1,900 / 74.80	4.64 / 6.07	70	8	230104-02185	1,900 / 74.80	4.64 / 6.07	70	8
						230104-01939	2,100 / 82.67	5.237 / 6.850	70	8	230104-02031	2,100 / 82.68	5.24 / 6.85	70	8	230104-02187	2,100 / 82.68	5.24 / 6.85	70	8







Doosan Infracore Korea Office (HQ)

27/F, 275, Jangchungdan-ro, Jung-gu, Seoul, Korea Tel: 82 2 3398 8114

Attachment Factory