

SANWA AUGER

SANWA KIZAI EARTH AUGER

K - SERIES

D-30KP

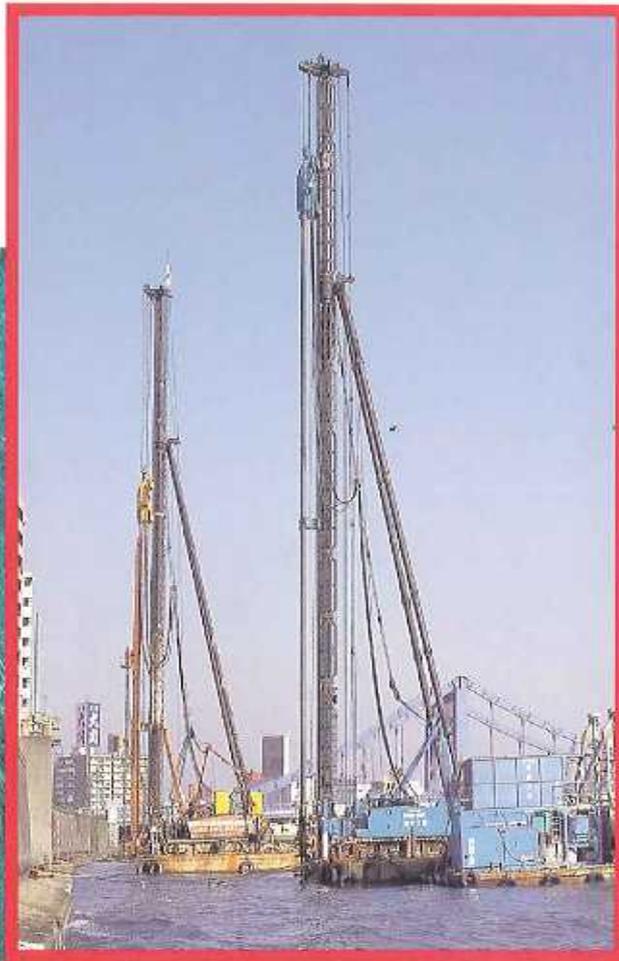
D-40-50K/KP

D-60K/KP

D-80K/KP

D-100K/KP

D-120K/KP



SANWA KIZAI CO.,LTD

Introduce

SANWA AUGER consists of the swivel integrated within the output shaft of the planetary gear transmission which is driven by one or two specially designed vertical electric or hydraulic motor(s), auger flight and head. SANWA AUGER can bore holes even in high SPT Value (N Values) soil, and for gravel, boulder layer also hard soil layer using heavy duty type driving unit, auger flight and head. Built-in swivel permits injection of water, blowing of compressed air, grouting of bentonite liquid or mortar through the hollow shaft of auger flight and head. These injections, blowings, or groutings increase the augering speed in hard soil, reduce circumferential friction against extraction of the auger flight and prevent the formation of vacuum which would result not only the auger flight stick to the mud but also in drilled hole collapse.

K-SERIES

MODEL

D-30K(P)



For normal soil layer
In diameter
300 ~ 400mm

D-50K(P)



For normal soil layer
In diameter
300 ~ 500mm

D-60K(P)



For soft and hard layer
In diameter
300 ~ 600mm

D-80K(P)



For gravel, boulder layer also hard soil layer
In diameter
450 ~ 800mm

D-100K(P)



For gravel, boulder layer also hard soil layer
In diameter
450 ~ 1000mm

Recommended for soil improvement continuous flight auger (CFA) method pre-boring

D-120K(P)



For gravel, boulder layer also hard soil layer
In diameter
450 ~ 1200mm

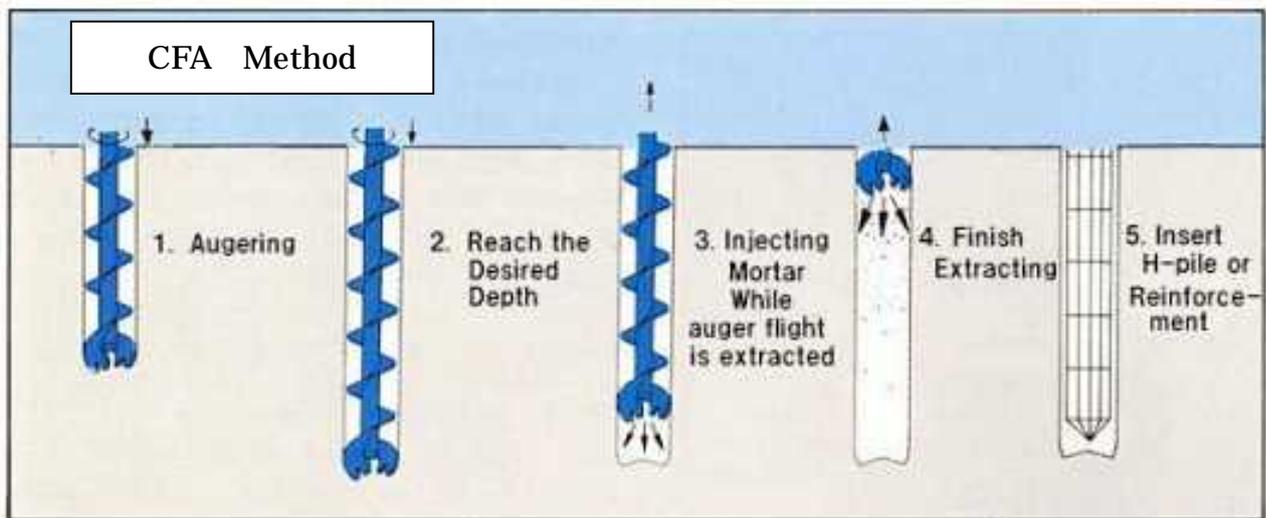
Recommended for soil improvement continuous flight auger (CFA) method pre-boring

Whole Composition and Names



CFA Method

Continuous flight auger(CFA) piles are drilled foundations in which the pile is drilled to depth in one continuous process using a continuous flight auger. After the hole of desired depth is drilled, cement mortar is injected through the swivel device equipped with Auger Drive Unit into the drilled hole while the Auger Flight is extracted, and then reinforcing steel cage or equivalent is installed with its own weight into the hole filled with mortar. The mortar generally consists of water, fine sand, Portland cement and chemical additives. The method is applicable for frictional bearing pile, soil- retaining wall and earth anchor bearing pile.



General Specification of Sanwa Kizai Earth Auger Series

Model		D-120KP			D-100KP		
		A2	A3	A4	A2	A3	A4
Electric Motor		90kW · 4/8P			75kW · 4/8P		
Screw Rotation Speed(min ⁻¹)	@ 50Hz	27.7/13.8	32.1/16.0	40.1/20.0	27.7/13.8	32.1/16.0	40.1/20.0
	@ 60Hz	33.3/16.6	38.6/19.3	48.2/24.1	33.3/16.6	38.6/19.3	48.2/24.1
Rated Torque (kN-m)	@ 50Hz	31.0/61.9	26.7/53.4	21.4/42.8	25.8/51.6	22.2/44.5	17.8/35.7
	@ 60Hz	25.8/51.5	22.2/44.4	17.8/35.6	21.5/43.0	18.5/37.0	14.8/26.7
Swivel (diameter)		53(2in.) ¹					
Mass(Ton)	Main Body	5.3		5.1	4.5		4.8

Model		D-80KP				D-60K	D-60KP	
		A1	A2	A3	A4			
Electric Motor		55kW・4/8P				45kW・6P	45kW・4/6P	
Screw Rotation Speed(min ⁻¹)	@ 50Hz	22.8/11.4	27.7/13.8	32.1/16.0	40.1/20.0	15.8	23.7/15.8	
	@ 60Hz	27.4/13.7	33.3/16.6	38.6/19.3	48.2/24.1	18.9	28.5/18.9	
Rated Torque (kN-m)	@ 50Hz	23.0/46.0	18.9/37.8	16.3/32.6	13.1/26.2	27.1	18.1/27.1	
	@ 60Hz	19.1/38.2	15.7/31.5	13.6/27.2	10.9/21.8	22.7	15.1/22.7	
Swivel (diameter)		53(2in.) ¹						
Mass(Ton)	Main Body	4.5				3.3		

Model		D-50K	D-50KP	D-40K	D-40KP	D-30KP
						B1
Electric Motor		37kW・6P	37kW・4/6P	30kW・6P	30kW・4/6P	22kW・4/6P
Screw Rotation Speed(min ⁻¹)	@ 50Hz	15.7	23.5/15.7	15.7	23.5/15.7	25.6/17.1
	@ 60Hz	18.8	28.3/18.8	18.8	28.3/18.8	30.8/20.5
Rated Torque (kN-m)	@ 50Hz	22.5	15.0/22.5	18.2	12.1/18.2	8.2/12.3
	@ 60Hz	18.8	12.5/18.8	15.2	10.1/15.2	6.8/10.2
Swivel (diameter)		42(1 1/2in.) ²				
Mass(Ton)	Main Body	2.4		2.4		1.3

Option: ¹ 100mm ² 75mm



SANWA AUGER MODEL D-60H USED FOR A SOIL CONSOLIDATION WORK BY INJECTION OF CEMENT SLURRY IN UMMSAID, QATAR

Two units of Sanwa Auger Model D-60H* have completed soil consolidation work for jetty construction in Qatar in very short period; each completed four soil column per hour, by Penta-Ocean Construction Co.,Ltd., one of the leading Japanese general contractors.

When the Sanwa Auger D-60H reached the desired depth-- about 17m below the seabed-- a mixture of seawater and cement was injected into the hole through a swivel device, hollow stem of Auger Flights, Agitating Head when Auger Flights were extracted and mixed with soil in order to increase its bearing strength.

As it was important to keep extracting speed and consolidating scope of soil, speed meter and depth measure meter were equipped in operator's room.

* Former Model of D-60KP

Please note that some products may be subject to change due to continuous studies of design and performance.

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