

GLOBAL PUMP SOLUTION DOOCH

60Hz



SEWAGE LIFTING PUMP SYSTEM

NDPS SERIES

No-Blockage & Hygienic DOOCH OSC SYSTEM ‘ Sewage Lifting Pump System ’



※ Control panel with stand is optional.

✓ Minimize maintenance cost

- Designed as bottom-discharge type to reduce floor area and avoid sediments in the tank
- HDPE (high density polyethylene) material : High chemical resistant & durability / Save the cost of regular tank cleaning

✓ Best performance - No Blockage

- Dooch's cutting edge pumps (grinder, vortex) installed : No blockage at all
- High performance motor that is usable on land / Grinder type pump that can shred solids and avoid fixation.

✓ High durability material / High performance motor

- High intensity stainless steel (Hi-Cr steel) cutter installed : for grinder pump
- Low operation cost by high performance motor and hydraulics structure

※ Smart overload operation function (Function that avoids inlet blockage)

Protection function operates when pump's current gets 130~150% due to impeller's restrain : Try 'CCW rotation→CW rotation→CCW rotation→CW rotation→CCW rotation→CW rotation' but if it still doesn't run normally, pump stops and runs off alarm.

✓ Hygienic maintenance

- Able to clean waste inside before a pump maintenance
- Able to clean inside in various ways / dismantling pump is easy and hygienic

✓ Easy installation

- Pump is mounted on the specialized, hard and hydraulics structured stand.
- Easy to install as the dismantlable vertical sewage tank is in slim size
- Easy to dismount as hard and big pipe is assembled
- At-site labor is unnecessary as it comes out in a finished-product

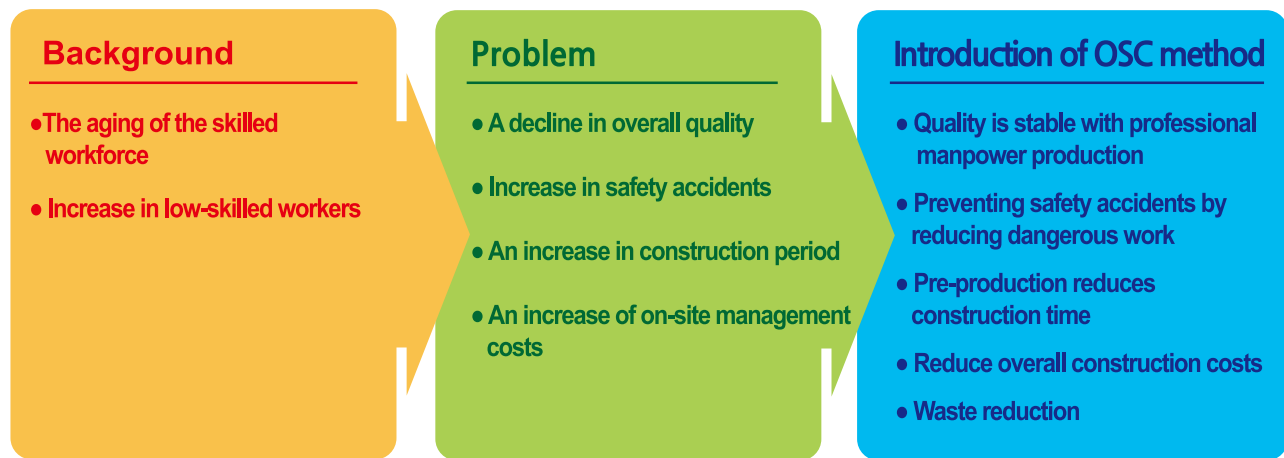
✓ Features

- System based on OSC
- High-durability HDPE (High-density polyethylene) sewage tank (Select among 200L/350L/500L)
- A fully discharged tank that facilitates discharge of suspended and sedimentary materials
- Sewage-specific float switch applied (Increased buoyancy of its own, even under conditions with a large amount of floating matters)

What is OSC method?

Off-site construction means putting together modules made in a factory at the installation site, away from the existing on-site production system, to make sure accidents like welding and cutting are less likely to happen. As field work is reduced, **40% of conventional waste generation is reduced by 5%.**

OSC Introduction Background



Comparison of competitor's dry sewage & drainage package system

Category	dooch	A company	B company
Pump installation position	Outside	Outside	Outside
Pump connection method	All-in-one type	Individual Installation	Individual Installation
Pump type	Grinder, Voltex	Voltex	N Impeller in voltex type
Tank capacity	200~500L	400L/1,200L	800L
Tank material	*HDPE (High-density polyethylene)	PE (Polyethylene)	FRP (reinforced plastic)
Product size	60% (500L)	100% (400L)	95% (800L)
Delivery method	: All-in-one set delivery	Field assembly	Field assembly

*HDPE : Hardness, mechanical strength and heat resistance is more durable than FRP and PE.

What is Sewage lifting pump system?

Sewage lifting pump system is a system made by collecting and reducing the weight of the septic tank in an environment where natural drainage is not possible, such as multi-family buildings or underground buildings, and provides an optimal solution for the site.

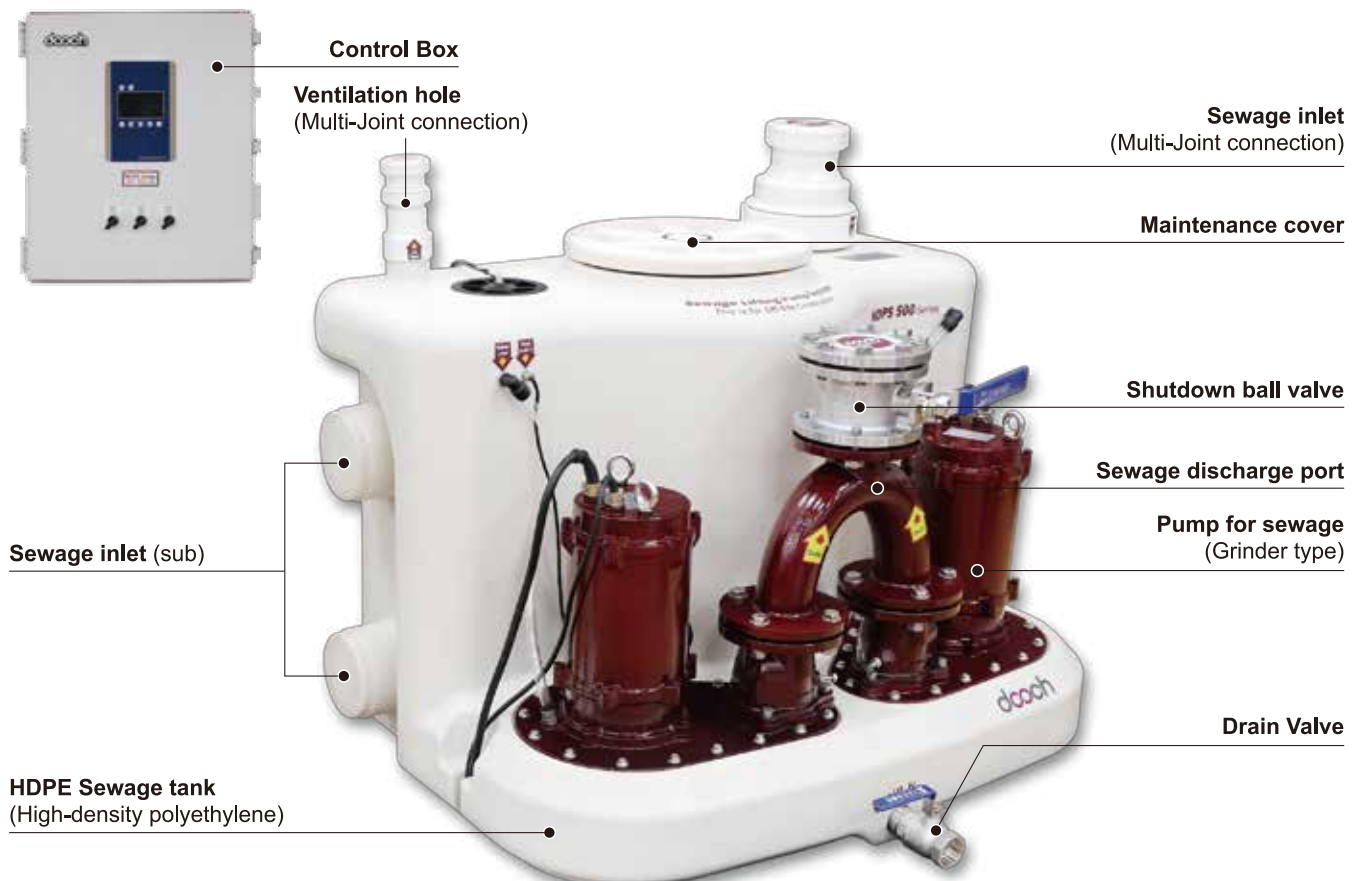
Areas of application

Multi-family buildings, houses, apartments, residential and commercial complexes, sewage treatment plants, manholes, breeding grounds, etc. that do not naturally drain

Applied Model

Category	200L		350L				500L					
Power (kW)	1.5	2.2	1.5	2.2	3	4	1.5	2.2	3	4	5.5	7.5

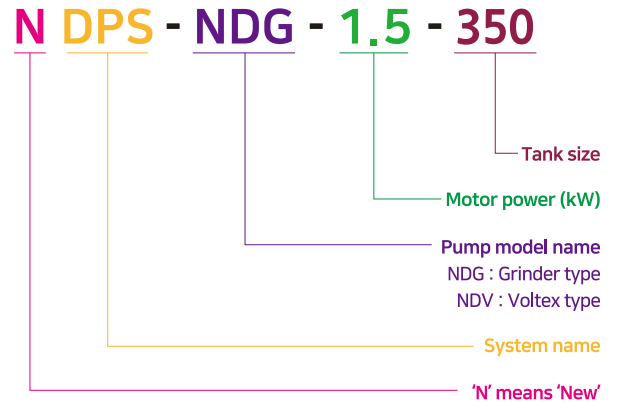
Component



- ※ Inside of the pump : Check-valve built in front of the sewage outlet
- Inside of the tank : Float-switch for sewage installed
- ※ The pressure gauge is excluded from the supply range.

※Control panel with stand is optional.

Introduction of model name



Control Box



* Specification

Case material	ABS (OPTION: STAINLESS STEEL)		
Display	4.3" TFT LCD / KEY PAD		
Number of pump	2~3 pumps		
Rated capacity	1~5HP	7.5~10HP	15~30HP
Maximum quantity of float switch	Max. 4		
Input Power	3Øx220V/380V/440V, 50~60Hz		

* Key functions

- Overload protection
- Alternating operation based on accumulated operation time
- Dry running protection
- Panel temperature, humidity detection

※ Overload protection (Inlet-blockage protection)

If 130-150% overload of pump current value due to impeller constraint during pump operation, protection starts : Try 'CCW rotation→CW rotation→CCW rotation→CW rotation→CCW rotation→CW rotation' but if it still doesn't run normally, pump stops and runs off alarm.

Sewage Package Components



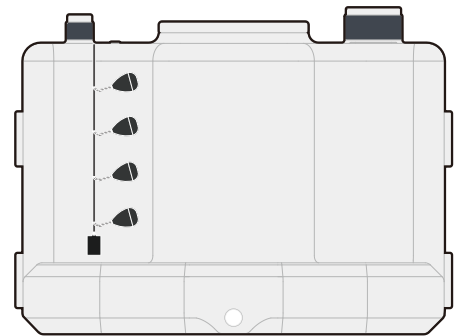
a grinder-type sewage pump



Hi-Cr Impeller
(STS 420J1)



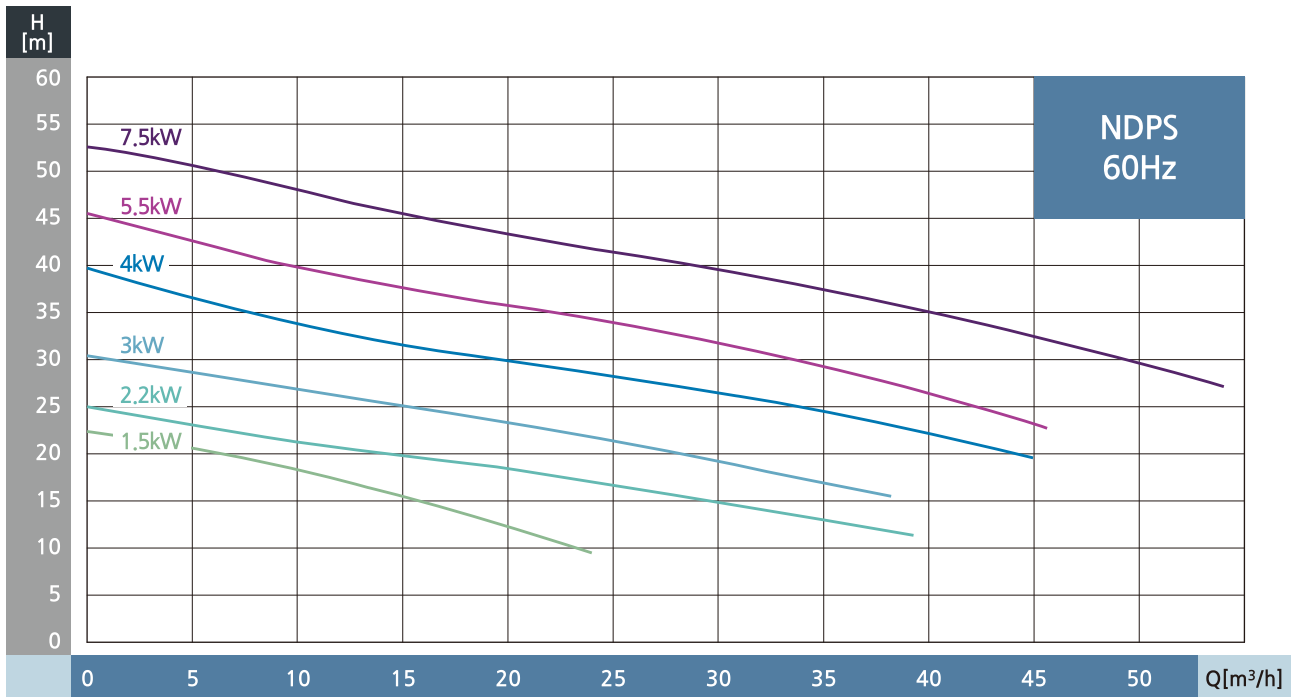
Hi-Cr grinder
(STS 420J1)



- HDPE Sewage tank 200~500L (High-density polyethylene)
- Float switch for sewage (Operates precisely)

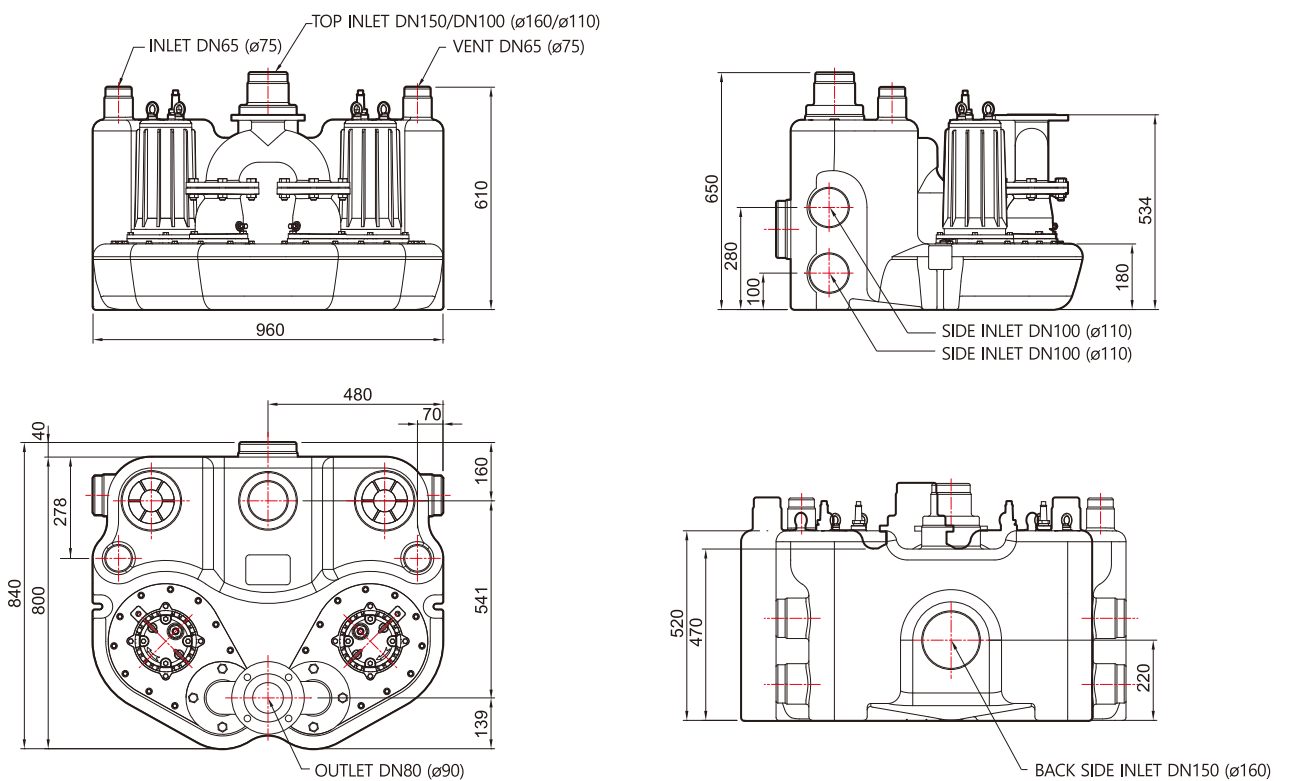
- ※ Pump installed outside the water collection tank to maintain dry condition
- ※ Fully sealed tank with integrated pump (OSC system)

Performance curve



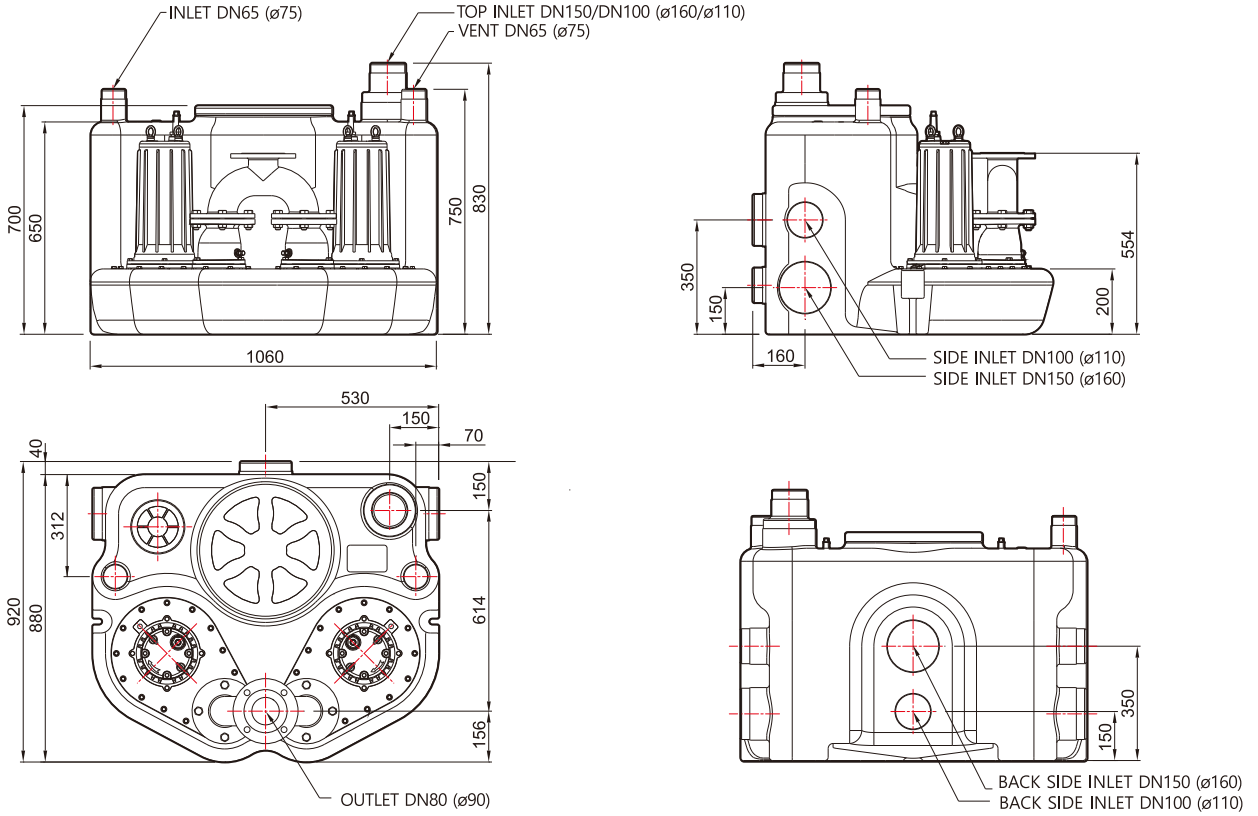
Outline Drawing

NDPS 200 Series



Outline Drawing

NDPS 350 Series



NDPS 500 Series

