PRESSING ROTARY OUTER CYLINDER-TYPE SCREW PRESS

ISGK

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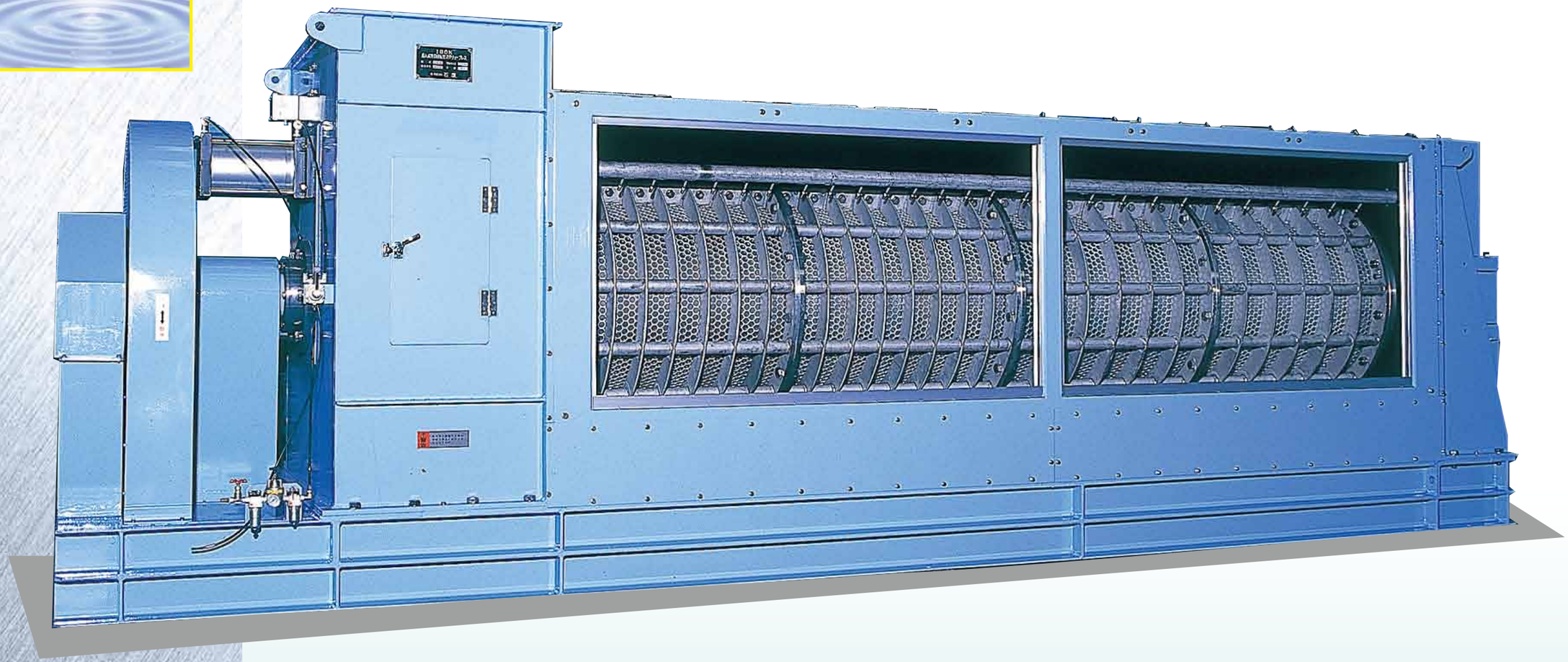
ISGK CONTINUOUS PRESSING DEHYDRATION IS A PERMANENT SUBJECT

Environmental issue such as global warming and acid rain are important problems that have become part of business community's social responsibility.
With this responsibility in the mind, the ISGK helps the environment with its compactness efficiency and energy saving.
The ISGK Screw Press reduces labor and other costs.



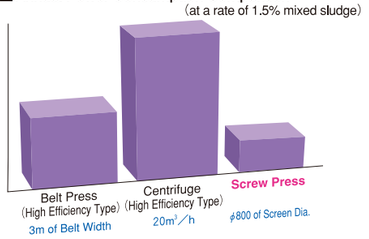
HIGH-PERFORMANCE SCREW PRESS IS COMPACT, SAVES ENERGY AND HELPS THE ENVIRONMENT

Features

1 High Performance with Less Power Consumption

The motors of both the Screw Press and its auxiliary devices are designed to consume less power than other machine types.

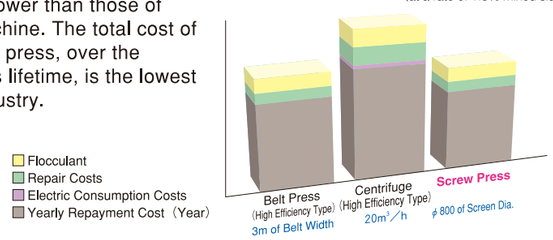
■ Annual Power Consumption Comparison
(at a rate of 1.5% mixed sludge)



2 Low Price & Low Running Cost

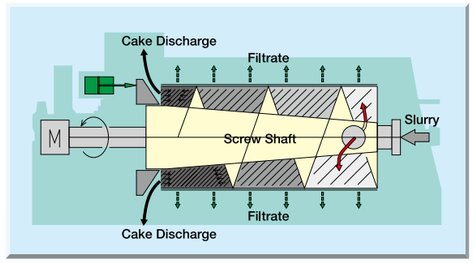
Yearly maintenance and running cost are lower than those of other machine. The total cost of our screw press, over the machine's lifetime, is the lowest in the industry.

■ Comparison of Yearly Maintenance Cost
(at a rate of 1.5% mixed sludge)



3 Easy operation and maintenance with light weight and simple structure

The ISGK Screw Press has simple structure and is lighter in weight than other machine types. Maintenance is simple and easy.
It is not necessary to discharge the cake left in the machine at the end of each day's operation, except before a holiday. The press can be stopped and started as it is.
Accordingly, less energy is required to stop and start the Press.



4 No noise and vibration is generated due to low rotation speed.

The rotation speed of the screw shaft is normally only 0.1 ~ 2rpm. Therefore, no noise and vibration is generated and a good operating environment can be maintained without taking any extra measures.

5 No filter cloths . Only one polymer is required for operation.

Because the screens are made of metal they need to be replaced less frequently. This results in easier maintenance.
Sludge is flocculated with one kind of polymer, facilitates efficient and stable operation.
It is possible to further reduce cake moisture content and increase capacity by applying the two-liquid method.

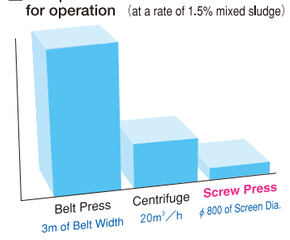
6 Only simple ventilation system is required due to enclosed structure.

Enclosed structure is applied to the filtering and dewatering area,
Which allows for the operation with deodrization when simple ventilation system is applied.

7 Less wastewater is produced because of less wash water.

Less water is required as compared to other presses since only 5-10 minutes of washing are needed for the press after an operation is completed. Wastewater is diminished because over 95% of suspended solids are collected.

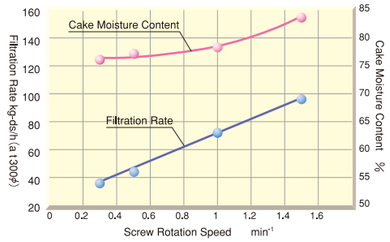
■ Comparison of water volume needed for operation (at a rate of 1.5% mixed sludge)

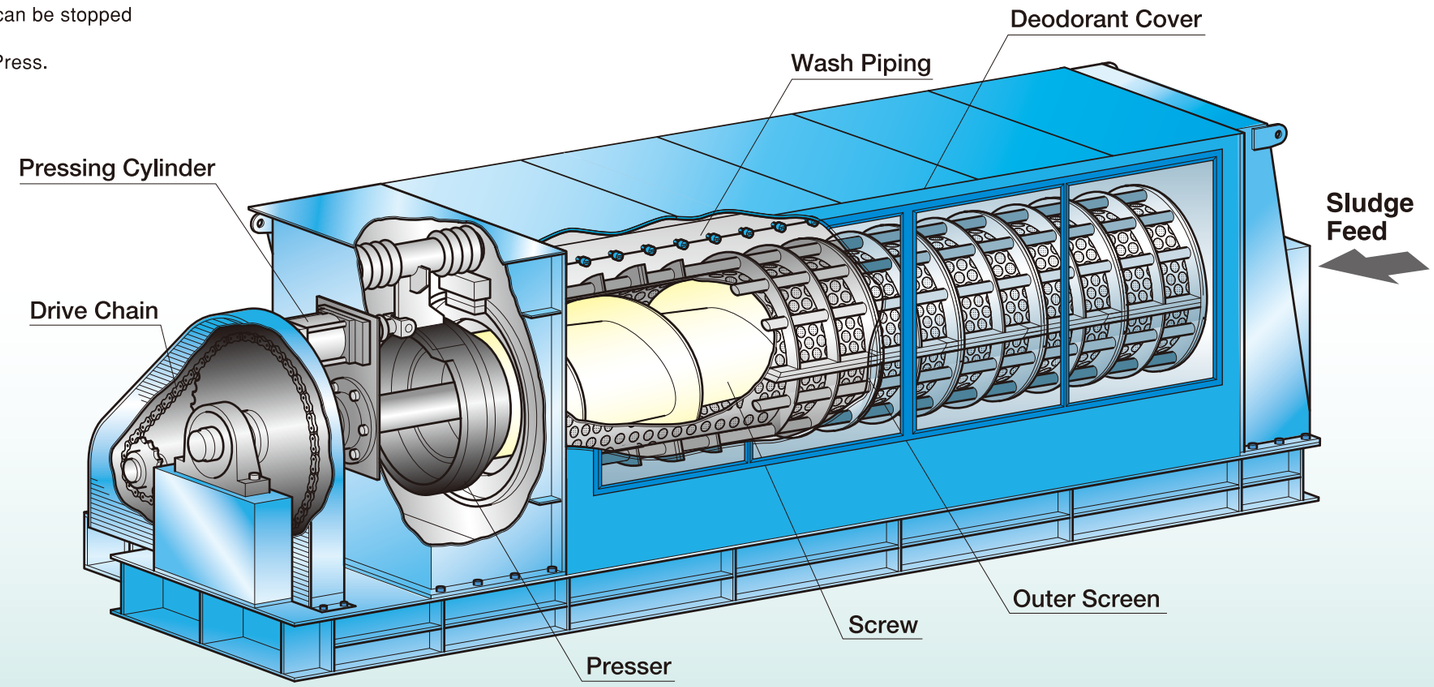


8 Easy adjustment of Cake moisture content and treatment volume.

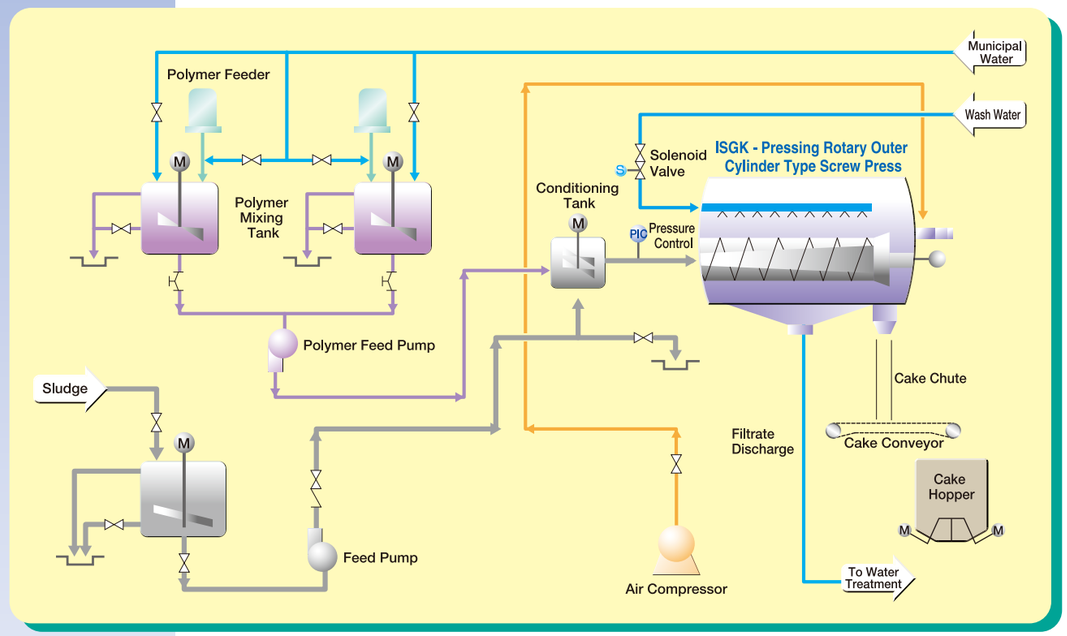
Cake moisture content and treatment volume can be freely adjusted by regulating the screw rotation speed.
This feature is unique to the Screw Press, and it is also useful when cake moisture content must be reduced to a certain level when recycling.

■ Reference Sample





Flow Sheet



Application

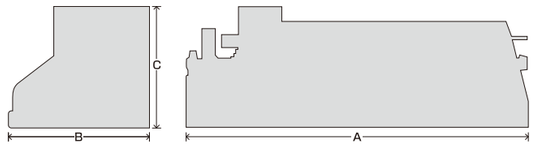
- Surplus Activated Sludge Treatment
- Industrial Waste Water Sludge Treatment
- Sedimentation Sludge Treatment

Typical Data

Sludge Name	Concentration (SS) (%) (W/V)	Organic Polymer	Dosage Rate (%) per SS	Cake Moisture Content (%) per WB	Filtration Rate kg-ds/Hrϕ300	Business Line
Floatation Scum	9～10	Cation	0.3	65	60～75	Oils and Fats
Plant Waste Water	4.5～5.5	Cation	0.7	74	75～90	Automobiles
Coagulated & Surplus Sludge (Mixed)	3～3.5	Cation	0.4	75	35～40	Industrial Wastes
Hog Yard Mixed Sludge	2～2.5	Cation	1.8	77	25～30	Hog Raising
Coagulated Sludge	6～9	Cation	0.4	66	30～40	Oils and Fats Polishing
Plant Surplus Sludge	0.7～1.2	Cation	1.7	83	13～20	Chemical
Raw & Surplus Sludge (Mixed)	2.5～3.0	Cation	0.7	73	45～60	Sewage
Anerobic Digested Sludge	2～2.5	Cation	1.5	75	30～40	Sewage

Dimension & Weight

Model	Screen Diameter (mm) (D)	Dimensions (mm)			Weight (t)
		A	B	C	
0205	200	2,000	1,000	880	0.9
0305	300	2,590	1,200	1,030	1.4
0405	400	3,380	1,360	1,150	2.2
0505	500	4,120	1,760	1,450	4.0
0605	600	4,960	2,015	1,700	6.0
0705	700	5,490	2,130	1,890	7.5
0805	800	6,190	2,250	2,010	9.1
0905	900	6,740	2,460	2,110	10.7
1005	1,000	7,520	2,720	2,375	13.9
1105	1,100	7,975	2,960	2,480	16.3
1205	1,200	8,730	3,200	2,665	21.0



Note 1) Dimension and Weight in this table may be changed without notice.
Note 2) Aluminum Sash is used for cover.

Packaged Type

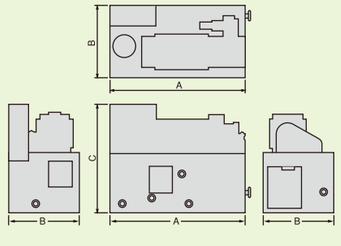
Packaged Type saves space and reduces lead time

Feature

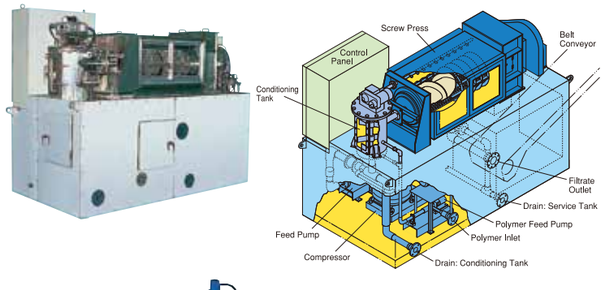
- **Space-Saving** ····· Equipment is compact because the Screw Press is packaged together with its auxiliary devices.
- **Lead Time Reduction** ····· The operation can be up and running in short time after installation by connecting piping and electric wiring.

■Dimensions

	A	B	C
0205	2,620	1,400	2,100
0305	3,360	1,600	2,200
0405	4,300	1,930	2,300
0505	5,200	2,200	2,650



ϕ200 Packaged



ϕ400 Packaged