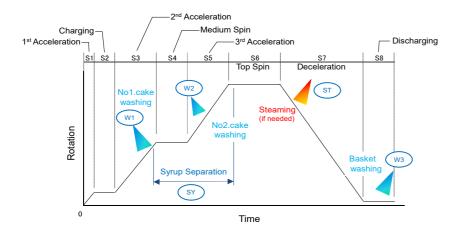
ADVANTAGES

5 Smooth Operation

5-1 Operation Control System

◆ Optimum setting for the various massecuite



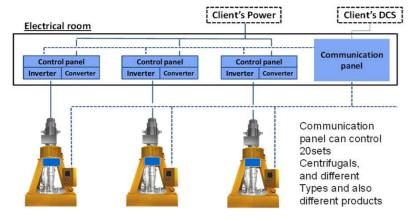
5-2 Local Operating Box with Touch Screen

- Easy setting of each parameter
- Operation trend and Alarm log can be monitored

5-3 Communication Panel

- Optimization of Power leveling and non- overlapping of sugar discharging for the multi-centrifugals
- ◆ Communication with client's DCS









TSUKISHIMA KIKAI CO.,LTD

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Fully Automatic Batch type Centrifugal

"Customer satisfaction" is one of the Corporate Policy of TSUKISHIMA KIKAI

TSUKISHIMA KIKAI's centrifugal named "Hospitality" are the longest history, more than 110 years, in the world thanks to "Customer satisfaction improvement".

TSUKISHIMA KIKAI has delivered over 1,500 units of "Hospitality" all over the world, for all the variety of applications such as raw sugar, white sugar, refined sugar, glucose, fructose, sugar alcohol, etc.

TSUKISHIMA KIKAI's "Hospitality" is well-known for its quality with reliability such as high level of safety.



ADVANTAGES

Safety

1-1 Basket

- ◆ No explosion for more than 110 years
- ◆ Manufactured by TSUKISHIMA KIKAI's own factory
- ◆ Durable design without hoops

1-2 Casing

◆ Structural safety guard for the basket explosion

Sanitary

2-1 Basket

◆ Low microbiological risks thanks to hoopless basket

2-2 Basket Valve

- ◆ Minimal leakage of massecuite thanks to the upper side open system
- ◆ No mechanical component under the machine

2-3 Discharge System

◆ Minimal remained sugar thanks to the centering system

2-4 Casing

- ◆ No product accumulation thanks to the bottom slope
- ◆ No pockets inside casing

2-5 Charge Chute

◆ Less remaining massecuite by spray nozzle washing



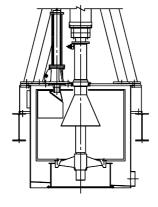


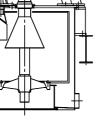
TSUKISHIMA KIKAI OTHER BRAND Sugar Discharge Area

















Basket

Basket Valve

Energy Saving

3-1 Drive System

- ◆ Energy consumption is only 0.8 1.0 kWh/tonmassecuite by optimum inverter drive system
- Optimization of Power leveling for the multi-centrifugals

Easy Maintenance

4-1 Basket Valve

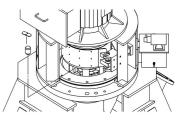
◆ No mechanical component of bottom valve under the machine

4-2 Upper Shaft & Lower Shaft(separate shaft)

Replacement of the bearing without disassembling of basket unit

4-3 Coupling of Motor

◆ Replacement of the coupling rubber without pulling up the motor



4-4 Charge Valves

Less consumable parts by double butterfly valves

Charge Chute & Valves

Coupling

Approx. Major Design Data on TSUKISHIMA KIKAI's Batch type Centrifugal

Model	Massecuite Capacity (kg / batch)	Cycles (batch / hr.) * Easily separation	Cycles (batch / hr.) * Not easily separation	Dimension & Weight			
				Total Height (mm)	Installation Pitch (mm)	Depth under Floor (mm)	Operation Weight (kg)
1000	1000	25	20	5000	1770	1085	9300
1300	1300	25	20	5140	1920	1085	9600
1500	1500	25	20	5450	2120	1185	10100
1750	1750	25	20	5570	2220	1205	10850
2000	2000	22	18	6350	2320	1375	14200

Note: Above figures are subject to minor changes after finalizing detailed design.



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