

# Techno-center for your solution and development !!

In our Techno-center, fundamental research-works, development of new equipments and processing-plants have been executing with full of power.  
Upon client's request, Techno-center prepares the equipments for experimental use and tests them in shortest leading time.



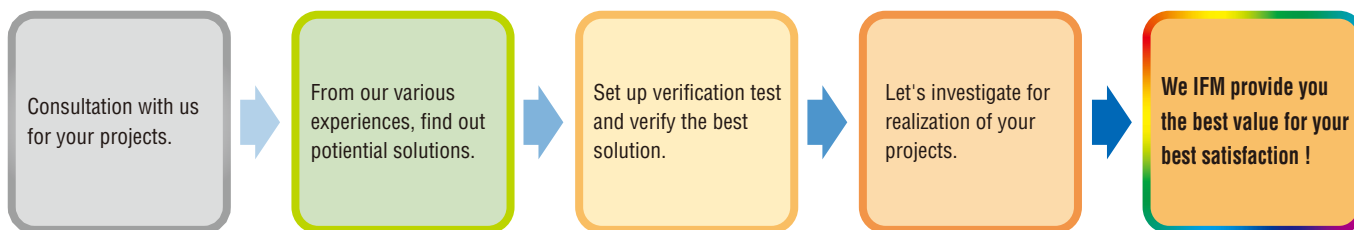
● Particle size distribution measuring device ● Microscope

#### ● Available Measuring instruments and Experimental equipments

- Viscometer • Microscope • pH meter
- Particle size distribution measuring device • Centrifugal separator
- Moisture meter • Salinometer • Rotary evaporator
- DO meter • Autoclave • Electric conductivity meter
- Superheated steam generator • Colorimeter • Brixmeter

● Viscometer

Utilize our techno-center through communication to fulfil exactly what you require.



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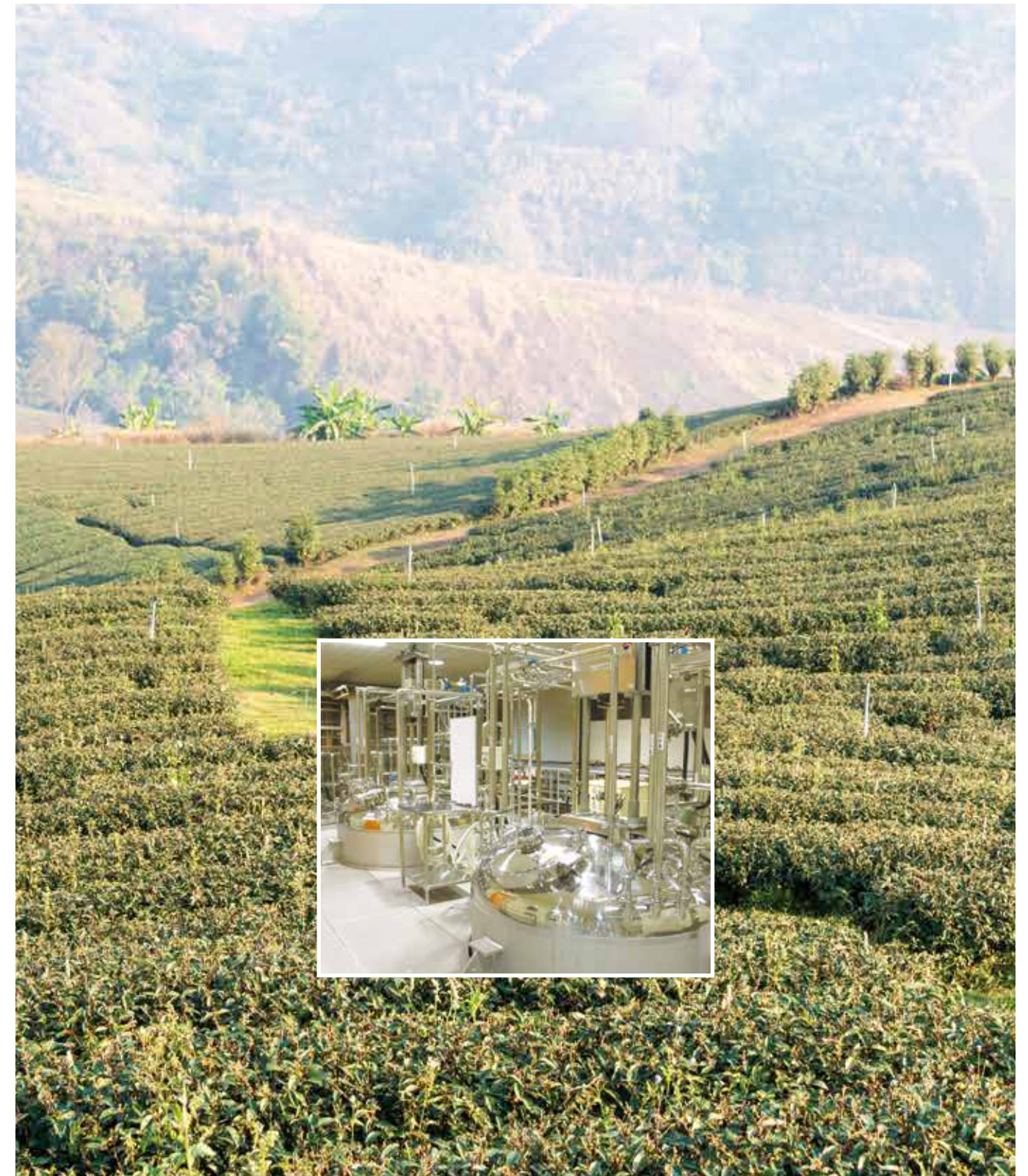
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# Multi-Purpose Extractor

*Creates the new wave of extraction systems*



**IZUMI FOOD MACHINERY CO., LTD.**



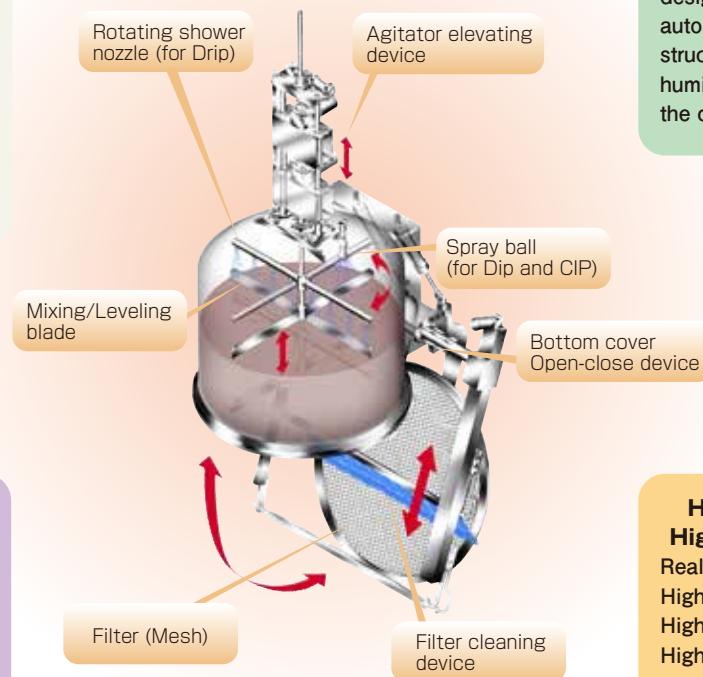
# Multi-Purpose Extractor

The Multi-Purpose Extractor can produce all of the major beverages in the current beverage market with one unit and also can achieve the quality control depending on the grade of the beverage.  
The Multi-Purpose Extractor creates the new wave of extraction systems by applying new mechanism.

**[Excellent Installed inventory]**  
More than 150 projects in Japan & overseas.

## Wide-Range and High-Quality Extraction

The Multi-Purpose Extractor covers almost all the extraction needs with wide range of extraction methods: Dip, Drip, Dip-Drip extraction and High temperature and pressure extraction recovers the effective substance at high yield rate.



## Ease of Operation and Safety

The Multi-Purpose Extractor designed to be cleaned automatically. Also, sealed structure helps avoid the hot humid environment and prevent the contamination.

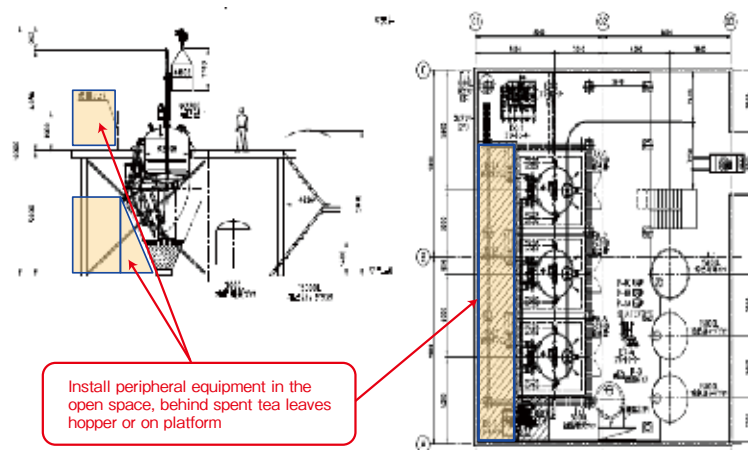
## Automatic Extraction Process

Leveler and agitation device are mounted on the Multi Purpose Extractor as standard equipment. In addition, excellent extraction and quality control can be achieved by various extraction pattern settings.

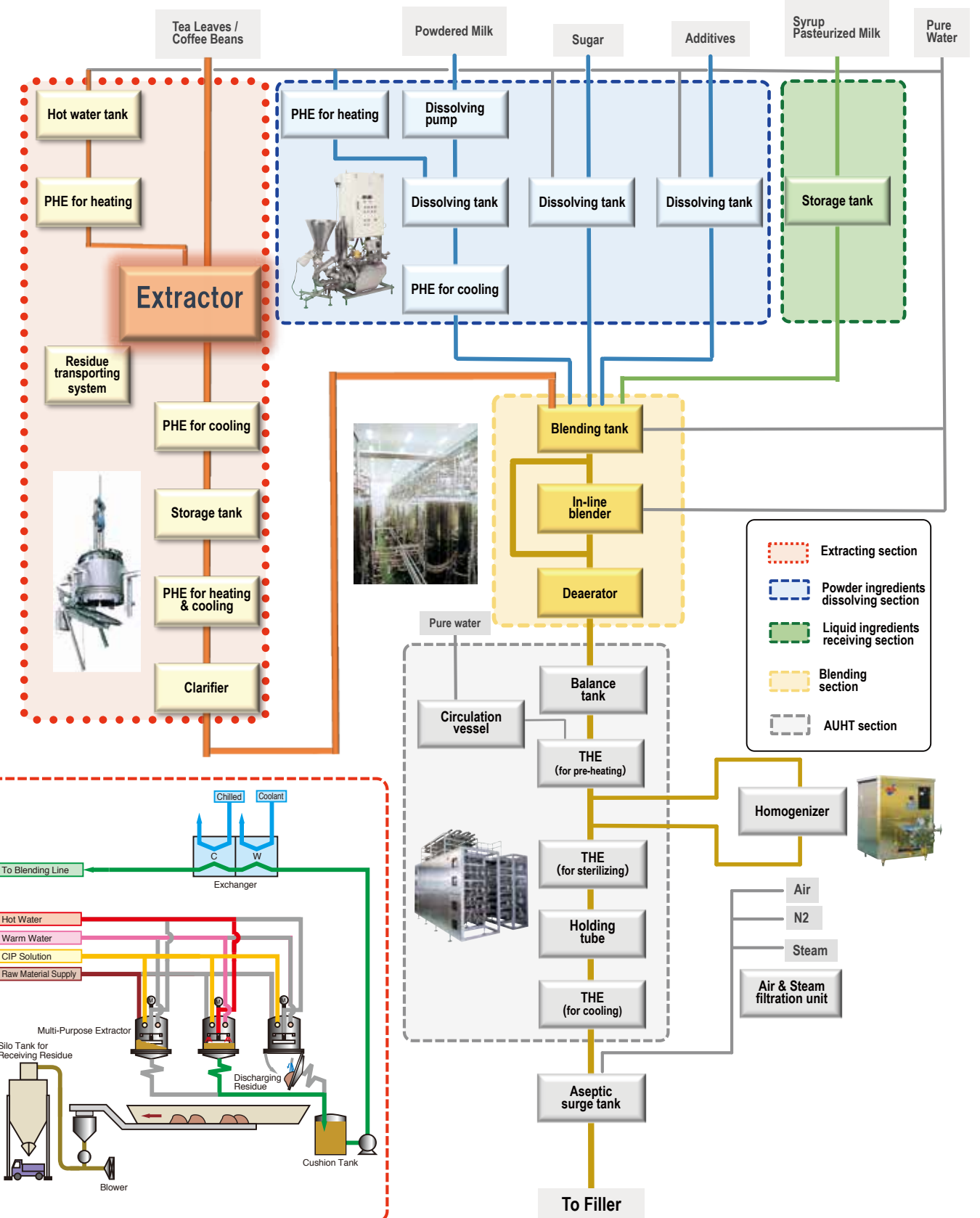
## High Temperature and High Pressure Extraction

Realizing Espresso extraction by High Temperature and High Pressure Extraction. High concentrates of coffee essence can be obtained by this extraction method.

Layout example



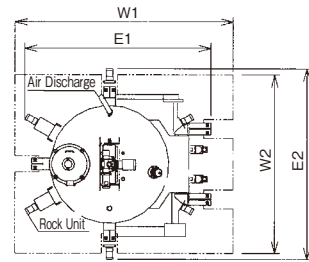
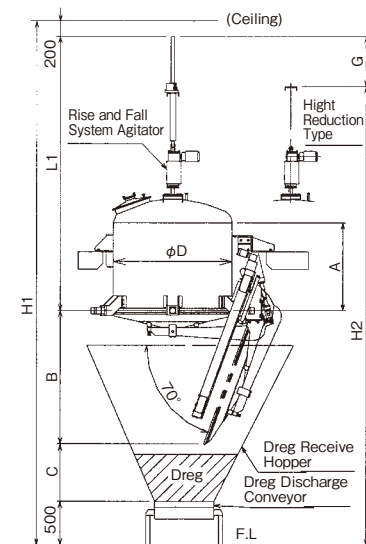
# Creates the new wave of extraction systems



# Multi-Purpose Extractor

## Atmospheric extraction system

### DIMENSIONS



Integrating various extraction process into one extractor  
Drip, Dip, Dip-Drip extraction etc.  
Automating extraction process.  
Improving operating environment with closed structure.

MODEL	φD (mm)	A (mm)	B (mm)	C (mm)	L1 (mm)	G (mm)	H1 (mm)	H2 (mm)	W1 (mm)	W2 (mm)	E1 (mm)	E2 (mm)
TEX1113	1150	1300	1525	600	3900	760	6725	5965	2150	2100	2000	2100
TEX1512	1550	1200	1900	700	3800	760	7100	6340	2550	2500	2400	2500
TEX2015	2000	1500	2300	1000	4600	760	8600	7840	3200	2800	3100	3200
TEX2215	2200	1500	2500	1200	4700	760	9100	8340	3800	3300	3300	3400

※Filter mesh #50 (Basic)

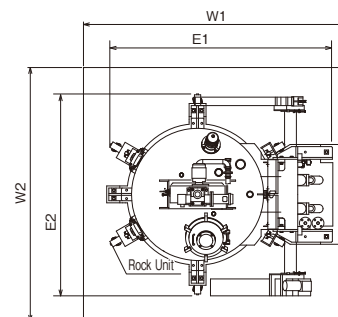
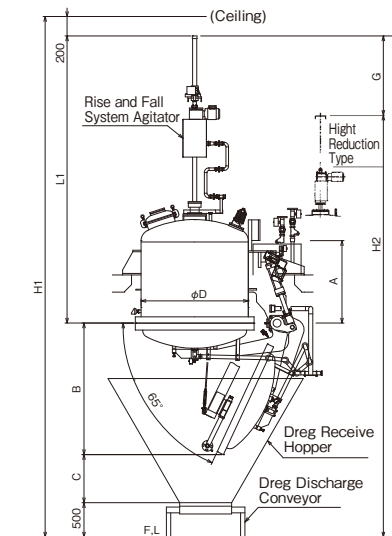
### SPECIFICATIONS

MODEL	Raw Materials Volume (kg/B) Coffee/Tea*1)	Design Pressure	Agitating Speed (rpm)	Filtration Area (m <sup>2</sup> )	Operation Capacity (L)*2)	Showering Volume (L/Hr)*3)	Hot Water Volume (L/Hr)	Air Volume (Nm <sup>3</sup> /Hr) 0.2MPa	Purified Water Volume (m <sup>3</sup> /Hr) 0.3MPa	Power(kw) at 3φ x 200/220V*5)	Dry Weight (kg)
TEX1113	165/35	○	6~60	1.03	1000	3000	8000	—	—	1.6	2200
TEX1512	300/70	○	6~50	1.65	2100	5000	12600	3.5	2.0	1.9	3000
TEX2015	500/165	○	6~40	2.85	5000	8000	30000	4.5	3.2	2.6	4800
TEX2215	600/200	○	6~35	3.45	6000	10000	30000	5.0	4.0	2.6	5000

\*1) The figures indicate the benchmark values and may vary depending on properties of raw materials and processing conditions.  
\*2) For Dip Extraction  
\*3) For Drip and Dip-Drip Extraction  
\*4) The figures indicate the volume of air and purified water used for filter cleaning device.  
\*5) The figures do not include the power used for hydraulic unit.

## High Temperature and High Pressure(HTHP) extraction system

### DIMENSIONS



HTHP Extraction system creates more multi-purpose and increases variety of extracting methods.  
Higher concentrated extract obtained by high temperature extraction over 100 degree C.

MODEL	φD (mm)	A (mm)	B (mm)	C (mm)	L1 (mm)	G (mm)	H1 (mm)	H2 (mm)	W1 (mm)	W2 (mm)	E1 (mm)	E2 (mm)
TEX1512 H	1550	1200	1915	700	4180	600	7495	6895	3500	3000	2700	2500
TEX2015 H	2000	1500	2300	1000	5000	760	9000	8240	3950	3450	3400	2800
TEX2215 H	2200	1500	2500	1200	5100	760	9800	9040	4150	3650	3600	2900

※Filter mesh #50 (Basic)

### SPECIFICATIONS

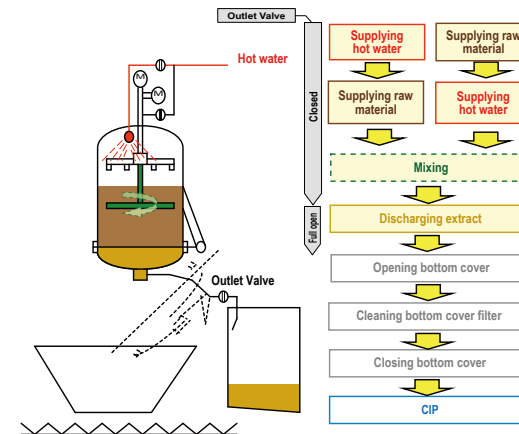
MODEL	Raw Materials Volume (kg/B) Coffee/Tea*1)	Design Pressure (MPa)	Agitating Speed (rpm)	Filtration Area (m <sup>2</sup> )	Operation Capacity (L)*2)	Showering Volume (L/Hr)*3)	Hot Water Volume (L/Hr)	Air Volume (Nm <sup>3</sup> /Hr) 0.2MPa	Purified Water Volume (m <sup>3</sup> /Hr) 0.3MPa	Power(kw) at 3φ x 200/220V*5)	Dry Weight (kg)
TEX1512 H	300/70	0.3	6 ~ 50	1.65	2100	5000	12600	3.5	2.0	1.9	4700
TEX2015 H	500/165	0.3	6 ~ 40	2.85	5000	8000	30000	4.5	3.2	2.6	7200
TEX2215 H	600/200	0.3	6 ~ 35	3.45	6000	10000	30000	5.0	4.0	2.6	7500

\*1) The figures indicate the benchmark values and may vary depending on properties of raw materials and processing conditions.  
\*2) For Dip Extraction  
\*3) For Drip and Dip-Drip Extraction  
\*4) The figures indicate the volume of air and purified water used for filter cleaning device.  
\*5) The figures do not include the power used for hydraulic unit.

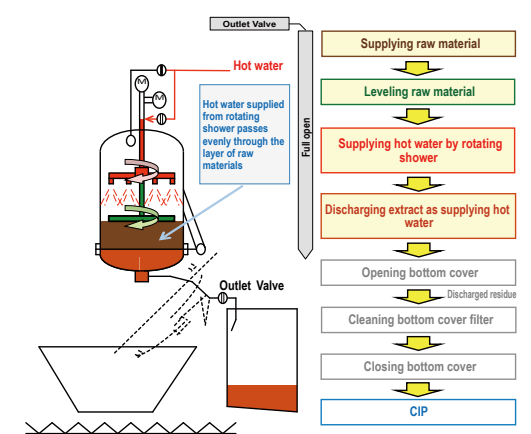
# Versatile extract methods and Improvement of extraction efficiency

## Versatile extract methods

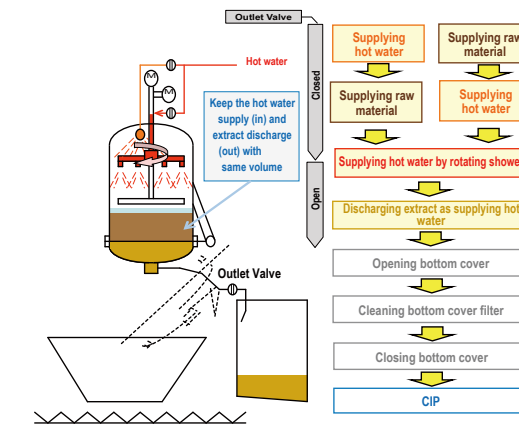
### Dip Extraction



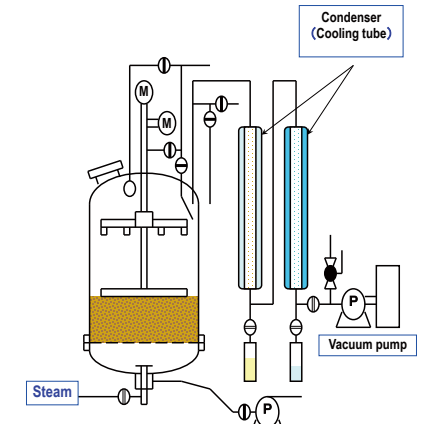
### Drip Extraction



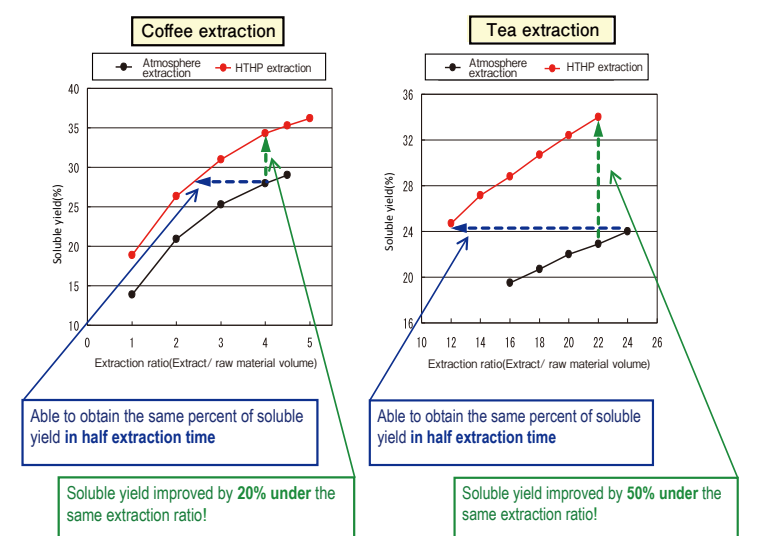
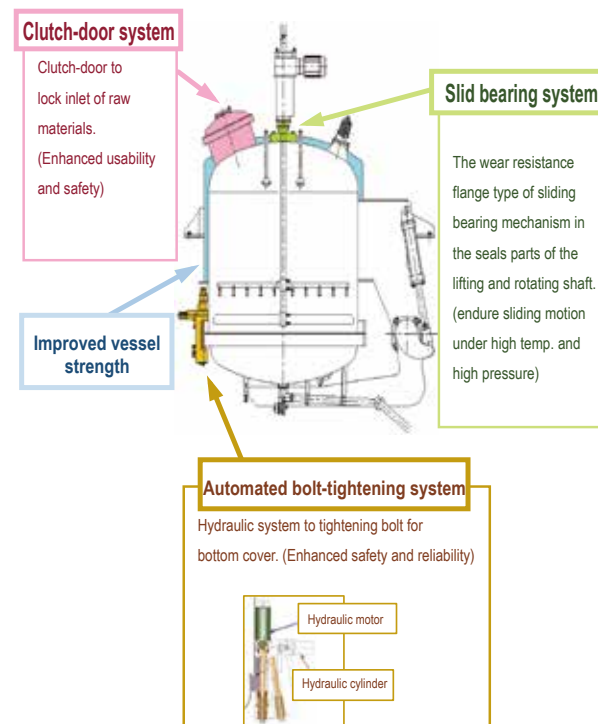
### Dip-Drip Extraction



### Aroma Recovery



## Improvement of mechanism and extraction efficiency

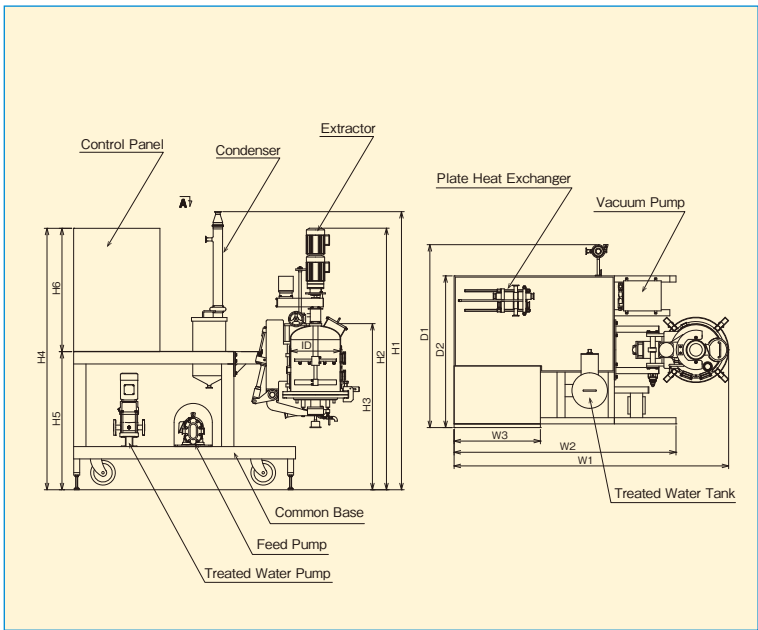




# Multi-Purpose Extractor

for Simplicity and Small-volume production in great varieties

## Small-Capacity type unit



### DIMENSIONS

Operating Volume (L)	I.D (mm)	W1 (mm)	W2 (mm)	W3 (mm)	D1 (mm)	D2 (mm)	H1 (mm)	H2 (mm)	H3 (mm)	H4 (mm)	H5 (mm)	H6 (mm)
50	400	2230	1800	700	1485	1230	2300	2125	1350	2120	1120	1000
100	500	2330	2000	700	1485	1230	2300	2470	1620	2120	1120	1000
200	650	2980	1760	700	1800	1430	3140	3300	2180	2150	1150	1000
500	900	3230	1760	700	2000	1630	3140	3700	2450	2150	1150	1000

### SPECIFICATIONS

Operating Volume	Raw Material Volume For Drip/Dip *1)	Agitator RPM	Filtration Area	Showering Volume *2)	Hot Water Volume (for Dip)	Extractor Design Temperature and Pressure					
						Standard		Mid Pressure		High Pressure *4)	
						Design Pressure	Design Temperature	Design Pressure	Design Temperature	Design Pressure	Design Temperature
(L)	(kg/B)	(r/min)	(m²)	(L/Hr)	(L/Hr)	(MPa)	(°C)	(MPa)	(°C)	(MPa)	(°C)
50	2.5~10/1~8	18~106	0.13	300	600	0	99	—	—	0.27	135
100	5~20/2~15	18~106	0.20	600	600	0	99	0.13	125	0.3	135
200	10~40/4~30	18~106	0.33	1000	1500	0	99	0.15	99	0.3	135
500	25~100/10~75	7~70	0.64	2000	3000	0	99	0.15	99	—	—

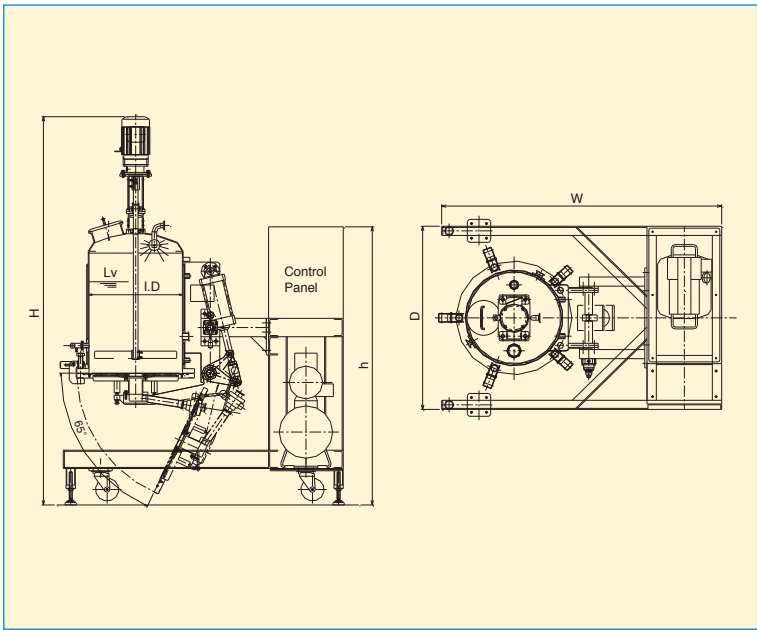
\*1) The values indicate the reference, therefore vary on raw materials and operating conditions.  
\*2) The values indicate the showering volume used for Drip and Dip-Drip extraction.  
\*3) Small-Sized Pressure Vessels code is applicable to 50L with mid pressure extractor.  
\*4) Small-Sized Pressure Vessels code is applicable to 50L and First Class Pressure Vessel code is applicable to 100L and 200L with high pressure extractors.

### UTILITY

Operating Volume (L)	Water (for Extraction) (L/Hr)	Cooling Water (m³/Hr) 0.2MPa	*1) Steam (kg/Hr) 0.5MPa	*2) Air (NL/min) 0.5MPa	Electricity (kW) ϕ 3x200-220V
50	1000	3000	130	200	2.2
100	1000	3000	130	200	2.2
200	1500	5000	180	200	3.5
500	3000	5000	450	200	5.0

\*1) The values include the required capacity for hot water supply, heating by jacket and aroma recovery.  
\*2) The values include the required capacity for pressurizing extractor, instrumentation and opening/closing bottom cover.

## Simple type unit



### DIMENSIONS

Lv (L)	I.D (mm)	W (mm)	D (mm)	H (mm)	h (mm)
50	400	1400	1000	2000	1600
100	500	1500	1000	2200	1600
200	650	1700	1200	2800	1700
500	900	2000	1600	3400	1800

### SPECIFICATIONS AND UTILITY

Lv (L)	Jacket steam (kg/Hr)	Jacket cooling water (L/Hr)	Electrical (kW)
50	30	3000	1.2
100	30	3000	1.2
200	60	5000	1.2
500	100	8000	2.3

- Accessories
- Control Panel
  - Handwheel for opening bottom cover
  - Tank for heating and cooling
  - Oil-compressor for opening bottom cover

- Option
- Residue receiving hopper
  - Fixed shower nozzle
  - Moving up-down agitator
  - Rotating shower nozzle

### Unit flow for Small-Capacity type

