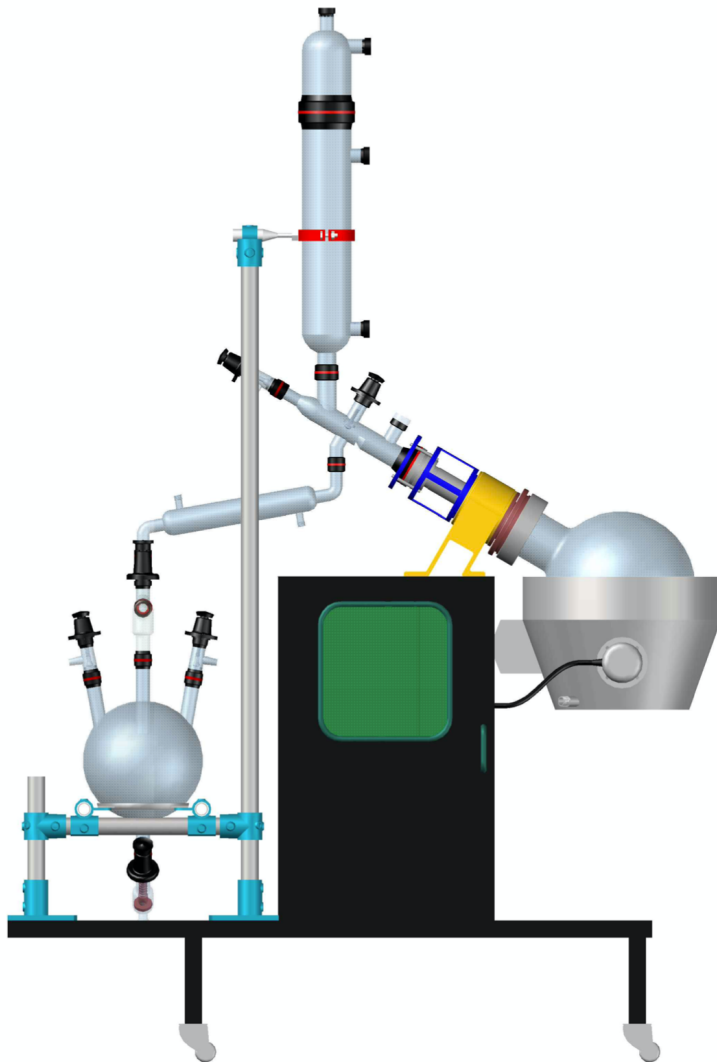




**JAGDAMBA ENTERPRISE**  
A Representation of Engineering and Technology



**ROTARY EVAPORATOR SYSTEM**

# SALIENT FEATURES OF JE ROTARY EVAPORATORS

## Principle

A rotary evaporator can form a thin film by rotating under constant heating and specific pressures (vacuum or atmospheric). It evaporates effectively and the vapours are condensed separately and collected.

## Applications

- Concentration
- Solvent Extraction
- Crystallisation
- Petrochemistry
- Particularly handling temp sensitive materials

Rotary Evaporator is the most effective and important apparatus for research and development, educational purpose and pilot testing in biological, biochemical, pharmaceutical, chemical, food and fragrance industry

## Our Rotary evaporators have (Optional) :

- A user-friendly frame guard hood with transparent glass protecting the user from steam, oil spillage and accidental flask breakage
- The whole system is covered with metal housing with glass doors keeping in mind the industrial safety standards
- The receiver are guarded with metal. Glass doors are provided for ease of handling for the user in order to clean the receiver after reaction
- The thermostatic bath is lifted by hydraulic system
- It is controlled by PLC system
- All the parameters can be read, set and stored:
  - Actual & set bath temperatures
  - Vapour temperatures
  - Rotation speed
  - Actual and set vacuum values

# TECHNICAL DATA OF 5L ROTARY EVAPORATOR

Model	5L GMP & FLP	5L NON-GMP & FLP	5L NON-GMP & NON-FLP
<b>Body</b>	SS 304 BODY	MS Powder coated	MS Powder coated
<b>POWER SOURCE</b>	Electric Panel in Flameproof Enclosure		Electric Panel in Non-Flameproof Enclosure
<b>Voltage Supply</b>	220V , 3Ph 50Hz		
<b>Power Consumption</b>	3 kW		
<b>ROTATION OF FLASK</b>			
<b>Rotation &amp; Controlling</b>	Soft start & controlling with VFD		
<b>Rotation Drive</b>	AC Synchronies Motor 0.25HP / Hindustan Make FLP motors		AC Synchronies Motor 0.25HP
<b>Rotation Speed</b>	10 to 135		
<b>Controlling</b>	By VFD		
<b>Accuracy</b>	2 RPM		
<b>Distillation Rate</b>	up to 1 - 2 L/H for water		
<b>BATH HEATING</b>			
<b>Temp Range</b>	0-180°C		
<b>Bath Heater Power</b>	2 kW		
<b>Bath Heating Control</b>	Electronic with PT-100, control accuracy +/-2 °C		
<b>Bath Construction</b>	Stainless steel 304 with Cover for heat protection		
<b>Bath Lift</b>	Motorised & controlled Linear Movement by Limit switches		
<b>GLASS ASSEMBLY (IN SCOPE OF JAGDAMBA ENTERPRISE)</b>			
<b>Rotating Flask</b>	5L-1 no		
<b>Receiving Flask</b>	2L - 1 no (Option for twin receivers available)		
<b>Condensate Area</b>	Vertical, 0.3 Sq.m surface area		
<b>Maximum Vacuum</b>	133 Pa		
<b>Safety Measures</b>	MCB & Short Circuit Breaker , Heater Protection		
<b>Other Accessories</b>	pipe supports, condensor holder, receiver flask holder, and rotating flask holder on bath		
<b>DISPLAY</b>			
<b>RPM</b>	Digital		
<b>Bath Temp</b>	Digital with PID Controller		
<b>Vapour Temp</b>	Digital		
<b>Time Totalizer</b>	Digital		
<b>SENSORS</b>			
<b>Vapour Temperature</b>	PT - 100, 3 wire with FLP Head		PT - 100, 3 wire
<b>Bath Temperature</b>	PT - 100, 3 wire with FLP Head		PT - 100, 3 wire
<b>Castor Wheels</b>	All four wheels with Lock [Double Wheels]		
<b>Optional</b>	SS-304 Body	MS Powder coated	MS Powder coated
	Frame guard covering with transparent glass to protect the user from steam, oil spillage and accidental glass breakage. It consists of PLC and HMI with all the parameters		

# TECHNICAL DATA OF 10L ROTARY EVAPORATOR

Model	10L GMP & FLP	10L NON-GMP & FLP	10L NON-GMP & NON-FLP
<b>Body</b>	SS 304 BODY	MS Powder coated	MS Powder coated
<b>POWER SOURCE</b>	Electric Panel in Flameproof Enclosure		Electric Panel in Non-Flameproof Enclosure
<b>Voltage Supply</b>	220V , 3Ph 50Hz		
<b>Power Consumption</b>	3 kW		
<b>ROTATION OF FLASK</b>			
<b>Rotation &amp; Controlling</b>	Soft start & controlling with VFD		
<b>Rotation Drive</b>	AC Synchronies Motor 0.25HP / Hindustan Make FLP motors		AC Synchronies Motor 0.25HP
<b>Rotation Speed</b>	10 to 135		
<b>Controlling</b>	By VFD		
<b>Accuracy</b>	2 RPM		
<b>Distillation Rate</b>	up to 3.5 - 4 L/H for water		
<b>BATH HEATING</b>			
<b>Temp Range</b>	0-180°C		
<b>Bath Heater Power</b>	4 kW		
<b>Bath Heating Control</b>	Electronic with PT-100, control accuracy +/-2 °C		
<b>Bath Construction</b>	Stainless steel 304 with Cover for heat protection		
<b>Bath Lift</b>	Motorised & controlled Linear Movement by Limit switches		
<b>GLASS ASSEMBLY (IN SCOPE OF JAGDAMBA ENTERPRISE)</b>			
<b>Rotating Flask</b>	10L-1 no		
<b>Receiving Flask</b>	5L - 1 no (Option for twin receivers available)		
<b>Condensate Area</b>	Vertical, 0.5 Sq.m surface area		
<b>Maximum Vacuum</b>	133 Pa		
<b>Safety Measures</b>	MCB & Short Circuit Breaker , Heater Protection		
<b>Other Accessories</b>	pipe supports, condensor holder, receiver flask holder, and rotating flask holder on bath		
<b>DISPLAY</b>			
<b>RPM</b>	Digital		
<b>Bath Temp</b>	Digital with PID Controller		
<b>Vapour Temp</b>	Digital		
<b>Time Totalizer</b>	Digital		
<b>SENSORS</b>			
<b>Vapour Temperature</b>	PT - 100, 3 wire with FLP Head		PT - 100, 3 wire
<b>Bath Temperature</b>	PT - 100, 3 wire with FLP Head		PT - 100, 3 wire
<b>Castor Wheels</b>	All four wheels with Lock [Double Wheels]		
<b>Optional</b>	SS-304 Body	MS Powder coated	MS Powder coated
	Frame guard covering with transparent glass to protect the user from steam, oil spillage and accidental glass breakage. It consists of PLC and HMI with all the parameters		

# TECHNICAL DATA OF 20L ROTARY EVAPORATOR

Model	20L GMP & FLP	20L NON-GMP & FLP	20L NON-GMP & NON-FLP
<b>Body</b>	SS 304 BODY	MS Powder coated	MS Powder coated
<b>POWER SOURCE</b>	Electric Panel in Flameproof Enclosure		Electric Panel in Non-Flameproof Enclosure
<b>Voltage Supply</b>	220V , 3Ph 50Hz		
<b>Power Consumption</b>	5 kW		
<b>ROTATION OF FLASK</b>			
<b>Rotation &amp; Controlling</b>	Soft start & controlling with VFD		
<b>Rotation Drive</b>	AC Synchronies Motor 0.25HP / Hindustan Make FLP motors		AC Synchronies Motor 0.25HP
<b>Rotation Speed</b>	10 to 135		
<b>Controlling</b>	By VFD		
<b>Accuracy</b>	2 RPM		
<b>Distillation Rate</b>	up to 3.5 - 4 L/H for water		
<b>BATH HEATING</b>			
<b>Temp Range</b>	0-180°C		
<b>Bath Heater Power</b>	4 kW		
<b>Bath Heating Control</b>	Electronic with PT-100, control accuracy +/-2 °C		
<b>Bath Construction</b>	Stainless steel 304 with Cover for heat protection		
<b>Bath Dimensions</b>	Outer Ø 425 mm x 330mm deep		
<b>Bath Lift</b>	Motorised & controlled Linear Movement by Limit switches		
<b>GLASS ASSEMBLY (IN SCOPE OF JAGDAMBA ENTERPRISE)</b>			
<b>Rotating Flask</b>	20L-1 no		
<b>Receiving Flask</b>	10 L - 1 no (Option for twin receivers available)		
<b>Condensate Area</b>	Vertical, 1 Sq.m surface area		
<b>Maximum Vacuum</b>	133 Pa		
<b>Safety Measures</b>	MCB & Short Circuit Breaker , Heater Protection		
<b>Other Accessories</b>	pipe supports, condensor holder, receiver flask holder, and rotating flask holder on bath		
<b>DISPLAY</b>			
<b>RPM</b>	Digital		
<b>Bath Temp</b>	Digital with PID Controller		
<b>Vapour Temp</b>	Digital		
<b>Time Totalizer</b>	Digital		
<b>SENSORS</b>			
<b>Vapour Temperature</b>	PT - 100, 3 wire with FLP Head		PT - 100, 3 wire
<b>Bath Temperature</b>	PT - 100, 3 wire with FLP Head		PT - 100, 3 wire
<b>Castor Wheels</b>	All four wheels with Lock [Double Wheels]		
<b>Optional</b>	SS-304 Body	MS Powder coated	MS Powder coated
	Frame guard covering with transparent glass to protect the user from steam, oil spillage and accidental glass breakage. It consists of PLC and HMI with all the parameters		

# TECHNICAL DATA OF 50L ROTARY EVAPORATOR

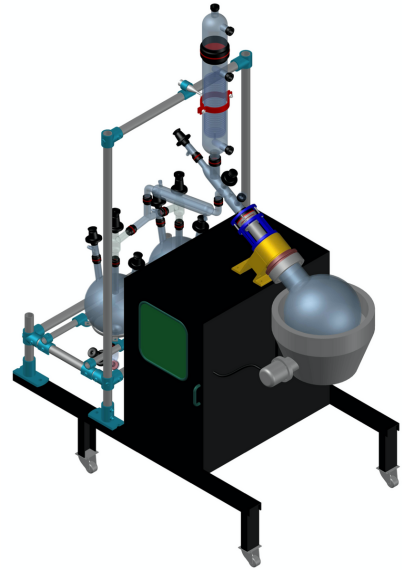
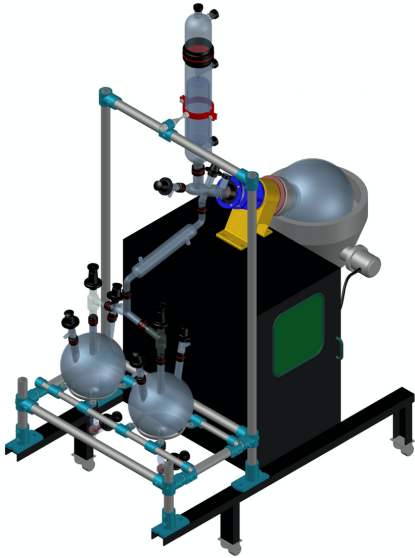
Model	50L GMP & FLP	50L NON-GMP & FLP	50L NON-GMP & NON-FLP
<b>Body</b>	SS 304 BODY	MS Powder coated	MS Powder coated
<b>POWER SOURCE</b>	Electric Panel in Flameproof Enclosure		Electric Panel in Non-Flameproof Enclosure
<b>Voltage Supply</b>	220V , 3Ph 50Hz		
<b>Power Consumption</b>	7 KW		
<b>ROTATION OF FLASK</b>			
<b>Rotation &amp; Controlling</b>	Soft start & controlling with VFD		
<b>Rotation Drive</b>	AC Synchronies Motor 0.5HP / Hindustan Make FLP motors		AC Synchronies Motor 0.5HP
<b>Rotation Speed</b>	10 to 135		
<b>Controlling</b>	By VFD		
<b>Accuracy</b>	2 RPM		
<b>Distillation Rate</b>	up to 4 - 5.8 L/H for water		
<b>BATH HEATING</b>			
<b>Temp Range</b>	0-180°C		
<b>Bath Heater Power</b>	6 kw with FLP Head		6 kw without FLP head
<b>Bath Heating Control</b>	Electronic with PT-100, control accuracy +/-2 °C		
<b>Bath Construction</b>	Stainless steel 304 with Cover for heat protection		
<b>Bath Dimensions</b>	Outer Ø 560 mm x 400mm deep		
<b>Bath Lift</b>	Motorised & controlled Linear Movement by Limit switches		
<b>GLASS ASSEMBLY (IN SCOPE OF JAGDAMBA ENTERPRISE)</b>			
<b>Rotating Flask</b>	50L-1 no		
<b>Receiving Flask</b>	20 L - 1 no (Option for twin receivers available)		
<b>Condensate Area</b>	Vertical, 1.5 Sq.m surface area		
<b>Maximum Vacuum</b>	133 Pa		
<b>Safety Measures</b>	MCB & Short Circuit Breaker , Heater Protection		
<b>Other Accessories</b>	pipe supports, condensor holder, receiver flask holder, and rotating flask holder on bath		
<b>DISPLAY</b>			
<b>RPM</b>	Digital		
<b>Bath Temp</b>	Digital with PID Controller		
<b>Vapour Temp</b>	Digital		
<b>Time Totalizer</b>	Digital		
<b>SENSORS</b>			
<b>Vapour Temperature</b>	PT - 100, 3 wire with FLP Head		PT - 100, 3 wire
<b>Bath Temperature</b>	PT - 100, 3 wire with FLP Head		PT - 100, 3 wire
<b>Castor Wheels</b>	All four wheels with Lock [Double Wheels]		
<b>Optional</b>	SS-304 Body	MS Powder coated	MS Powder coated
	Frame guard covering with transparent glass to protect the user from steam, oil spillage and accidental glass breakage. It consists of PLC and HMI with all the parameters		



# TECHNICAL DATA OF 100L ROTARY EVAPORATOR

Model	100L GMP & FLP	100L NON-GMP & FLP	100L NON-GMP & NON-FLP
<b>Body</b>	SS 304 BODY	MS Powder coated	MS Powder coated
<b>POWER SOURCE</b>	Electric Panel in Flameproof Enclosure		Electric Panel in Non-Flameproof Enclosure
<b>Voltage Supply</b>	415V , 3Ph 50Hz		
<b>Power Consumption</b>	14 KW		
<b>ROTATION OF FLASK</b>			
<b>Rotation &amp; Controlling</b>	Soft start & controlling with VFD		
<b>Rotation Drive</b>	AC Synchronies Motor 1HP / Hindustan Make FLP motors		AC Synchronies Motor 1HP
<b>Rotation Speed</b>	0 to 90		
<b>Controlling</b>	By VFD		
<b>Accuracy</b>	2 RPM		
<b>BATH HEATING</b>			
<b>Temp Range</b>	0-180°C		
<b>Bath Heater Power</b>	6 kW X 2		
<b>Bath Heating Control</b>	Electronic with PT-100, control accuracy +/-2 °C		
<b>Bath Construction</b>	Stainless steel 304 with Cover for heat protection		
<b>Bath Dimensions</b>	Outer Ø 750 mm x 550mm deep		
<b>Bath Lift</b>	Motorised & controlled Linear Movement by Limit switches		
<b>GLASS ASSEMBLY (IN SCOPE OF JAGDAMBA ENTERPRISE)</b>			
<b>Rotating Flask</b>	100L-1 no		
<b>Receiving Flask</b>	50 L - 1 no (Option for twin receivers available)		
<b>Condensate Area</b>	Vertical, 1.5 / 2.5 Sq.m surface area		
<b>Maximum Vacuum</b>	133 Pa		
<b>Safety Measures</b>	MCB & Short Circuit Breaker , Heater Protection		
<b>Other Accessories</b>	pipe supports, condensor holder, receiver flask holder, and rotating flask holder on bath		
<b>DISPLAY</b>			
<b>RPM</b>	Digital		
<b>Bath Temp</b>	Digital with PID Controller		
<b>Vapour Temp</b>	Digital		
<b>Time Totalizer</b>	Digital		
<b>SENSORS</b>			
<b>Vapour Temperature</b>	PT - 100, 3 wire with FLP Head		PT - 100, 3 wire
<b>Bath Temperature</b>	PT - 100, 3 wire with FLP Head		PT - 100, 3 wire
<b>Castor Wheels</b>	All four wheels with Lock [Double Wheels]		
<b>Optional</b>	SS-304 Body	MS Powder coated	MS Powder coated
	Frame guard covering with transparent glass to protect the user from steam, oil spillage and accidental glass breakage. It consists of PLC and HMI with all the parameters		

# JAGDAMBA ENTERPRISE



The above images are only for your reference from our past projects. We reserve the right to modify our design and specifications as and when required

**Address:** 504- Aurum Building, Near HP Petrol Pump,  
Iskon Vasna Road, Vadodara- 390007, India

**Phone:** (M) +91-9924376558

**Website:** [www.jagdamba-enterprise.in](http://www.jagdamba-enterprise.in)

**Email:** [sales@jagdamba-enterprise.com](mailto:sales@jagdamba-enterprise.com)