

## **MODEL LSR**Distillation Units

Model LSR distillation units are designed for dirty solvent waste streams with high solids loading throughput rates up to 400 gallons per hour.\* The LSR series use PRI's exclusive rotating scraper blade assembly to insure optimum throughput efficiency and minimal maintenance. The LSR design utilizes a conical boiling chamber for maximum heat transfer to the waste solvent.

### **MAXIMIZE SOLVENT RECOVERY**

- Cut virgin solvent purchase volumes by up to 90%\*
- Reduce hazardous waste disposal volume
- Units typically pay for themselves in a matter of months

### REDUCED ENVIRONMENTAL IMPACT

- Reduce the risks of handling and storing large numbers of hazardous waste drums
- Reduce the size of plant's environmental footprint

## **DURABLE, SAFE CONSTRUCTION**

- Industry Exclusive 10 Year Limited Warranty on the Boiling Vessel
- ASME stamped boiling vessels standard
- Available as steam heated or electrically heated
- Scraper blade assembly cleans heat transfer surface of solids buildup for high distillation efficiency
- PLC control of all operating functions and processes
  - Frees operator for other duties
- Electrically heated have removable low watt density heaters in an oil jacket for longer life
  - · Outlive systems with high watt density heaters
  - · Designed for severe service
- Conical bottom with air operated dump valve to discharge sludge into drum
  - Allows safe and efficient handling of hazardous waste
- Heat transfer takes place in a conical vessel for higher rates
  - Greater efficiency than systems that only heat the bottom of the boiling vessel.



### SAMPLE RETURN ON INVESTMENT\*

DESCRIPTION:	PRI Recovery	No Recovery		
Solvent Type: Various				
Waste Generated (gal/wk)	12,650	12,650		
Percent Solids	15%	15%		
Recovered Solvent (gal/wk)	8,855	0		
Required Makeup (gal/wk)	1,898	10,753		
Disposal Amount (gal/wk)	3,795	12,650		
Weekly Service Recovery & Disposal Cost	N/A	N/A		
Utility Operating Cost/Week	\$759	\$0		
Replacement Solvent Cost/Gal	\$5	\$5		
Required Makeup Cost/Week	\$9,488	\$53,763		
Disposal Cost/Gal	\$1	\$1		
Disposal Cost/Week	\$3,795	\$12,650		
Total Cost/Week	\$14,042	\$66,413		
Total Yearly Cost	\$702,075	5 \$3,320,625		
Equipment Acquisition Cost	\$313,400	N/A		
Weekly Savings w/PRI	\$52,371			
Yearly Savings w/PRI	\$2,618,550			
Months to Payback	1			
Return On Investment	836%			

<sup>\*</sup> Depends upon type of solvent, contamination level, contaminate type and other factors.



# MODEL LSR Distillation Units

MODEL	CAPACITY	RATE*	HEATER	Α	В	С	WEIGHT
LSR-80	1544 L (408 G)	422 L/h (111.4 G/h)	Electric or Steam	5182 mm (17')	2083 mm (6' 10")	2540 mm (8' 4")	3629 kg (8000 lbs)
LSR-120	2419 L (639 G)	568 L/h (150 G/h)		5791 mm (19')	2286 mm (7' 6")	2794 mm (9' 2")	4536 kg (10000 lbs)
LSR-160	5288 L (1397 G)	1007 L/h (266 G/h)		6680 mm (21' 11")	2362 mm (7' 9")	2896 mm (9' 6")	5443 kg (12000 lbs)
LSR-200	9024 L (2384 G)	1514 L/h (400 G/h)		7137 mm (23' 5")	2819 mm (9" 3")	3302 mm (10' 10")	6804 kg (15000 lbs)

<sup>\* &</sup>quot;Defined Rate" is defined as 2000 BTU/gal. solvent being distilled at 100 deg. differential between the solvent and the heating media. Custom sizes available upon request.



