

L-K INDUSTRIES

January, 2016

PRODUCT CATALOG

Oil Testing Equipment Suppliers Worldwide Since 1930



To set the standard for MANUFACTURING QUALITY and customer service in the OILFIELD TESTING industry.



Since 1930 we have taken great pride in building high quality products and providing excellent customer service. Our original "Melton" centrifuge set the standard in 1957 and continues to inspire our product development today.

We look forward to continuing the rich traditions that have made us successful and to manufacturing the next generation of oilfield testing supplies.

Thank you for your business.

Sincerely,

Eric R. Calderon
President and CEO
L-K Industries



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PARTS

For parts please contact LK directly



Transport Series

The rugged steel Transport Series is available in 12VDC & 115VAC and is ideal for crude oil haulers. You can choose from the standard or digital models as well heated & non-heated configuration. This centrifuge can offer larger sample testing with the 4-place trunnion arm.

FEATURES	BENEFITS
Rugged steel case assembly with reinforced mounting points	Longer life and less down time
Pre-heater pocket	Faster sample testing
Compact design	Easy installation and maintenance
Solid state motor control with epoxy coated electronics	No rheostat headaches longer field life



"Transport 9100"

Heated Centrifuge with adjustable controls

MSRP: \$2,689*

Weight & Size

65 lbs, 18"x22.5"x12.5"



"Transport 7100"

Heated Centrifuge

MSRP: \$1,945*

Weight & Size

65 lbs, 18"x22.5"x12.5"



"Transport 3100"

Non-Heated Compact Centrifuge

MSRP: \$1,270*

Weight & Size

60 lbs, 18" x 22.5" x 12.5"

Multiple Configurations available. Choose from

- "A", "B" or "D" Tube sizes
- 12V or 115V
- 2 Place or 4 Place Trunnion arm
- Heated/ Non-Heated
- Standard or adjustable controls

Ask About LK's 24hr Replacement Guarantee

*Recommended configuration shown (see details in appendix). For pricing on other configurations, please visit www.lk-ind.com.



Benchmark Series

The state of the art Benchmark Series is the first oilfield centrifuge with Class I, Division 2 certification. The fully insulated centrifuge is perfect for laboratory settings or refineries using long cone (C) or short cone (D) tube configurations. With an all new motor capable of 2300 RPM's and real temperature readings, this unit has unmatched precision.

FEATURES	BENEFITS
High speed capability (2300 RPM)	More experimentation and testing ability= Better data
Digital temperature control. (Ambient to 200°F)	Better process control for testing heavy crude oil
Integrated timer	Reduces variation in testing
Internal motor control	Linear acceleration results in more consistent testing
Specifically designed collars and cushions	Less tube breakage at higher G-Forces

Meets Requirements for: ASTM D4007, D1796, D2709, D2273, D91, D96, D893



"Benchmark C" (2014)

MSRP: \$14,495*
Includes 4 Centrifuge Tubes

Weight	Size
110 lbs	28" x 33" x 18"

Certification requires hard wiring. Power cord not included.

Multiple configurations available. Choose from

• "C", "D" or "E" Tube sizes

• 120V or 220V

Coming soon: "Benchmark S" non Certified economy lab model

Ask About Our Benchmark Maintenance Plan!

*Recommended configuration shown (see details in appendix). For pricing on other configurations, please visit www.lk-ind.com.



Melton Setting the Standard Since 1957

This one of a kind unit offers heated cups for oil samples. This unit can be used with "A", "B", "C", "D" or "E" tube models and is designed with a built in mechanical tachometer for easy RPM readings. 115 VAC or 220 VAC are available.

FEATURES	BENEFITS	
Robust construction with steel case	Can be used in harsh environments	
Consistent speed motor	Less process variation	
Built-in tachometer	Direct mechanical reading of RPM= Great accuracy	
Electric heated cups	Maximum heat transfer to test samples= Better test results	



Box Weight

150 lbs

Size

27" x 27" x 26"

Ideal for

Offshore Platforms and other harsh / corrosive environments.

MSRP: \$6,400*

Designed for hard wiring. Power cord not included.

Multiple Configuration available. Choose from

• "A", "B", "C", "D" or "E" Tube sizes

• 115V or 220V

^{*}Recommended configuration shown (see details in appendix). For pricing on other configurations, please visit www.lk-ind.com.



Light Duty

Hand - Crank



Designed to fit tubes "A", "B" or "D"

MSRP: \$565*

FEATURES	BENEFITS
Light weight design	Easy portability
Hand powered	Can be used anywhere. No electricity needed
Built in C-Clamp	Quickly mount to any table or flat surface

Ideal forWeightSizeChem Techs, Field Operators,
Biodiesel Techs6 lbs12"x 12"x 15"

Mini - Melton (auto)



Two Place
Designed to fit "A" tubes
MSRP: \$599*

FEATURES	BENEFITS
12V vehicle power	Easily powered in any personal vehicle
Enclosed case	Increased operator safety
Compact and light weight design	Easy storage in tool box or field office

Ideal forWeightSizeChem Techs, Field Operators,
Biodiesel Techs18 lbs16"x 16"x 16"



Criterion Water Bath

900 Watts Of Heater Power

This unit is designed to meet the needs of lab operators focused on the precise heating of solvents and samples. The unit will hold 2 one gallon bottles of solvent and fourteen long cone "C" or 12 short cone "D" centrifuge tubes. The unit is set to heat to 140° F (60° C) and maintain that temperature with unrivaled precision.



Holds 14 "C/E" Tubes

or 12 "D" Tubes
MSRP: \$3,610



Holds Two 1 Gallon

Bottles of Solvent

MSRP: \$3,610

FEATURES	BENEFITS
Digital temperature control	Maintain selected temperature with high accuracy for extended periods
Accommodates two 1 gallon solvent bottles	Allows for efficient rotation of heated solvent samples
14 "C" or 12 "D" tube capacity	More samples = less down time
Modular construction	Allows for versatility of lab configuration
Unit Size	Safely fits under standard fume hood

CertificationsASTMWeightSize• ETL• ANSI/ISA-STD 12.12.0130 lbs26" x 16" x 18"• Hazardous Location• ANSI/UL STD 61010.1• Class I, Divison 2

Certification requires hard Wiring. Power Cord Not Included.

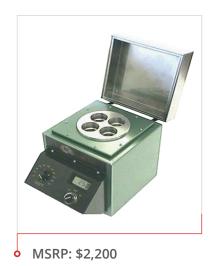
Full System avaliable with purchase discount.

\$7220 \$6500



TradeMark Heater

This unit is a Class 1, Division 2 certified dry bath built for laboratory use and is offered in 115VAC or 220VAC. A LCD screen monitors the temperature accurately and is adjustable 72°F to 250°F. The tube configurations "A", "B", "C", or "D" are available for this unit.



FEATURES	BENEFITS
Insulated body	Efficient heating
Adjustable temperature	Versatility for multiple applications
Dry bath	Less corrosive operation

Weight	Size
28 lbs	17" x 15" x 19"

Certification requires hard Wiring. Power Cord Not Included.

Melton Heater

This non-certified-explosion resistant sample heater was built for laboratory settings and is offered in 115VAC or 220VAC. The unit can be configured to a 4-place or 8-place, depending on the tube model. Tube models "A", "B", "C", and "D" are available for this series.



FEATURES	BENEFITS	
Intrinsically safe	Worry free operation	
Robust construction	Durability= Less down time	
Factory set temperature	Precision in testing	

Weight	Size
32 lbs	14" x 14" x 14"

Designed for hard Wiring. Power Cord Not Included.



Transport Heater

The rugged steel lightweight heater was designed with the truck driver in mind. The unit is available in 12VDC and can be configured to "A" or "D" model tubes. The heater can preheat samples in as little as 10 minutes.



FEATURES	BENEFITS	
High speed heat	Quicker testing	
Compact size	Fits easily in trucks	

Weight	Size
8 lbs	12"x 12"x 9"

Hydrometer Cylinder Heater

Hydrometer Cylinder heaters are available in 115VAC with Thermostatic Control or with 12VDC Rheostat Control. Units include Pyrex inner cylinder.



cylinder

MSRP: \$42.50



Heated hydrometer cylinder

MSRP: \$811.50

FEATURES	BENEFITS
User controlled temperature	Testing versatility
Custom design	Fits Pyrex cylinder

Weight	Size
12 lbs	14"x 14"x 14

^{*}Recommended configuration shown (see details in appendix). For pricing on other configurations, please visit www.lk-ind.com.



LP Gas Corrosion Test Cylinder Heater

Designed especially to work with LK's LP Gas Corrosion test cylinder, this dry block heater is able to maintain required temperature to the high degree of accuracy required for testing standards.



LP Gas Corrosion Test Cylinder Heater MSRP: \$2,200

FEATURES	BENEFITS
Explosion resistant	Confidence when heated
Digital readouts	Verified accuracy
Soild aluminum block	Provides even heating properties

Weight	Size
28 lbs	14"x 15"x 19"

Under Certification requires hard wiring. Power cord not included.

Compatible w/ LP Gas Corrosion Test Cylinder pg.15

Refined Fuel Test Cylinder Heater

This unit is a Class 1, Division 2 certified dry bath built for laboratory use and is offered in 115VAC or 220VAC. A LCD screen monitors the temperature accurately and is adjustable 72°F to 250°F. The tube configurations "A", "B", "C", or "D" are available for this unit.



Refined Fuel Test Cylinder Heater

MSRP: \$2,200

FEATURES	BENEFITS
Insulated body	Efficient heating
Adjustable temperature	Versatility for multiple applications
Dry bath	Less corrosive operation

Weight	Size
28 lbs	17" x 15" x 19"

Certification requires hard Wiring. Power Cord Not Included.

Compatible with solid stainless steel cylinder pg.15



Centrifuge Tubes









(A Style)

MSRP: \$15

(B Style)

MSRP: \$60* MSRP: \$92*

(C Style- 8 inch)

MSRP: \$39*

(E Style)

MSRP: \$77*

FEATURES	BENEFITS	
Conforms to ASTM & API standards	Can be used in regulatory environments	
Graduated marks permanently etched	Improves visibility and provides longer life	
Unique serial number	Precise traceability	
Custom markings available	Convenient for specific applications	
Wide thread and thick wall configurations available	Durability and high RCF capability	

Multiple Tops & Threads Available





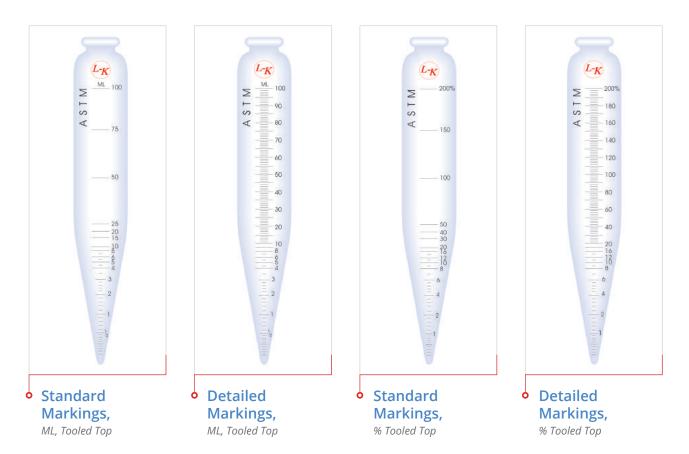




*Pricing shown is for recommended configurations. Complete price list is available in the appendix.



Centrifuge Tubes Markings



LK's centrifuge tubes are made in-house and calibrated using both volumetric and gravimetric techniques. With innovations such as 2mm wall thickness and wide-neck threads,LK prides itself on being a market leader in glassware.

Customers may choose from several configurations including

- A, B, C, D, E tube sizes
- Standard or detailed lines
- ML or Percent markings

- Wide-neck or standard threads
- 3rd Party Certification
- LK Internal Verification

Multiple Tops & Threads Available





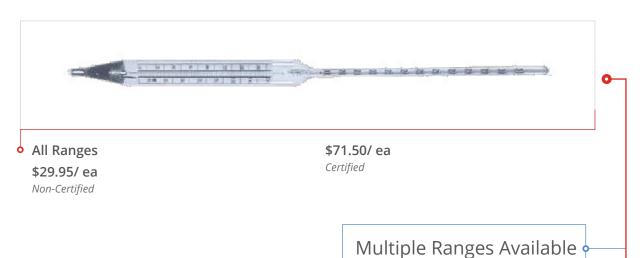






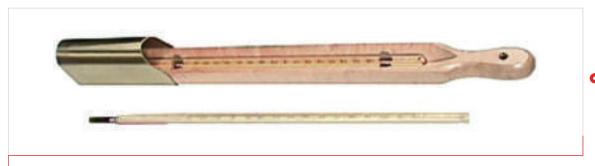
Hydrometers

LK offers 22 API hydrometer ranges that are precision grade. All hydrometers have a thermometer located in the center and are available with certification. Designed to be used with LK's Hydrometer Heater (Pg10).



Thermometers

LK's thermometers meet ASTM standards and feature yellow backed glass for easy reading. Thermometers are available in a wide range and with a woodback. Verification is available upon request.



• \$144.38/ ea Certified Woodback Unit \$124.56/ ea Certified Thermometer Only

Non-Certified units from \$23/ea

LK is proud to feature Miller & Weber products.



Corrosion Test Cylinders

Designed especially for conducting ASTM and NGPA copper strip and silver strip corrosion tests of liquefied petroleum gas and engine fuel. Designed and precision machined from stainless steel for noncorrosive product applications.



LP Gas Corrosion Test Cylinder

MSRP: \$430

Compatiable with LK heater (pg11)

Ideal for

Copper Strip Testing ASTM D1838



Fuel Corrosion Test Cylinder

MSRP: \$325

Compatiable with LK heater (pg11)

Ideal for

Silver Strip Testing ASTM 7671

FEATURES	BENEFITS	
All stainless steel construction	Durability and long life	
No wrench neccesary	Use anywhere. No tools required	
Easy to replace O-ring seal	Less down time	



Gaging Accessories



LK offers Gage tapes from Lufkin and US Gaging. Units feature heavy gage construction, a snap swivel hook, and folding handle. Various lengths available. Certified units available on request.

Lufkin Gage Tape
MSRP: \$189.50
US Gage Tape
MSRP: \$109.50

LK's oil thief offers an adjustable trip rod and adjustable tension. All cylinders are graduated. Custom configurations are avilable upon request.

Oil Thief MSRP: \$446





Trays, ropes, plumb bobs and other miscellaneous accessories available online or by contacting LK directly.

Aluminum Gager's Tray

MSRP: \$173

Gagers Replacement Package available for **\$399.00** package includes tape refill, thermometers, hydrometers, and more. See website.

^{*}Pricing shown is for recommended configurations. Complete price list is available in the appendix.



Glassware Accessories



• Cushion and Collar Package
(6 BM cushions and collars)

MSRP: \$50



Cushion Replacement Package (12 cushions)

MSRP: \$50



 Tooled Top Accessory Package (12 stoppers & 3 brushes)

MSRP: \$50



 Wideneck Accessory Package (6 caps & 3 brushes)

MSRP: \$50



• Racks
MSRP:\$29*

To see all of LK's accessories, please visit www.lk-ind.com or contact LK directly.



Hauler's Package



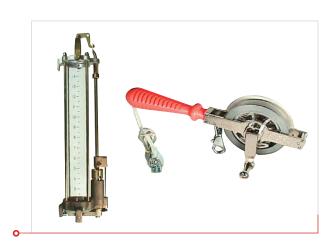
MSRP: \$3,066

Package: \$2,750

Transport 7100 Centrifuge Typical Gaging Supplies

Ideal for

New Trucks



Description

- 25-foot gage line
- Plumb bob
- Little Joe Tape Wiper
- Pocket Thermometer
- Oil Thief/ 2 Petcocks 6" & 10"
- 25-foot thief rope
- Gager's Tray
- Centrifuge Tubes (6/box)
- Brush to clean tubes

- Woodback Complete
- 25-foot Woodback rope
- 3-Place Hydrometer Case
- 29 to 41 API Range Hydrometer
- 39 to 51 API Range Hydrometer
- 49 to 61 APR Range Hydrometer
- 500 ML Hydrometer Cylinder
- Water Finding Paste, 3oz. tube



Laboratory Package

Perfect For New Lab Configurations



Benchmark 2014

Class 1, Division 2, Certified



Criterion Water Bath system

Class 1, Division 2, Certified



 Wide thread factory verified tubes

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MSRP: \$18,633 \$17,250 (C)

MSRP \$18,444 \$16,999 (D)

"Benchmark C" (2014)

- Centrifuge Model LB-14-C120C
- Centrifuge Model LB-14-D120C

Centrifuge Tubes (12 Tubes)

• Model S10CWTHDFV15

• Model S10DWTHDFV15

Criterion Water Bath System

- Water Bath Model WB-T2/ T14C
- Water Bath Model WB-T2/ T14D



Laboratory Package

Perfect For New Lab Configurations

MSRP: \$18,633 \$17,250 (C) MSRP \$18,444 \$16,999 (D)



Benchmark 2014

Class 1, Division 2, Certified



Criterion Water Bath system

Class 1, Division 2, Certified



 Wide thread factory verified tubes

"Benchmark C" (2014)

- Centrifuge Model LB-14-C120C
- Centrifuge Model LB-14-D120C

Centrifuge Tubes (12 Tubes)

• Model S10CWTHDFV15

• Model S10DWTHDFV15

Criterion Water Bath System

- Water Bath Model WB-T2/ T14C
- Water Bath Model WB-T2/ T14D



24 Hour Replacement Plan

Designed to meet the needs of oil haulers, customers who purchase this plan are guaranteed to have a replacement centrifuge delivered to them anywhere in the continental US within 24 hours. Should LK's unit break or stop working for any reason, simply contact LK and a replacement will be on its way. A pre labeled package will also arrive for you to send the damaged unit back.

This package is offered with LK's Transport Series centrifuges. Price: **\$199** per year.

Preventative Maintenance Plan

Designed to meet the standards of lab users, customers who purchase this plan will have annual maintenance performed on their centrifuge. A detailed list of the services performed is noted below. All work will be done on the client's site at a prearranged date and time.

Service Includes

- Service Includes
- Diagnostic checks, clean, & recalibrate
- Validate RPM readings
- Validate temperature
- Clean unit

- Rewire any suspect connections
- Cosmetic touch-up
- Operational validation
- Integrity test
- Balance validation

This package is offered on Benchmark Series centrifuges.

Price: \$399 per year.



PRODUCT	DUCT RECOMMENDED CONFIGURATION		PAGE NO.
Transport Series	ort Series "9100" 2 Place, 12V, D-Model, Heated, Digital Readouts		Pg. 4
Transport Series	"7100" 2 Place, 12V, D-Model, Heated	\$1,945.00	Pg. 4
Transport Series	"3100" 2 Place, 12V, D-Model	\$1,270.00	Pg. 4
Benchmark Series	120V, C-Model	\$14,495.00	Pg. 5
Melton	115V, D-Model	\$6,400.00	Pg. 6
Light Duty Mini-Melton, A-Model Centrifuge		\$599.00	Pg. 7
Criterion Water Bath	Vater 14 Place, C/E-Model		Pg. 8
TradeMark Heater	TradeMark Heater 115 VAC, D-Model		Pg. 9
Melton Heater	Melton Heater 115 VAC, C-Model		Pg. 9
Transport Heater	Transport Heater 12 VDC, D-Model		Pg. 10
Hydrometer Cylinder Heater			Pg. 10
Gage Tape	Lufkin, 25ft, Complete Unit	\$189.50	Pg. 16
Gage Tape	US Tape, 25ft, Complete Unit	\$189.50	Pg. 16
Oil Thief Protek, 16inch, 2 Petcocks		\$446.00	Pg. 16



Common Glassware Configurations

PART NUMBER	PRICE/EA	TUBE SIZE	TOP	THREAD TYPE
S10AW	\$15.00	Finger Tubes (A)		
S10B	\$60.00	Pear Shaped (B)	Tooled Top	
S10B2	\$60.00	Pear Shaped (B)	Tooled Top	
S12EFV15	\$75.00	Pear Shaped (B)	Tooled Top	
S12E2FV15	\$75.00	Pear Shaped (B)	Tooled Top	
S12CFV15	\$63.00	Long Cone 8 in (C)	Tooled Top	
S12CAV15	\$93.00	Long Cone 8 in (C)	Tooled Top	
S12C2FV15	\$63.00	Long Cone 8 in (C)	Tooled Top	
S12C2AV15	\$93.00	Long Cone 8 in (C)	Tooled Top	
S12CWTHDFV15	\$92.00	Long Cone 8 in (C)	Threaded	Wide Neck
S12C2WTHDFV15	\$92.00	Long Cone 8 in (C)	Threaded	Wide Neck
S10D	\$39.00	Short Cone 6 in (D)	Tooled Top	
S10D2	\$39.00	Short Cone 6 in (D)	Tooled Top	
S12D	\$60.00	Short Cone 6 in (D)	Tooled Top	
S12D2	\$60.00	Short Cone 6 in (D)	Tooled Top	
S10DWTHDFV15	\$71.00	Short Cone 6 in (D)	Threaded	Wide Neck
S10D2WTHDFV15	\$71.00	Short Cone 6 in (D)	Threaded	Wide Neck
S12DWTHDFV15	\$85.00	Short Cone 6 in (D)	Threaded	Wide Neck
S12D2WTHDFV15	\$85.00	Short Cone 6 in (D)	Threaded	Wide Neck
S12EAV15	\$110.00	Capillary 8 in (E)	Tooled Top	
S12E2AV15	\$110.00	Capillary 8 in (E)	Tooled Top	
S12EWTHDFV15	\$109.00	Capillary 8 in (E)	Threaded	Wide Neck
S12E2WTHDFV15	\$109.00	Capillary 8 in (E)	Threaded	Wide Neck

*Most common configurations are listed above with recommended configurations in bold. For a full list of LK's tube configurations, please visit www.lk-ind.com



Common Glassware Configurations

PERCENT/ ML LINES	STANDARD/DET AILED MARKINGS	CERT/ NON CERT	VERIFIED/ NON VERIFIED
ML	Standard	Non Certified	Non Verified
Percent	Standard	Non Certified	Non Verified
ML	Detailed	Non Certified	Verified
Percent	Detailed	Non Certified	Verified
ML	Detailed	Non Certified	Verified
ML	Detailed	Certified	
Percent	Detailed	Non Certified	Verified
Percent	Detailed	Certified	
ML	Detailed	Non Certified	Verified
Percent	Detailed	Non Certified	Verified
ML	Standard	Non Certified	Non Verified
Percent	Standard	Non Certified	Non Verified
ML	Detailed	Non Certified	Non Verified
Percent	Detailed	Non Certified	Non Verified
ML	Standard	Non Certified	Verified
Percent	Standard	Non Certified	Verified
ML	Detailed	Non Certified	Verified
Percent	Detailed	Non Certified	Verified
ML	Detailed	Certified	
Percent	Detailed	Certified	
ML	Detailed	Non Certified	Verified
Percent	Detailed	Non Certified	Verified

 Weight
 Size

 2 lbs
 7" x 6" x 4" [A, B, D]

 Weight
 Size

 2 lbs
 3.5" x 4.5" x 2.5"

L-K INDUSTRIES

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