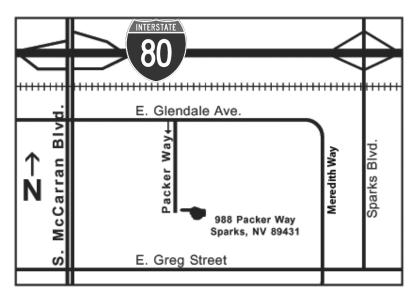
χı HANDBOOK GEOLOGY SUPPLIES ASSAY, REFINING

SPRING 2024 EDITION WWW.LMINE.COM

## We are located at:



# LEGEND, INC.

988 Packer Way, Sparks, NV 89431 Tel: (775) 786-3003 Fax: (775) 786-3613 Email: info@Lmine.com Web: www.Lmine.com

## Our Guarantee

At Legend, Inc. your complete satisfaction is our goal. If any item purchased from us does not meet your expectations, simply return it within 30 days of the invoice date, postage or shipping pre-paid, for a prompt exchange, credit, or refund.

## Limited Warranty

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Drawstring Sample Bags

## Cloth Bags - Legend Heavy Duty

Legend Heavy Duty Cloth Bags are made of light canvas which is much heavier and stronger than standard cloth bags. Equipped with a drawstring. Low fines loss due to tight weave and folded seam. These bags come with a polyester high temperature tag with sequential Barcode numbering. The 20" x 24" size is ideal for lining a 3-1/2 or 5 gallon bucket. Sold by the bundle of 100 bags

Item #	Size	Price:
01401	. 3.5 x 5"	\$43.69
01411	. 4.5 x 6"	.\$47.18
01416	.5 x 7"	\$50.00
01421	.5 x 8.5"	\$51.23
01426	.5.5 x 10.5"	\$55.62
01440	.7 x 12.5"	.\$63.48
01450	. 10 x 17"	.\$76.18
01457	. 12 x18"	.\$84.60
01465	. 15 x 19"\$	135.68
01490	. 20 x 24"	3143.41



#### Bags - PE Spunbonded

Spunbonded PE bags can withstand high temperatures and are suitable for drying samples directly in the oven to over 400°F. Equipped with a drawstring. These bags come with a polyester high temperature tag with sequential Barcode numbering.

Sold by the bundle of 100 bags

00.000	2011010 01 100 20190	
Item #	Size	Price:
01515	. 5 x 7"	. \$68.16
01540	.7 x 12.5"	. \$76.38
01550	. 10 x 17"	\$102.81
01570	. 14 x 28"	. \$74.15
01554	. 17 x 28"	. \$86.51
01553	. 20 x 24"	\$147.06



## Cloth Bags - Protexo by HUBCO

These bags are for rock chip sampling and oil/gas or mineral exploration drill and recon samples. They are made of high count, bleached and backfilled white cotton cloth. These bags include a drawstring and 2" by 3" yellow tag with our exclusive mineral sample format.

Sold by the bundle of 100 bags

Item #	Size	Price:
01200	4.5 x 6"	\$80.26
01205	5 x 8.5"	\$100.91
01210	7 x 12.5"	\$146.49
01220	10 x 17"	\$221.29



## Bags - Micro Shield by HUBCO

Bags are made of a polyester/latex coated material, equipped with a drawstring and a 2x3" Golden Magic Mark water proof, tag. Material is strong with very good filtration qualities for fine minerals. It is rot/mildew resistant and inert to most organic and inorganic chemicals.

Sold by the bundle of 100 bags

Item #	Size	Price:
01157	10" x 17"	\$195.17
01158	15" x 19"	\$330.46
01159	20" x 24"	\$409.63



## Bags - PP Spunbond Heavy Duty

Bags are made of polypropylene spunbonded material. This is a very strong bag with good moisture draining properties. Much stronger than olefin. They are equipped with a white drawstring or tie-tapes and a polyester water-proof, insect-proof, and mildew-proof 3" x 3" tag. Sold by the bundle of 100 bags

Item #	Size	Price:
01525	7" x 12.5"	.\$44.60
01555	10 x 17"	.\$76.06
01564	12 x 18"	\$101.79
01576	15 x 19"	.\$89.54
01578	17 x 28"**	.\$84.26
01579	20 x 24"	\$143.76
**Tie-tane		

## Bags - SENTRY Polyester by HUBCO

HUBCO **SENTRY** bags are made from **polyester material** so they can be placed directly in the drying oven. This is the newest type of Sentry bag. Equipped with a natural polished drawstring and a GOLDEN MAGIC MARK waterproof, insect proof, oven safe, and mildew proof 2" x 3" tag. Sold by the bundle of 100 bags

Item #	Size	Price:
01170-PE	. 7" x 12.5"	. \$164.69
01180-PE	. 10" x 17"	. \$144.60
01185-PE	. 15" x 19"	. \$230.11
01190-PE	. 20" x 24"	. \$340.90

## Bags - SENTRY II PP by HUBCO

HUBCO **SENTRY II** bags are made from **polypropylene**. This is a favorite bag which has been reintroduced due to its popularity. Equipped with a natural polished drawstring and a GOLDEN MAGIC MARK water-proof, insect proof and mildew

proof 2"	x 3" tag. S	Sold by the bundle of 100 bags
Item #	Size	Price:
01180	10 x 17	" \$97.26
01185	15 x 19	9" \$151.53
01190	20 x 24	¥" \$220.20

## Bags - Canvas Ore Sacks

Extra heavy duty bags are made of canvas. For handling samples of rock, or anywhere you need an economical but very strong bag. Bags are equipped with draw strings and include a polyester tag. Sold by the bundle of 100 bags

Item #	Size	Price:
01302	.7 x 12.5"	. \$86.06
01306	. 10 x 17"	\$117.75
01308	. 12 x 24"	\$160.39
01328	. 20 x 24"	\$193.69

#### Back Pack Sample Bag

12" x 18" Spunbond PP BACK PACK Sample Bag. Double Shoulder straps. Sold individually.

Item #	Price:
01564BP	\$2.79



#### Woven Bags

#### Bags - Canvas Drill and Duck Ore Sacks

Extra heavy duty bags are made of canvas. For handling samples of rock, or anywhere you need an economical but very strong bag. Bags are equipped with draw strings or tie tapes & include polyester tag.



#### Sold by the individual bag:

Item #	Size	Material/closure	Price:		
01300	10 x 18"	Drill/draw string	\$2.99		
01310	10" X 17".	Duck/Tie Tape	\$3.17		
01320	14" X 20".	Drill/draw string	\$4.54		
Sold by	Sold by the bundle of 25:				
Item #	Size	Material/closure	Price:		
01305	10 x 17"	Duck/Tie Tape	\$25.20		
01325	14 x 20"	Duck/Tie Tape	\$35.70		
01350	20 x 24"	Duck/Tie Tape	\$67.03		

Poly Bags

01340 ...... 17" X 28" ...... Duck/Tie Tape ...... \$296.49

## Bags - Polyethylene Plastic

Polyethylene with additives in the plastic to increase strength and puncture resistance. Bags are constructed with no side seams and have strong seams on the bottom.

	.9 000		
Item #	Size	Mil.	Price:
02100	8" X 10"	4	\$11.84
02110	8" X 12"	6	\$21.14
02120	8" X 16"	6	\$27.21
02130	10" X 17".	6	\$35.04
02140	12" X 18".	6	\$41.97
02150	12" X 18".	8	\$55.16
02160	12" X 24".	8	\$69.30
02170	14" X 28".	8	\$72.72
02172	16" X 20".	8	\$66.42
02176	18" X 24".	8	\$83.86
02180	20" X 30".	8	\$111.27



## Bags - Seal Top (Zip Lock)

Convenient "zipper closure" make these bags ideal for small samples bullion samples, or as pulp bags.

Solu III pack	5 01 100.	
Item #	Size	Price:
02300	. 2 x 3"	. \$1.50
02305	. 3 x 4"	. \$1.75
02310	. 4 x 6"	. \$2.83
02320	. 4 x 8"	. \$3.26
02325	. 6 x 8"	. \$4.00
02330	. 8 x 10"	. \$6.66
02340	. 12 x 12"	\$25.16
02342	12 x 15"	\$16.13



#### Bags - Woven Polypropylene Sandbags

Extra Heavy Duty bags for samples of rock, shipping of smaller samples, or other sampling or shipping jobs requiring an extremely tear resistant material. Sold in a bundle of 100 bags.

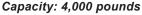
Item #	Size	Price:
03110	14 x 26"	\$34.92
03120	18 x 31"	\$38.33
03140	24 x 40"	\$57.57



## Bags - Bulklift Forklift

These bulk bags ideal for transporting material from granular carbon to drilling samples. Flap closure on top with discharge spout. (No Spout on UN Bags).

Item #	Size (inches)	Price:
Capacity:	2,000 pounds	
03162	35 x 35 x 26	\$19.50
03150	35 x 35 x 46	\$19.50
03160-UN.	35 x 35 x 35"	\$36.00



03161......35 x 35 x 46......\$22.50

Ties and Seals

# e-s.

#### Ties - Poly Coated Wire

Heavy duty 10" double wire ties for tough jobs. Lighter duty 4", 6", 8" & 10" single wire ties for regular applications.

Item #	Length	Quanity/bundle	Price:
02220	4" ties	500	\$3.05
02230	6" ties	500	\$3.89
02240	8" ties	250	\$4.44
02210	10" ties	250	. \$11.46
02200	10" ties	250/double wire	. \$22.92

## Security Cable Ties - Plastic

Security ties for standard bundling applications up to 50 lbs. of force. Natural colored with hot stamping number imprints for easy succession and tracking.

Bundle of 100. 
Item # Length Price: 02285......1".......\$27.50 
02286......14".....\$29.50



#### Security Seals (Globe) Steel

Globe seals are U.S. Customs approved and are used by many government agencies, industrial manufacturers, forwarding agents and international cargo handlers. The double wire locking mechanism encased within the Globe seal secures your shipment and provides increased tamper resistance. Made of tin plate steel 95#. Finished Dimension: 5/16" x 8 1/2". Operational strap length: 7 1/4". Embossed with the word "SECURED" and Sequential Numbering. Sold in a bundle of 100.

**Item # Price** 02419......\$36.19



## Ties - Double Loop Wire

Extra-Heavy 6" double loop wire ties. Made from 16 gauge ductile wire. Hook the special tool through the two loops and twist for rapid, secure closing or opening. Use on sand bags and other large bags.

Item #	Qty	Price:
02415	1000	\$15.33
02420	5000	\$76.63

## Twist Tool for Double Loop Wire

High quality twist tool works with double loop wire ties to quickly tie large numbers of bags. Poly handle and steel shank make this long lasting tool a real workhorse.

Item #	Description	Price:
02500	. Twist tool	\$5.25
02450	. Auto tool	.\$15.95

# 2450 ...... Auto tool ........\$15.95 Pulp/Soil Envelopes

## Pulp / Soil Envelopes - Golden Kraft

Golden Kraft Pulp Envelopes are made of **Wet Strength 28 pound Kraft Paper** and have a tin top (except 3-1/8" x 5-1/2") with fold flap. They are used for bullion samples, small sample bags, or for stream sediment and soil envelopes. Box of 250 envelopes.

Item	Size	Price:
03235	3x5"	\$74.79
03240	3-1/2x6"	\$84.97
03250	4x7"	\$88.08
03260	5x9"	\$106.60



## Pulp / Soil Envelopes - Economy Kraft

Pulp Envelopes for dry material. Made of Kraft paper & have a tin top which folds down to seal the envelope. They can also be used for bullion samples & soil envelopes.

Item #	Size	QTY	Price:
03210	4" x 7"	100	\$19.66
03255	4.5" x 7.7	5"1000	\$458.50



**Drilling Supplies** 

#### **Drill Hole Plugs**

The 13" plug is designed to close holes 5" to 9" in diameter at any depth. These plugs are fabricated from quality controlled, high density polyethylene which remains flexible in sub-zero weather. The long cylindrical body guides and stabilizes the plug while the sharp friction points on the overlapping petals secure the plug to form a positive seal. The Trojan Mini Plugis a customized design to close slim 3" to 4" augerholes.

Item #Hole size		Price:
02610	3"-4.5":	\$1.55
02615	4"-6"	\$1.60
02600	13"	\$7.72



## Sampling Tubes and Augers

The sampling tube is ideal for sampling soil, carbon, or other fine grained products. The tube portion is 12" long and 1" diameter, with two 12" extensions. Additional extensions can increase the depth of sampling. Augers are used to create access or installation holes, and to collect disturbed soil samples. The standard auger is designed for use in most soils.

Item #	Description	Price:
03320	Sampling tube kit (model B)	\$241.88
03321	Extension, 12"	\$39.58
03322	Sampling tube foot jack	\$35.21

Poly Core Sample bags. 5" wide laying flat, for use with core up to 3" in diameter. 100 per box

*Item* # *Size Price:* 02198......5"x30"x.004" ...\$15.33

Core Sample Poly Bags



#### Core Blocks & Chocks

Wood core blocks and plastic core chocks can be placed in core boxes indicate footages or to seperate, mineralized zones.

Item #Description	Price:
02626Plastic Core Chocks	NC(HQ) \$17.40/40
02627Plastic Core Chocks	NX(NQ) \$11.40/40
02620Wood Core Box Bloc	ks - NC\$19.61/50
02625 Wood Core Box Bloc	ks - NX \$13.32/50

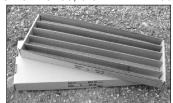




#### Core Boxes

Corrugated core boxes are treated with a special wax coating to resist water & weather. Each box holds 10 linear feet of core in five 2 foot sections (4" core box has 2 x 24" compartments). Printed with label for identification and sample information. Shipped flat.

Item #	Description	No/bdl	Price:
02511	NC (HQ) Core Box - 2 5/8"	25	\$426.00
02512-10	NX (NQ) Core Box - 2 1/8"	10	\$114.60
02513	BX Core Box - 1 5/8"	10	\$217.50
025101	PQ Core Box - 3 3/8""	25	\$406.88
02517	4" Core Box	25	\$496.88
02518	Core Box Bands, 5/8" x 7"	50	\$11.15



## Core Boxes - Plastic

Corrugated Plastic Core Boxs include a top, a bottom & an insert. Supplied flat. Outside Box Dimensions: 25-5/8"L x 15"W x 3"H Compartment Dimensions: 24-1/4"L x 2-3/4"W x 2-1/2"H. Molded boxes are UV and weather resistant & include bottom with dividers & drain holes.

Item # Description	No/Bundle	Price/bundle:
02511PNC/HQ Corrugated	25	\$674.14
026026 N 2" Molded	6	\$101.53
026016H 2-1/2" Molded	6	\$115.36

Core Saws and Splitters

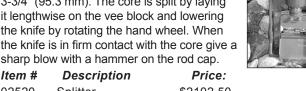
## **Blade Dressing Stones**

Aluminum Oxide Blade Dressing Block/Stone will unleash the best cutting ability of all your diamond blades, hole saws, etc. The special formatted grit is designed to sharpen and reactivate diamond blades, as they may have been glazed over by cutting hard material.

Item #	Description	Price:
025422	. 1x1x6" 100 Grit	\$27.20
0254271	.8x2x3" 60 Grit	\$68.53

## Core Splitter - Manual

Core splitters are used to split cores lengthwise for study and analysis. The manual core splitter handles core diameters from 3/4" (19 mm) to 2 7/8" (73 mm) in lengths of up to 3-3/4" (95.3 mm). The core is split by laying it lengthwise on the vee block and lowering the knife by rotating the hand wheel. When the knife is in firm contact with the core give a sharp blow with a hammer on the rod cap.

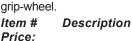


02520 Splitter	\$2102.50
02521 Top Blade/knife	\$123.28
Management and a second second according to the latest	and the state of t

More replacement parts available on line at: www.Lmine.com

## Core Splitter - Hydraulic

Designed to split core in half lengthwise to inspect for mineral content. Make a controlled, shatterless split every time with minimumal of effort. It is a compact, portable unit, yet is ruggedly constructed & virtually maintenance free. Features hydraulic splitting force of 24,000 pounds. Will handle 10" long by 3" high core. Contains core self-centering bottom anvil. Low profile design is more conventent to use & transport. Convenient top blade adjustment



025281..... Hydraulic Splitter...... \$1660.65 Replacement parts available on line at: www.Lmine.com



#### Core Saws

#### Pothier - 14" Core Saw

This heavy duty saw, manufactured in Canada, is designed for fast and accurate sawing of exploratory core specimens. The 5 HP 220 volt motor and specialty designed 14" segmented diamond blade allow cutting of hard or dense rock samples and engineered materials. The integral core holder provides for rapid and safe cutting of cylindrical core samples. Adjustable height cutting head accommodates specimen sizes between 1" and 5" in diameter.

Blade guard gives 180° coverage at all times. Drop down blade shaft is built with sealed, permanently lubricated, heavy-duty bearings. Convenient ON/OFF switch for operator safety. Recoil spring return cutting head. Adjustable water supply for maximum blade protection. Thermally protected Baldor motor. One-year limited warranty. Blade water supply via hose connection (included) or with pump (optional).

Blade not included.

Motor: Baldor 230v/60hz/1ph

Amps: 19.5 Horsepower: 5 Motor RPM: 3450 Blade Capacity: 14 inch Arbor: 1 inch Table Travel: 9 1/2"

LxWxH(in): 42X26X37 Shipping Weight: 300 lbs Model: PE2-1451

Item: 25548 Call for pricing.

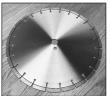
## "Bad Boy" Segmented Rim Saw Blade

14" Wet Cutting "Bad Boy" Segmented Rim Quartz Blade, Diameter: 14" (350 mm)

Width: 0.125". Arbor: 1" Seament Height 10mm

Professional grade, core blade for cutting quartz, volcanic rock, marble, and similar materials.

Item # Description Price: 02570...... 14"...... \$190.22





#### Continuous Rim Core Saw Blades

Our Continuous Rim diamond saw blades are made with the highest level of performance & the longest life while yielding the highest value. These diamond blades have the highest level of performance & will make even the toughest sawing job easier.



Item #	Size:	Price:
02544	8" Premium	\$75.63
02543A	10" Premium	\$140.60
02544A	14" Premium	\$210.25
02558	10" Continuous BD303P	\$94.02
02555	14" Continuous MK415	\$308 47

## Notched Continuous Rim Saw Blades

BD-301 Notched Continuous Rim diamond saw blades are made with the highest level of performance and the longest life while yielding high value. These diamond blades have the highest level of performance and will make even the toughest sawing job easier.

Item #	Description	Price:
02554	14"	.\$254.86
02544E	20"	.\$450.66



## Segmented Rim Core Saw Blades

Segmented Rim diamond saw blades are made with the highest level of performance & the longest life while yielding the highest value. These diamond blades have the highest level of performance & will make even the toughest sawing job easier.



Item #	Description	Price:
02544C	.10" Premium	\$217.50
02557	.12" Wet Cutting BD-62G	\$292.15
02556	.14" Wet Cutting BD-62Q	\$306.92
02560	.14" Silent Wet MK-62GSPV	\$300.23
	.14" Dry & Wet Silent Cutting	
02544D	.14" Premium HC44 (hard)	\$281.20
02556-W .	.Wide Slot 14" MK-62P	\$302.25
02559	.20" Wet Cutting Quartz Blade	\$544.68

#### Storage Boxes

Special storage boxes and bins for cataloging and efficiently retaining samples, envelopes and other items.



Item #	Description	Price:
02510-L	Pulp Storage Box with Lift off lid	\$138.83
	24 x 12 x 6" 25/pk	
02516	Self-Locking Bin 18 x 4 x 4.5" ea	ch\$1.81
02505	Storage Box, 19.5 x 11 x 8" each	\$6.09
02502	Chip Tray Storage Box	\$6.78
	14.5 x 8.5 x 20.5" with Insert	

Tags

## Sample Tag Books

100 tags per book. Sequentially numbered for labeling samples. Tags have numbered perforated bottom tabs which are placed in the sample bag. Made of heavy card stock. \*New improved page pattern includes TWO Tear Off Tags with Sequential Barcoded Numbering on page and tags.



Item	Description	Price
034001	. 100 per book	\$6.90

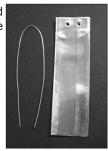
## Tags - Aluminum

Aluminum "Racetrack" Tags - Unnumbered tags are made of 0.025" thick aluminum. Hole diameter: 3/16" (accepts a 10 penny nail). Sold in packages of 100 tags.

Aluminum Corner Location Tags - Use these aluminum corner location tags to identify corners. Drive tack or nail through section diagram. 4" x 5". Sold by the each (1) sheet.

**Aluminum Al-Tags** - Simple, single thickness aluminum tags. 1" x 3-12". Write on one side. Tac-on style attaches with nail, tack, or staple. Ideal for drying oven tags (will not burn or scorch). 500 per box.

Item #	Description	Price:
13340	"Racetrack" Tags	. \$15.41
13311	Legend Tac-on Al-Tags	.\$24.29
13330	Aluminum Corner Markers	\$1.79





## Aluma-Boss Aluminum Tags

Double Faced Aluminum Tags with paper core. Aluma-Boss tags are both weather-resistant and heat-resistant, ideal for both indoor and outdoor use. They are easily embossable with a pen, pencis, or a blunt stylus & create a durable record. Each tag is punched at the top with an industry standard sized hole so that it can be easily attached. Includes 9" wire ties. Boxes of 500

Item #	Description	Price:
13300	3" x 7/8" Aluma-Boss Tags	\$48.94
13302	4" x 1-3/4" Aluma-Boss Tags	\$96.06
13304	6" x 1-3/4" Aluma-Boss Tags	\$117.08



## "Write-On" Aluminum Tags

Write-on tags provide a fast, easy way to tag mining claims, identify and label equipment or parts, or keep track of stock in outdoor storage locations. Tags will retain their contents long after paper tags have been burned away, sun-faded, covered by paint, or washed off by corrosive chemicals. 7/8" tags have two ungrommeted holes. Other sizes have one grommeted hold. All include 6" ties. Approx. 50 per box.



Item #	Size	Price:
13341	7/8"x3"	\$4.40
13342	3"x3"	\$27.55
13343	3"x4"	\$27.55
13344	3"x5"	\$27.95



#### Gold Pans & Classifiers

## Estwing Plastic Gold Pans

These rigid plastic gold pans are a chemical resistant, light weight design with a rim finger grip and lanyard hole for easy use & carrying, Chinese riffle, large drop center and friction type surface help make separating of gold easier.

Item #	Size	Price:
04105	10"	\$4.81
04100	12"	\$5.89
04110	14"	\$8.36
04120	16"	\$10.11



## Gold & Finishing Pans - Plastic

Garrett "Gravity Tray" gold pans are made of sturdy, green ABS plastic. These pans feature the "Gravity Trap Riffle" design. Pan three times as fast as you would with a

conv	entio	nal	gold	pan!	

Item #	Size	Price:
04140	.10.5"	\$9.58
04130	.14"	\$12.39
04160	.15" Super Sluice	\$37.56

#### Metal Gold Pans

Made from 24 gauge steel. Estwing's Steel Gold Pans have creases for thorough separation and a lanyard hole for easy use and carrying. "Big Bottom" finishing pans for concentrate cleanup.

Item #	Size	Price:
04205	. 10"	.\$28.96
04200	. 12"	.\$32.03
04210	. 14"	.\$36.08
04220	. 16"	.\$41.35



## **Gold Panning Kit**

Contains everything you will need to learn gold panning or to improve your gold panning techniques. Contains: 12" Plastic gold pan, Secrets of Gold Panning Book, gold ore for hand panning, instructions, display vial for gold, hand lens, magnet & tweezers.



Item #	Description	Price:
04600	.Gold Panning Kit	\$20.25
04615	.Additional Gold Panning Ore	\$8.25

## Vanning Plaque

For panning small amounts of fine material. This plaque is useful for laboratory work in studying the products from gravity concentrating & flotation tests. Porcelain coated stainless steel.

Item	Size	Price
04650	. 10"	.\$90.90



#### Classifiers

Save time and improve your recovery with these Classifying Sieves. Our Sieves are used for sizing material down before processing through a sluice box or gold pan. Stack various mesh grades together for multi-tiered classification! Conveniently fits over the top of most 5-gallon buckets and constructed of high-impact plastic and stainless steel mesh (04150 has plastic mesh). 14" top diameter, 12" mesh diameter.

Item	Opening	Price
04150	3/8"	\$15.05
04177	2 mesh	\$24.01
04170	4 mesh	\$24.01
04171	8 mesh	\$24.01
04172	12 mesh	\$24.01
04173	20 mesH .	\$24.01
04174	30 mesh	\$24.01
04175	50 mesh	\$24.01
04176	100 mesh	\$24.01



#### Gold Snuffer Bottle

**Instruction:** Fill bottle with water, squeeze bottle for water jet, then release pressure to draw gold into bottle. Ideal for transferring gold from pan into vial.

Item # 11166 Price: \$4.95

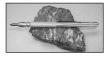


#### Magnets and Geologist Tools

## Magnets & Scribes

No self-respecting prospector should be without a proper magnet. This wonder utility extracts magnetic sand from gold concentrate & black sand. Pick up the magnetic sand, then simply release & the sand falls free! Its that simple! The "Big Orange Gold Magnet" is a definite "must have" for removing magnetic sand from dredges & dry washer concentrators. Works wet or dry.









	· · · · · · · · · · · · · · · · · · ·	
Item #	Description	Price:
05531	.Aluminium Automagnet	\$166.50
05515	.Big Orange Gold Magnet	\$21.71
05530	.Keene Gold Magnet	\$17.80
05514	.Telescoping Pick-Up Magnet	\$6.99
05520RE.	.1" Rare Earth Donut Magnet	\$7.86
05521	.1"x3/8" Rare Earth Disk Magnet	\$16.41
05519	.2" Rare Earth Donut Magnet	\$17.70
19499	.Carbide Tipped Scribe	\$7.33
19493	.Combination Magnet-Scribe	\$8.82
19493-1	.Replacement Tungsten Tip	\$4.50
19492	.Pendulum Pencil Magnet	\$6.17

#### **Blue Bowl Concentrator**

The BLUE BOWL concentrator makes easy work of concentrating and does a more thorough job of removing the black sand from the gold dust. The unit is used by attaching to a garden hose, or pump (sold separately).



Item: 04113 Price: \$88.73

Rock Picks, Hammers, Chisels

#### Estwing Chisel Edge Picks (soft rock)

Polished head and shank with forged one piece head and handle. Blue nylon vinyl grip. Mason hammer has a wider edge on the chisel end.

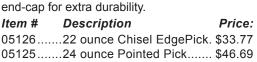
Item #	Description	Price:
05145	. 16 oz	\$36.11
05113	. 24 oz	\$32.89
05114	. 20 oz	\$31.07
05425	. 24 oz Mason .	\$39.77



## Estwing "BIG BLUE" Rock Picks

The NEW Estwing Chisel Edge (E6-22BLC 22 oz) and Pointed (E6-24PC 24 oz) Rock Picks are Estwing's most recent addition to its line of Geological tools. These new picks combines Estwing's solid steel construction with the best engineered ugrades including: Shock Reduction Grip, permanently molded and bonded to the handle. A modified face profile with a larger striking area. Protective end-cap for extra durability.

nanently molded	
nodified face	
area. Protective	
Price:	
l EdgePick. \$33.77	



## Europa Two Handed Prospectors Pick

LEGEND finally provides an economical alternative for those wanting a european style geologists pick. The 30" long (made in USA) hardwood handle and 1" square hammer head makes this a heavy duty companion to the prospector, geologist, miner- or any outdoosman. The durable head is low carbon chrome-moly alloy for exceptional durability.

Item #	Description	Price:
05205H	Europa Prospectors Pic	k\$39.29



## **Economy Wood Handle Chisel End Pick**

New Zealand style geologist pick feature a hardwood handle and 30 ounce head with chisel end.

Item #	Description	Price:
05203	Economy Pick	\$12.99



## Geo-Paleo Hoe Pick - Estwing

25" long, 4 pounds. Pick has a wide spade end for moving large amounts of dirt with a "hoe" motion, and a pointed pick end for digging in hard dirt, soil, and rock. Features: Forged in one piece. Shock Reduction Grip. The optional leather sheath shields both the pointed pick end as well as the hoe end.

Item # Description	Price:
05800 Hoe-pick	\$81.19
05800S Hoe pick Sheath	\$64.92



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## Estwing Rock Picks - Pointed Tip

Estwing 22oz. Rock Pick - ounce head with polished head, shank, and pointed tip. This is the standard weight rock pick and features a forged one piece head and handle. Overall length is 13 inches. Blue nylon vinyl grip.



Estwing Long Handle Rock Pick - 23 ounce head with polished head, shank, and pointed tip. This 16 inch long pick aids in providing extra leverage and prying power. Forged one piece head and extra long handle.



Estwing Lightweight Rock Pick - Estwing's Lightweight Rock Picks have bonded and molded Shock Reduction Grip which offers the utmost in both comfort and durability, while reducing vibrations caused by impact.



Estwing Leather Grip Rock Picks - 22 ounce head with polished head, shank, and pointed tip. Forged one piece head and handle. Brown laminated leather grip. The sole-leather washers are pressed on and riveted.

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Item #	Description	Price
05118	13 ounce	\$30.56
05100	14 ounce	\$37.33
05110	22 ounce	\$38.02
05130	22 ounce Leather Grip	\$45.38
05120	23 ounce Long Handle	\$42.37

#### Burpee Pick - Estwing

Solidly made 17" in overall length (approx.) and forged in one piece, this pick was designed with the professional in mind. 3 magnets in the side of the head allow for material analysis. The Shock Reduction Grip reduces impact stress.



Item # Description Price: 05801......Burpee pick.....\$61.10

## Chisels - Estwing

Estwing full assortment of rock chisels have vinyl grips. Unsurpassed in quality, balance and finish.

Item #	Description	Price:
05300	8" ERC-8C	\$17.17
05301	7" ERC-7C	\$16.94
11420	Chisel Holster	\$46.80



## **U-Dig-It**

The U-DIG-IT folding hand shovel is a great item to add to your pack for hiking, camping, and working in the field. The blade is 2-1/4" wide by 5-1/4" long Stainless Steel. The folding handle is ¼" SS rod x 4-3/4" long. When closed, the U-DIG-IT handle will fold almost entirely into the blade. Includes nylon case.



Item #	Description	Price:
05420	U-Dia-It	\$17.95

#### Crack Hammers - Estwing

Estwing's Crack Hammers have a bonded & molded Shock Reduction Grip which offers the utmost in both comfort and durability, while reducing vibrations caused by impact. The head & handle are forged in one piece & both faces are fully polished. Permits heavy blows with limited swing.

Item #	Description	Price:
05600	2 lb Drilling Hammer - B3-2LB	\$34.01
05610	3 lb Drilling Hammer - B3-3LB	\$34.51
05620	4 lb Drillling Hammer - B3-3LB	\$39.80
05621	4 lb Long Handle Drill-B3-4LBL	\$41.77
05312	40 oz Cross Peen - E6-40CP	\$27.52



#### Spads

#### Spads - Stainless Steel & Nickel Plated

2-1/8" Long. Spads are flat spikes which are hammered into a wooden plug anchored in a hole drilled into the mine ceiling from which is threaded a plumbline. They can be hammered directly into the rock or a small crack in the rock face. Used for hanging equipment, lighting, mine safety items, or in mine surveying for marking permanent underground stations or suspending survey equipment.



Item #	Description	Price:
19511	Nickle Plated (100)	\$36.73
19510	Nickle Plated (500)	\$132.24
19514	Stainless Steel (100)	\$58.45
19515	Stainless Steel (500)	\$222.72

#### Holsters and Packs

#### Holsters & Sheaths

Item #	Description	Price:
05146	#22 Black Pointed Pick Sheath- nylon	. \$6.54
05402	#24 Blue Chisel Pick Sheath- nylon	. \$8.04
05147	#23 Blue Pointed Pick Sheath- nylon	. \$6.54
11430	.Leather Pick Holster	. \$11.71
11470	Gfeller Crack Hammer Holster	. \$39.52
11420	Gfeller Double Chisel holster	. \$46.80





Tapes and Hip Chains

## Keson Measuring Tapes





Item #	Description	Price:
06135	Keson 25' 1/10 - 1/100	\$14.95
06125	Keson 30M Nylon-Coated	\$49.50
06119	Keson 50ft F/glass -10ths & 100ths	\$23.04
06121	Keson 165'/50M F/glass Tape	\$44.21
06115	Keson 300' F/glass Tape	\$67.89
	Keson 300' F/glass Long Tape	
06118	Keson 300' Surveyors' Rope	\$41.60
06117	Keson Replacement Blade/300'	\$13.93

#### Hip-Chain

Tie the line from a HIP-CHAIN to a tree or other object and set the meter to zero. As you walk, the meter measures and indicates the length of line pulled out, giving the distance you've traveled. Your hands are free for other tasks. After use, simply break and discard the disposable line.

Item #	Description	Price:
06200	Feet	.\$242.82
06220	Meters	.\$242.82

## Hip-Chain Thread (Spools)

Very high quality Poly-Cotton and Cotton thread for use in Hip-Chain and Chainman.

Item #	Description	Price:
06330	Polyester- 2750 yds .	\$3.80
06340	Cotton- 2725 yards	\$6.62



#### Compass Cases

Item #	Description	Price
11450	Leather case w/belt loop	\$20.73
07580	.Nylon compass case	\$11.61

Bruntons and Compasses

#### Brunton Accessories

The Brunton non-magnetic Tripod is adjustable from 19 inches to just over 48 inches to fit almost any situation. Manufactured using nonmagnetic aluminum and brass. Mounting post is a standard 1/4 - 20 thread. Adjustable legs for use on almost any surface. Pointed tips on the ends of all three legs for no-slip use.

Item #	Description	Price:
07600	.Non-Magnetic Tripod	\$165.00
07610	.Tripod Adapter	\$112.50
11390	.Gfeller Transit Case	\$55.43
11395	.Leather Brunton Case	\$42.75



11390	Gfeller	Transit C	ase	\$5
11395	Leathe	r Brunton	Case	\$4

## Brunton Pocket Transits

All Bruntons include induction dampening, lift pin, leather case and instruction manual.

Standard models have a metal case with lift-pin and are balanced for used in the northern hemesphere. They are not waterproof.

LM models feature a metal case, lift pins, are waterproof, and international.

Com/Pro 90- a state-of-the-art pocket transit with advanced magnetics, mechanics, and materials. Features a single high energy rare earth magnet, composite case, lift-pin, are waterproof, and international.



Geo Pocket Transit features a solid aluminum case and a fast, magnetic north seeking, rare-earth magnet. Also includes a hinge inclinometer, accurate to +/- 2°. This feature allows simultaneous trend and plunge measurements, reducing the number of measurements required in the field. Needle can be locked or unlocked and feature a lift-pin, are waterproof and international.

Azimuth: 0-90° Quadrants

Item #	Model/Description	Price:
07210	2001 Standard	\$433.55
07212	F-5020 Standard-BLUE.	\$577.20
07310	5005LM	\$506.05
07430	5007 Com/Pro	\$450.00
07447	5009 Geo	\$802.50
Azimuth:	0-360° Degrees	
Itom #	Model/Description	Prico:

ALIIIIUUII	0-300 Degrees	
Item #	Model/Description	Price:
07200	2061 Standard	\$433.55
07202	F-5020 Standard-ORANG	SE\$577.20
07300	5006LM	\$506.05
07420	5008 Com/Pro	\$450.00
07446	5010 Geo	\$802.50

## eGear Compasses

Item #	Description	Price:
08421	Deluxe Map Compass	\$5.08
08422	Folding Map Compass	\$7.25



## Suunto Compass with Clinometer

Suunto MC-2 Azimuth (0-360) Mirror Sight Compass with Built-in Clinometer. For those who need accurate and reliable directional measurements; such as geologists, prospectors, surveyors, miners, architects, rescue patrols, hikers, boaters and the military. The declination adjustment system is especially useful when working in areas of large magnetic variation, while the sighting notch provides superior accuracy.



Item #	Description	Price:
08100	Suunto MC-2 Azimuth (0-36	50) \$82.50

#### Lanyards

Gfeller Neck lanyards, made of the finest soft garment cowhide, with a 5/8" single or double split ring. Adjusting slide button. For use with hand lens and other pocket type items.

Item #	Description	Price:
09000	Gfeller Single Leather	\$16.74
09001	Gfeller Double Leather	\$21.22
09003	Braided Rope Cord	\$2.50
09002	Woven Legend 1/2"	\$3.50



#### Magnifiers and Microscopes

## Microscopes & Magnifiers - Other

2X Rectangular Magnifier 2" x 4" - Bausch & Lomb. 60-100 X Pocket Zoom Microscope with Light. A powerful 60-100x magnification microscope with an extremely lightweight and portable design.

Item #	Description	Price:
09425	50x Pen Style Microscope	\$43.40
09427	10X Illuminated Magnifier	\$29.81
09420	30X Illuminated Microscope	\$19.70



## Magnifiers - Triplet

B & L Hastings Triplet lens consists of three separate lenses made of different types of glass. Each ground and polished to instrument quality standards & cemented together. Strong chrome plated metal case protects the quality lens.

Item #	Description	Price:
09100	.7X Hastings	\$41.26
09110	. 10X Hastings	\$43.06
09120	. 14X Hastings	\$50.84
09130	. 20X Hastings	\$50.84
09220	. 10X Peer - Blac	k\$23.24
09230	. 10X Peer - Gold	d\$23.24



## Magnifiers - UV/LED Illuminated

Geologists Loupe Magnifying Glass 6UV and White LED Lights. Useful for fluorscent mineral identification. UV Wavelength: 390-400 nm

Item #	Description	Price:
09234	.60x LED & UV	\$9.89
09237	. 10x Triplet LED & UV	\$27.58
09236	. 20x Triplet LED & UV	\$27.14



## Magnifiers - Doublet (Coddington)

Coddington Magnifiers use a single thick lens with a central groove diaphragm. This design provides for sharp, crisp images.



Item # De	escription	Price:
0914010	X	\$26.89
0915014	X	\$29.41
0916020	X	\$32.49
191375X	C-20X Folding	\$26.16
0920010	X Vantage - 15mm	\$12.26
0921010	X Vantage - 23mm	\$18.75
0921515	X & 20X Vantage Double	\$26.99
1913115	X Vantage Achromatic	\$43.58
1913220	X Vantage Achromatic	\$48.80





## Magnifiers - LED Illuminated

Ideal for use in poor lighting conditions, these loupes features a 21mm lens & bright white LED lights to illuminate the field of view & stones like never before. These battery operated magnifiers have a slide on/off switch, a storage case to protect the loupe while not in use & key for opening & closing battery compartment.



Item #	Description	Price:
09233	.10x Triplet Lighted Loupe	\$28.69

Cap Lamps and Lights

## Cap Lamp - Dual LED Lithium-lon

Miners Dual LED Cap Lamp with Lithium Ion (Li-Ion) Battery & Charger. This Cap Lamp has Dual LED Light source. The primary LED is a high intensity bulb giving up to 16 hours of continuous light on a fully charged battery. The lamp also comes with an auxiliary/backup (Emergency) long life light source made up of six (6) long life LED bulbs giving up to 45 hours of continuous use on a fully charged battery.

**Features:** Light Output over 70 lumens, up to 80 times longer lamp life than the ordinary bulbs, small, compact & lightweight, low Power consumption & Virtually maintenance free, LED light source can last up to 50,000 hours.

Supplied with Battery Charger





Easily used on the helmet, attached to the miners waist or even as hand held lamp.

Item #	Description	Price:
102461	.SE Miners Cap Lamp with Charger	\$79.05

## Cordless Cap Lamp - Dual LED Lithium

SE Miners Cordless Dual LED Cap Lamp with Lithium Ion (Li-Ion) Battery & Charger. This Cap Lamp has Dual LED Light source. The primary LED is a high intensity bulb giving up to 12 hours of continuous light on a ful charge. The lamp also comes with an auxiliary /backup (Emergency) long life light source made up of six (6) long life LED bulbs giving up to 36 hours of continuous use on a full charge. Can be clipped on the helmet, attached to the miners waist or as a hand held lamp. Cap sold separately. Includes charger.



Item #DescriptionPrice:10246.......SE Miners Cap Lamp & Charger .... \$56.12

#### **UV Lamps - Portable**

Rechargeable UV Lamp (UVSL-26P). Carry the portable / rechargeable 6 watt UV lamps anywhere! Built-in lead acid battery allows hours of use! Longwave & Shortwave combination of wavelengths in one lamp. Rechargeable lamps are equipped with an internal gel-based, lead-acid battery which can be charged for field operation from a standard wall outlet. A 12V adapter is available for operating the lamp from a car cigarette lighter. Model UVSL-26P can operate with both Longwave and Shortwave on at the same time



Item #	Description	Price:
10290	.UV Lamp UVSL-26P	.\$914.87
10291	.12V Adapter for UVSL-26P	\$52.88

#### Hard Hats and Miners Belts

#### Miners Belts







Item #	Description	Price:
10240	Koehler 3" Miners Belt - Small	\$106.47
10240-M	Koehler 3" Miners Belt - Medium	\$106.47
10240-L	Koehler 3" Miners Belt - Large	\$113.84
10240-XL	Koehler 3" Miners Belt - X-Large	\$116.48
10240-XXL	Koehler 3" Miners Belt - XX-Large	\$125.45
102401	Koehler Miners Belt Suspenders	\$34.90
102402	Koehler Wet Battery Pouch	\$15.50
102403	Koehler Lithium (Li-16) Battery Pouch .	\$28.04

## MSA Skullgard Hard Hats

MSA Skullgard Full Brim Resin Impregnated Textile Hard Hat contain layers of Resin-impregnated Textiles, Laminated Under Pressure Offers Heavy Duty Protection in Steel and other Industries where Metal Splash and High Temperatures are Common. MSA Skullgards are SEI Certified & meets or exceeds the applicable requirements for a Type 1 helmet (top impact) as outlined in ANSI Z89.1 2003, Class G (electrical-low voltage).



Features: Ratchet Suspension, Heavy-Duty Construction, CushionAire sweatband.

Item #	Description	Price:
10314	MSA Skullgard - White	\$213.24
10315	MSA Skullgard - <b>Tan</b>	\$185.25
10316	Ratchet suspension MSA Skullgard	\$29.59
10312	Miner's Lamp Bracket Screw In	\$22.01

#### MSA Comfo-Cap Hard Hat w/ Ratchet

Used in the mining industry for head protection. Low-crown clearance for work in low-ceiling areas and a lamp bracket and cord holder to support a miner's lamp. Rachet suspension makes for easy adjustments. Made of lightweight, tough polycarbonate plastic, the shell resists top impacts.



Molded cross ridges on the crown provide increased strength and rigidity. The cap's peak helps protect the wearer's eyes and face from small falling objects. Not designed to protect against lateral blows from the front, side or rear.

Item #	Description	Price:
10318	Hardhat w/Bracket & Ratchet	\$99.89

#### Claim Posts

#### Claim Posts - Kiln Dried

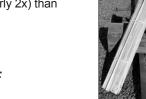
Kiln Dried Premium Fir Claim Posts. Four feet in length and 1.5" width, with either a 5" or 3" point. Sold in Bundles of 25.



Item #	Description	Price:
12550-M	.5" Point (Montana)	.\$73.83
12550	.3" Point (Oregon)	.\$73.83

#### Lath - Kiln Dried

Light weight fir Lath stakes. Kiln dried lumber is stronger (over 2x) and stiffer (nearly 2x) than green lumber. Four feet in length. Dims: 6/16" x 1-1/2" x 48" Sold in Bundles of 50 stakes.



Item # Description Price: 12633......Fir, pointed.....\$69.56

## Claim Post Notice Containers

Perfect for small samples or attach to claim posts with a screw or nail to protect notices and other paperwork. Steel gold anodized. Dimensions

(Ht x Dia):2 oz- 3/4" x 2-1/2": 4 oz- 1-1/8" x 3-1/4"

Item #	Size	Price.
11292	2 oz Screw Top	.\$1.67
11293	4 oz Screw Top	.\$1.79

## Lath - Canvas Carry Bag

46" Canvas Lath Bag to carry standard length lath. Shoulder strap and carry handle.

Item #	Description	Price:
10495	.Canvas Lath Bag	\$10.95



Chip Trays, Bottles, & Buckets

#### Chip Trays - Standard Rock

Trays are available with either 10 and 20 compartments. Each compartment measures approximately 1"x1-3/4"x1" deep. Secure closure & specially designed lid make cross contamination almost impossible.

Funnel attachment for easy loading of each compartment. 60 units per carton. The carton (included) is sturdy and can be used for storage and cataloging of trays after filling.



Item #	Description Price	:
11177	10 Unit Chip Tray \$1.69	)
11169	20 Unit Premium Chip Tray UV(each)\$2.99	)
11169K	20 Unit Premium Chip Tray UV(cs of 60)\$169.00	)
02603	20 Unit Chip Box Opaque UV \$3.73	3
11179	Funnel for Chip Tray\$1.49	)
02502	Chip Tray Storage Box\$6.78	3
	(24" x 14" 18" with divider - Heavy Duty)	

#### Vials - Clear Plastic

Transparent crystal polystyrene vials with tabbed white polyethylene snap-caps. Countless uses in the Mineral Industry, Medical, Agricultural & Hobbyist. Pricing per case:



Item #	Description	#/case	Price:
11222	40 dram vial	240	\$123.89
11221	15 dram vial	410	\$140.29
11223	7 dram vial	910	\$137.84

#### Vials - Glass "Gold"

Clear Borosilicate Glass Vials. These general purpose vials have black phenolic molded screw cap with polyvinyl-faced pulp liner. The cap is the same diameter as the body, fitting flush to the shoulder. Sold by the case.

Item #	Dram	#/case	Price:
11224	1	144	\$243.21
11225	2	144	\$127.70
11228	4	144	\$290.84
11233	.6	72	.\$128.78



#### Drums - Metal

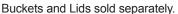
Metal open top drums. Perfect for storage and transport. All are open top with included lids and rings



Item #	Description	Price:
11250	Reconditioned 55 Gal	\$111.65
11251	New 30 Gal	\$89.73

#### Buckets - Plastic

Thousands of uses on the drill rig, mine, field site, or laboratory. Use for storage and transporting of drill cuttings and other types of samples. Ideal for wet samples where loss of liquid and fines is not acceptable.





Item #	Description	Price:
11102	1 Gallon Bucket	\$2.77
11103	Lid for 1 Gallon Bucket	\$1.45
11100	2 Gallon Bucket	\$2.64
11101-A.	Lid for 2 Gallon Bucket	\$1.13
11105	3.5 Gallon Bucket	\$4.57
11120A	5 Gallon Bucket	\$6.74
11127A	Tear Tab Lid for 3.5 & 5 Gallon Bucket	\$2.36
11126	Lid with Spout for 3.5 & 5 Gallon Bucket	\$3.03
11128	Lid Opening Tool - Aluminum Heavy Duty	\$20.07

## Centrifuge Tubes - Disposable

Low cost, non-sterile disposable polypropylene centrifuge tubes. Conical bootom with screw-on lids. Centrifuge Racks for 50ml: Epoxy coated steel wire is chemical & corrosion resistant & steam autoclavable at 121°C (250°F).



Item #	Description	Price:
11235	50 ml w/ Lids (500)	\$128.83
112361	15 ml w/ Lids (500)	\$98.42
112381	16 Place Rack (50ml)	\$55.71
11238	36 Place Rack (50ml)	\$81.00



## **Acid Drip Bottles**

Polypropylene & LDPE acid resistant dropper bottles for accurate & measured dispensing. Ideal for use with indicators. The 15 ml size fits our leather holder (#11375)

Item #	Description	Price:
11180	Flip Top, 15 ml	\$5.79
11190	Flip Top, 30 ml	\$8.34
11200	Flip Top, 60 ml	\$10.37
11202	Screw Top, 15 ml	\$2.32
11201	Screw Top, 30 ml	\$2.48
11203	Screw Top, 60 ml	\$2.94





#### **Bottles**

Bottles for solution samples in the laboratory, mine, and field use. Ideally suited for general storage of aqueous liquids, powders, and viscous fluids. Transparent wall for easy viewing of fluid levels and watertight design. Please see website for full details

Item #	Description	Price:
Wide Mou	th	
	.125 ml (4 oz) LDPE	
11154	.250 ml (8 oz) LDPE	\$3.63
11111	.250 ml (8 oz) HDPE	\$3.71
11153	.500 ml (16 oz) LDPE	\$5.07
111821	.500 ml (16 oz) HDPE	\$9.13
11161	.1000 ml (32 oz) LDPE	\$9.36
111611	.1000 ml (32 oz) HDPE .	\$10.58
11115	.1000 ml (32 oz) Oblong	\$5.53 <sup>l</sup>
11162	.4000 ml HDPE	\$49.31
Narrow M	outh	



Narrow Mouth	
1139-N125 ml (4oz) LDPE	.\$2.43
1167125 ml (4oz) HDPE	.\$3.20
11521125 ml LDPE Amber	\$2.36
1154-N250 ml (8 oz) LDPE	\$2.83
1153-N500 ml (16 oz) LDPE	\$3.72
1161-N1000 ml (32 oz) LDPE	\$6.84
1116250 ml (8 oz) PE	\$2.51
1157500 ml PE Measure	\$3.41
1140500 ml (16 oz) PE	\$2.92
1150100 ml (32 oz) PE	\$2.59



## Bottles - Wash

Handy squeeze bottles for laboratory and field use. Typically filled with deionized water, detergent solutions, and rinse solvents such as acetone and ethanol. When pressure is applied to the bottle, the pressurized liquid is forced out the nozzle into a narrow stream.

Item #	Capacity	Price:
11159	125 ml	\$4.78
11152	250 ml	\$4.92
11156	500 ml	\$5.59
11158	1000 ml	\$6.86
11155	Spray, 24 oz	\$4.92



## Mason Jars - Polypropylene

Heavy-walled, natural color polypropylene mason jars have a standard 70mm threaded neck. Screw caps have a seal ring and grip lugs. Autoclavable at 121°C (250°F).



Item #	Description	
11204	.2 Liter - 1/2 Gallon Mason Jar	.\$22.22
11205	.4 Liter - 1 Gallon Mason Jar	.\$36.68
11206	.8 Liter - 2 Gallon Mason Jar	.\$56.16

Field Books and Paper

## Elan Notebooks, Binders & Filler Sheets

High visibility covers, constructed to withstand the most rugged handling under all climatic conditions. Lines on opposite pages are in register and are printed with weatherproof blue & red inks, on high quality water-resistant paper.



Item #	Description	Price:
21200	.Mini Edition Hardbound Field	.\$6.93
21205	.Wire-O Field	.\$4.16
21210	.E64-8x4S Field	.\$4.16
21215	.Hardbound Field	.\$6.93
21220	.8x4 Hardbound Field	.\$6.93
21225	.8x8 Hardbound Mining Transit	.\$6.93
21235	.10x10 Hardbound Cross/Level	.\$6.93
21245	.Hardbound Level	.\$6.93
21250	.Hardbound Pocket Size Level	.\$6.93
21255	.Hardbound Field Book - 6"x9"	.\$9.04
21260	.E325 Mini Cloth Covered Binder	\$17.09
	.E324 2-1/4" Ring Binder	
21275	.Small Field Filler Paper Set	.\$3.91
21280	.Small Level Filler Paper	.\$3.91

## Legend Fieldbook

Size: 4-5/8" wide x 7-1/8" long. 68 pages, with board cover. Spiral or bound.

Item #	Description	Price:
21300	.Spiral Field Book	. \$1.99
21310	Round field Book	\$0.99



## "Rite in the Rain" Notebooks - Stapled

Millions of these notebooks are in use around the globe. With a "Rite in the Rain" tagboard cover and secure stitching, this notebook has quickly become a favorite among students and professionals alike. Weatherproof paper: Rite in the Rain is a truly amazing paper that is created specifically for writing field notes in all weather conditions; from the torrential downpours of the Pacific Northwest to the blistering heat and humidity of a Florida summer's day.



Item #	Description	Price:
22100	.#100 Stapled Memo Book - 3.25" x 5.75"	\$1.00
22101	.#378 Universal Field- 31/4" x 51/4"	\$6.69
22391FX.	.#391 Journal Stapled Notebook(pk of 3) .	\$15.35
22710	.#391-M Journal Mini-Stapled Notebook	\$1.90
22311FX	.#311 Level Stapled Notebook(pk of 3)	\$15.35
	.#341 Cruiser's Transit Stapled Notebook	
22301	.#301 Transit Stapled Notebook	\$4.48
	.#351 Field Stapled Notebook	
22371	.#371 Cross Section Stapled Notebook	\$4.48
22361	.#361 Metric Field Stapled Notebook	\$4.48
22381	.#381 Metric Grid Stapled Notebook	\$4.48

## "Rite in the Rain" Notebooks - Spiral

These notebooks are made with a Polydura cover and wire-o binding. Weatherproof paper: Rite in the Rain is a truly amazing paper that is created specifically for writing field notes in all weather conditions; from the torrential downpours of the Pacific Northwest to the blistering heat and humidity of a Florida summer's day.



Item #	Description	Price:
22135	Pocket Notebook - 3" x 5" #135	. \$3.73
22146	Pocket Notebook - 4" x 6" #146	. \$4.67
22393	Journal Spiral Notebook #393	. \$6.55
22313	Level Spiral Notebook #313	. \$6.55
	Transit Spiral Notebook #303	
22111	Spiral Notebook 8.5" x 11" #353-MX	\$15.50
	Spiral Notebook 8.5" x 11" #185	
22353	Field Spiral Notebook #353	. \$6.55
22363	Metric Field Spiral Notebook #363	. \$6.55
22313	Level Spiral Notebook #313	. \$6.55

#### "Rite in the Rain" - Binders

The "Rite in the Rain" Field Ring Binders are DURABLE! Made with Polydura and rust resistant metals. Designed to fit the 4 5/8" x 7" standard size loose leaf. Loose Leaf insert sheets sold separately.



Item #	Description	Price:
22200	.#200 1/2" Field 6 Ring - 4-5/8x7"	\$12.21
22204	.#204 1/2" Small Field 6 Ring-4"x6.5".	\$10.33
22210	.#210 1" Field 6 Ring-4-5/8"x7"	\$13.15
22218	.#218 1/2" Field 3 Ring-8.5"x11"	\$10.33

## "Rite in the Rain" Hardcover Bound

"Rite-in-the-Rain" all-weather writing paper products. Created specifically for writing field notes in wet or humid weather. A unique and exclusive chemical coating sheds water making it possible to write clear, readable notes during the heaviest rainstorm. The Bound Book-Two cover options: Extra durable vivid yellow Polyethylene or the time tested yellow Fabrikoid "old style" fabric cover. 8 different grid patterns available.



Item #	Description	Price:
22300	#300 Transit Poly	.\$18.81
22305	#300F Transit Fabric	.\$19.20
22310	#310 Level Poly	.\$18.81
22315	.#310F Level Fabric	.\$19.20
22320	#320 Poly Mining Transit	.\$14.55
22350	#350 Field Poly	.\$18.81
22355	#350F Field Fabric	.\$19.20
22360	#360 Metric Field Poly	.\$19.20
22365	#360F Metric Field Fabric	.\$19.20
22380	#380 B.C Field Poly	.\$18.81
22385	#380F Metric Grid Fabric	.\$18.81
225401	#540F Geological Fabric	.\$22.08
225501	#550F Environmental	.\$22.08

## "Rite in the Rain" - Loose Leaf Sheets

"Rite-in-the-Rain" all-weather writing paper products. Created specifically for writing field notes in wet or humid weather. A unique and exclusive chemical coating sheds water making it possible to write clear, readable notes during the heaviest rainstorm. Your best insurance against lost time & ruined notes.



Loose Leaf Sheets: "Rite-in-the-Rain" all-weather paper. 6 hole slotted punch fits all 7" six-ring binders . Ring binders sold separately.

Item #	Description	Price:
22302	#302 Transit Standard	\$14.39
22312	#312 Level Standard	\$14.39
22322	#322 Mining Transit	\$10.47
22342	#342 Cruiser's Transit Standard	\$11.09
22352	#352 Field Standard	\$13.15
22362	#362 Metric Field Standard	\$13.15
22372	#372 Cross Section Standard	\$14.39
22382	#382 Metric Grid Standard	\$13.15
22392	#392 Journal Standard	\$13.15
22395	#395 Blank Standard	\$13.15
22505	#1104 Cross Section 1/4" Grid	\$15.04
22525	#1111 Column Sheets-11 Columns	\$14.55
22530	#1113 Column Sheets - 13 Columns.	\$14.55

Pens. Pencils and Rulers

#### Mechanical Pencils & Refills

LOGO mechanical pencils feature a retractable eraser and retractable sleeve. Twist-advance eraser is six times longer than standard erasers so you'll always be ready for corrections. Convenient push-button lead mechanism delivers lead quickly and easily. Metal pencil tip provides top-notch durability.

Item #	Description	Price:
06615	.Tech .5mm mechanical pencil	.\$3.35
06630	Lead, 0.5mm, B- Pack of 12	.\$0.84
06635	.Lead, 0.5mm, HB- Pack of 12	.\$1.55



#### Sharpie Marking Pens

The original pen style permanent marker. The Sharpie has a fine point and features quick drying and water-resistant ink. Permanent on most surfaces. Fade & water resistant. The Sharpie King Size & Magnum markers have a wide chisel tip.



Item #	Description	Price:
05606	Sharpie fine point black ink	\$1.43
05607	Sharpie King Size Black Marker - pk/12	.\$28.68
05612	Sharpie fine point green ink	\$1.43
05615	Sharpie x-tra fine point 4 color set	\$3.00

#### "Rite in the Rain" - Wet-Writer Pen

Wet-Writer pen writes underwater & in temperatures from -500 F to over 4000 F. The smoothest & richest write out of any ballpoint on the market. Perfect for laboratory or field.

Item #	Description	Price:
22585	Wet-Writer Pen	\$10.32
22590	Wet-Writer refill - Black	\$7.65



#### Clipboards

**DeskMate II** - with Calculator is made from durable polypropylene. Its solar & battery powered calculator has easy-to-read LCD screen. Large internal storage compartment. Cover snaps shut to keep items in and weather out.



**WorkMate II** - Great For Organizing Your Mobile Work Station. Made from rugged, lightweight polypropylene that provides a solid, smooth writing surface. Six internal compartments.



Item #	Description .	Price:
21000	Aluminum Clipboard with Cover	\$20.25
21002	Aluminum Clipboard	\$18.01
22290	Aluminum Sheetholder	\$30.15
22295	Aluminum Sheetholder - Legal Size	\$37.35
22294	Aluminum Springback Sheetholder	\$34.05
21005	Sanford Deskmate II with Calculator .	\$15.60
21004	Sanford Workmate II	\$15.71

#### C-Thru Standard Rulers

C-Thru offers some of the finest measuring and drafting tools of their kind in the world. They are committed to broad product selection with meticulous quality and value-pricing. C-Thru® offers a full array of products in rulers, triangles, protractors, drafting tools, combo sets. These clear acrylic rulers are inexpensive and available in a variety of scales and graduations. The printing is between laminated layers so it won't wear off.







Item #	Description	Price:
22600	10ths Graph/Metric-6"/15cm	\$1.52
22602	Centimeter Grid Ruler - 30cm	\$1.81
22604	Metric ruler - 30ths	\$1.81
22607	Graph Ruler	\$1.52
22608	8ths Graph/Metric Ruler	\$1.81
22620	Metric/Inch Ruler - 30cm	\$2.00
22630	Scales Pocket Set	\$6.25
22601	Combo Scale Ruler	\$1.81
22622	Multiscale Scaler Set	\$11.00

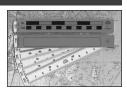
#### Protractor Rulers

The printing is between laminated layers so it won't wear off with field use.



Item #	Description	Price:
22605	16ths to the inch Protractor Rulers	. \$1.67
22609	10ths/50ths Protractor Rulers-6	. \$2.83
22610	Protractor ruler 10ths/20ths	. \$2.83
22611	20ths/40ths Protractor Rulers-6	. \$2.83
22614	32ths to the inch Protractor Rulers	\$2.65
22615	Beveled Protractor Ruler-12	. \$3.14
22616	1:500 & 1:1000 Metric Protractor	. \$2.83
22617	Engineers Protractor Ruler-6	. \$1.67
22618	1:2000&1:1500 Metric Protractor	. \$2.83
22619	Protractor Ruler 1/250 & mm	. \$2.83
22625	Goniometer Quick Angle Protractor	\$6.17
22635	Course Protractor Plotter Ruler	. \$8.41

## Map Rulers



Item #	Description	Price:
22633	GSA Photo Scale / Time Scale	\$2.20
226261	Map Ruler - 1:24,000	\$4.95
226271	Map Ruler - USGS Set	.\$19.95
226263	Pocket Sized UTM Corner Ruler	\$4.00
226272	UTM Corner Rulers Overlay	\$7.00
22621	Multiscale Quadrangle Map Scale	.\$11.00
22631	Grid Reader GR-2	\$6.72
22635	Protractor Plotter Ruler - 15"	\$8.41

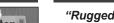
Flagging, Flags, Whiskers

## Flagging Tape - Arctic

#### Extra heavy duty for extreme conditions.

Color fast for extended exposure periods. The heavy gauge of this flagging makes it ideal for cold climates and extreme weather conditions. Colorful and highly visible, our Arctic Roll Flagging is the most durable, longest-lasting outdoor flagging available anywhere. Regular colors, 300 foot roll. Glo-colors, 150 foot roll. \$2.93 per roll.

Item #	Color
12270	Pink-glo
12280	Orange-glo
12290	Blue
12275	Yellow
12285	Red
12295	Green



#### "Rugged, Reliable Roll Flagging That's Easier to See & Use"

"Tafetta" flagging is weather resistant, won't tear at the knot and defies fading and cracking. Colorful and highly visible, Taffeta Roll Flagging is the most durable, longest-lasting outdoor flagging available anywhere thanks to proprietary formulations and annealing. Used in surveying, construction, forestry, mining, geophysics, hardware and oil exploration. Regular colors, 300 foot roll. Glo-colors, 150 foot roll. \$2.01 per roll.

Item #	Color
12145	. Purple
12150	.Red
12155	. Pink
12160	. Orange
12165	. Yellow
12170	. Blue
12175	. Green
12190	. White
12265	. Red-Glo
12235	. Pink-Glo
12240	. Orange-Glo
12250	. Yellow-Glo
12260	. Blue-Glo
12245	. Green-Glo
12255	. Lime-Glo

Flagging Tape - Tafetta



## Flagging Dispenser Holster

True North Flagging Dispenser

*Item #* 11441 ......

This tough, durable flagging dispenser attaches easily to your belt and holds one roll of flagging. Made of cordura nylon, it features a heavy-duty YKK zipper and a brass dispensing grommet.

ur beit and noids one roll of flagging. rdura nylon, it features a heavy-duty - and a brass dispensing grommet.	TRUENORTH
Price:	
\$22.90	

## Flagging - Tafetta - Striped & Polka Dot

#### "Rugged, Reliable Roll Flagging That's Easier to See & Use"

"Tafetta" flagging is weather resistant, won't tear at the knot and defies fading and cracking. Colorful and highly visible, Taffeta Roll Flagging is the most durable, longest-lasting outdoor flagging available anywhere The most asked for flagging by industry professionals in surveying, construction, forestry, mining, geophysics, hardware and oil exploration. Regular colors, 300 foot roll. Glo-colors, 150 foot roll. \$2.01 per roll

-	
Item #	Color
12176	Black & White Stripe
12177	Red & Black Stripe
12178	Orange & Black Stripe
12179	Orange Glo & Black Stripe
12181	Yellow & Black Stripe
12180	Red & White Stripe
12182	Pink & Black Stripe
12300	Red & White Polka Dot
12301	Orange & White Stripe

## Marking Flags - Wire Stake

Available in a wide range of sizes & long-lasting colors, these high-visibility marking flags are ideal for above-ground marking, even at -40°F. Flags are constructed of heavy-duty 4-mil vinyl and are mold & mildew resistant. Wire shafts are contructed of sturdy 15½ gauge steel wire. Bundles of 100 flags.



Item #	Color	Length	Price:
12525	.Red-Glo2	24"	\$11.58
12510	.Yellow-Glo 2	24"	\$11.58
12515	.Pink-Glo2	24"	\$11.58
12520	.Blue-Glo2	24"	\$11.58
12521	.Orange-Glo2	24"	\$11.58
12517	.Green-Glo2	24"	\$11.58
12516	.White/Red Strip	pe24"	\$11.58
12524	.Blue-Glo3	36"	\$15.12
12527	.Pink-Glo3	36"	\$15.12
		36"	
12518	.Orange3	36"	\$15.12
		36"	
12514	.White3	36"	\$15.12
12512	.Red3	36"	\$15.12
12513	.Green3	36"	\$15.12
12526	.Lime green3	36"	\$15.12

## Marking Whiskers

Marking Whisker are an alternative marking choice for survey and construction sites, underground utility locating & many other uses. APWA color-coded Marking Whisker spring back up when run over by lawn mowers, graders & heavy equipment. Easily attached to wood stakes or to 60-penny nails (not included). Use them alone or in conjunction with other marking products.

Item #	Color	Price:
12144	Pink-Glo	\$3.26
12143	Orange-Glo	\$3.26
12138	Blue	\$3.26
12139	Yellow	\$3.26
12141	Green	\$3.26
12142	White	\$3.26
12140	Red	\$3.26
12136	10 lb Whisker	Nails .\$35.72
12137	50 lb Whisker	Nails\$123.18



#### Field Bags

## Field Bags, Cases & Holders - Leather

Standard Acid Bottle Case includes belt loop. Uses 15ml Acid Bottle Item #11202. Large Acid Bottle Case includes belt loop. For 15ml Flip Top Acid Bottle Item #11180 or 30ml Acid Bottle Item #11201

Item #	Description	Price:
11370	Standard Acid Bottle Case	\$18.66
11375	Large Acid Bottle Case	\$41.97
11360	Geological survey field case	\$61.43
11345	Leather scale/10 pencil holder	\$68.67
11346	Rivet kit for pencil holder	\$4.44



#### Marking Paint

## Marking Paint - Upside Down

Aervoe's Survey Marking Paint is a superior inverted marking paint that is designed for survey marking. It provides the best quality paint in terms of color visibility & retention, durability, & a lasting mark of up to six months. Non-freezing & operational to 14°F. All marking paint formulations are lead free. Meets all OSHA user safety requirements. 12 cans per case. **Price: \$7.10 per can.** 

Item #	Color
12701	Fluorescent Red / Orange
12703	Fluorescent Orange
12706	Fluorescent Green
12710	Fluorescent Pink
12712	Fluorescent Blue
12713	White



#### Paint Accessories

Aervoe Marking Stick: Aervoe's Marking Stick is constructed of a tough durable plastic and lightweight steel or single-hand operation. Intended for upside down marking only. Aervoe Spot Marker: This simple, hand held marking gun provides accuracy and control for either upright or upside down marking.

Item #	Description	Price:
11716	Marking Stick	. \$36.88
11717	Spot Marker	. \$16.67



## Marking Paint - Upright

Item #	Color	Price:
12800	Fluorescent Orar	nge\$6.99
12801	Fluorescent Pink	\$6.99

#### Paint - Hi-Heat (Aervoe)

Hi-Heat Paint is flame & heat-resistant uniquely formulated to produce a lasting finish that is resistant to surface temperatures reaching up to 1000°F. Offers excellent corrosion resistance as well as interior & exterior durability. Uses: Assay Furnaces, Assay Tools, Kilns, engine manifolds & mufflers. 12 cans per case.

Price: \$8.74 per can.

Item #	Color
12818	Aluminum
12840	White
12850	Black
12845	Beige



Vests

#### Vest - JIM-GEM 10 Pocket Field

Quality field vests feature a flagging dispensing grommet, lanyard grommets, all-steel snaps, pocket gussets & ten roomy pockets. Pockets include one outside pen/pencil breast pocket, one compass breast pocket, three roomy front pockets with Velcro® closures, two large inside pockets with Velcro® closures, a two-pocket knapsack & a hidden zippered map pocket. Both the knapsack & map pockets feature a heavy, 1000 denier Cordura® nylon reinforcement layer sewn at the bottom.

	\$101.84	\$106.43
	Orange	Tan
Size	Item #	Item #
35-37(S)	13527	13533
37-39(M)	13528	13534
39-43(L)	13529	13535
43-46(XL)	13530	13536
46-49(XXL)	13531	13537
49-52(3XL)	13532	13538
52-55(4XL)	13526	13539



## Geology Vests with Reflective Strips

These vests offers visibility and safety on the job site. Constructed of 100% Polyester for softness, comfort, superior strength, and abrasion resistance. Feature 2"W reflective strips and convenient pockets with sturdy snap fasteners. Comply with DOT MUTCD and ANSI/ISEA 107-2004 Class 2 Standards for high-visibility safety apparel.

Standards	ior riigii-visibiiity	salety a
Item #	Size	Price:
13538-M	Medium\$	155.06
13538-L	Large\$	155.06
13538-XL	X-Large\$	155.06
13538-2X .	XX-Large\$	176.08



#### pH and ORP

#### pH Paper (Roll)

Reusable dispensers hold two rolls of standard-size Hydrion pH papers—15 ft.L x 7/32 in.W (4.6m x 0.55cm)—plus matching color charts. Wide-range papers provide a sharp color change for each full pH unit Short-range papers change for each 0.5pH unit.

Item #	Range	Price:
13147	pH 2-10, 3	-11\$28.49
13148	pH 4-9	\$43.01
13149	nH 1-6	\$32 43



#### pH Paper (Strips)

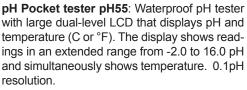
Unique pH test strips will not bleed, dilute, or contaminate trace samples. Accurate results even in weakly buffered samples. Pack of 100.

Item #	Range	Price:
13119	pH 0-14	\$35.15
13121	pH 2-9	\$28.20
13122	pH 5-10	\$27.96
13123	pH 7.5-14	\$27.96
13124	pH 0-6	\$35.15



#### pH & ORP Testers

**OHAUS pH Pen**: Convenient and economical pH testing. A simple-to-use pH pen meter offers fast and accurate results. Designed with a durable IP67 waterproof housing, protective cap that safeguards the sensor, and automatic shutdown. Comes with a storage case and wrist strap. Accuracy:0.1 pH, Range:0.0 to 14.0 pH, Resolution:0.1 pH





Item #	Description	
Price:	•	
13125	Ohaus pH Pen\$4	14.22
13116	Pocket Tester pH55\$5	51.80

**ORP Pocket tester ORP57:** Automatic Temperature Compensation (ATC), 1000 mV/ -5.0 to 60.0 °C, Accuracy 1 mV, Waterproof, ORP Electrode with Built in Temperature Sensor, Range: ±1000mV, Temperature Range: -5.0 to 60.0 °C / 23.0 to 140.0 °F

Item #	Description		Price:
131201	.Pocket Tester	ORP57	.\$122.25

Scales and Balances

## Calibration Weight Sets

Item #	Description	Price
132751	Mass Set - 500 mg x 1 mg	\$89.47
132752	Weight Set ASTM6- 100g-1mg.	\$253.97
132755	Mass Set - 10 mg-100g (16 pc)	\$29.90
132801	Wt 1000g (Cyl) Class ASTM 6	\$139.49
132802	Wt 500g Cylindrical Class M2	\$19.58
132804	Wt 100g Cylindrical Class M1	\$15.40
132807	Weight 50g OIML E2	\$124.41

#### Cahn - Accessories & Manuals

Cahn Microbalance Stirrups, Pans, and Manuals.

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Item #	Description	Price:	
134251	Dished Stirrup, light	\$153.00	
134252	.Dished Stirrup, mediun	n \$153.00	
134253	.Dished Stirrup, heavy	\$153.00	
13425	Flat Platform Stirrup	\$179.00	
134271-20	.Pans 14mm (Pk/20)	\$28.13 <sup> </sup>	
134271	.Pans 14mm (Pk/100)	\$140.65	
13426	.Pans 23mm (Pk/10)	\$39.77	
13230	Manual (specify model)	\$50.00	



#### Scales & Balances - Digital

Rugged and reliable electronic digital laboratory scales in a variety of capacities and sensitivities.



Item #	Description	Price:
132701	. Mini 100g balance, 100g/0.01g	\$53.24
13282-222	. Scout Pro SP-202: 200g/0.01g	\$568.54
132687	. Highland Portable 300g - 0.01g	\$439.56
1328231	. Ohaus PX323/E 320g/0.001g\$	1298.70
13282-422	. Scout Pro SPX-422: 420g/0.01g	\$796.54
132702	. Mini 500g balance, 500 g/0.1g	\$47.45
132688	. Highland Portable 600g - 0.02g	\$439.56
13259-621	. Scout Pro SP-621: 620g x 0.1g	\$463.68
13280-2201.	. OHAUS Scout Pro SP-2201	\$593.55
132689	. Highland Portable 3001g - 0.1g	\$439.56
132695	. LBK 12a Bench Scale 6kg/1g	\$167.66
13287-6201.	. Scout SPX-6201: 6200g x 0.1g	\$969.69
13408-8200.	. Scout SPX-8200: 8200g x 1g	\$484.85
13267-V	. Compact Scale - 15 kg x 2g	\$233.16
13257-2G	. Defender 5000 50#/0.01 lb (30kg)	\$1111.72
132682	Defender 5000 100#/0.01 lb (50kg)	\$1238.52
11207	Damping Platform (13.75x13.75")	\$1301.36
	Damping Platform (18x22")	

#### Ohaus Balances - Mechanical

Ohaus Triple Beam Balances are wellequipped to handle any weighing job, solids, liquids or powders. Known for its durability & versatility to accommodate a range of lab applications.



Item #	Description	Price:
13411	Triple Beam	\$179.89
13412	Cent-O-Gram Balance	\$390.57
13416	Dial-O-Gram Balance	\$472.34
13415	Attachment Weight set	\$83.69

## Pulp Density Scale - Marcy

Use Marcy Scales to obtain the following direct readings: Weight of sample in grams or kilograms. Marcy Direct Reading Pulp Density & Specific Gravity Scale speeds up the determination of pulp densities; specific gravities of pulps or liquids; specific gravity of dry solids. It eliminates errors in reading charts or graphs & prevents errors in calculations. Each scale includes 12 interchangeable dial faces with a specific gravity range of dry solids from 1.2 through 7.8.



\*\* Containers Sold Seperately \*\*

Item #	Description Price	e:
18380	Marcy Pulp Density Scale \$359.4	1
183801.	Clyde Pulp Density Scale \$379.8	0
18385	Stainless Steel Pulp Container \$73.6	7
18386	Plastic Pulp Container (Clear) \$25.6	6
18388	Dial Faces - Pack of 12\$49.5	1
183891.	Protective Housing\$155.1	5

## Weigh Boats & Dishes

Weigh boats are safe, economical containers for weighing liquid or powdered samples in the laboratory. Constructed of polystyrene with a smooth surface that provides accurate pour-outs with minimal sample loss & facilitates weighing of static-affected samples.



Item #	Description	Price
13297	20 ml (0.7 oz) Dishes-Pk 500	.\$16.20
13300-D .	20 ml (diamond) Dishes-Pk 500	.\$24.30
13296	100 ml (3.4 oz) Dishes-Pk 500	.\$29.24
13301-D .	100 ml (diamond) Dish-Pk 250	.\$28.88
13298	250 ml (8.4 oz) Dishes-Pk 500	.\$76.17
132903	Al Teardrop Weigh Boat - Each .	\$8.77

Hotplates and Stirplates

## Hotplates & Hot-Stir Plates

Hotplates and hotplate-stirrers with either Aluminum or Ceramic tops are compatible with a wide variety of borosilicate glass beakers, flasks, bottles & othervessels. Models with Ceramic, Aluminum, and Graphite tops.



Item # Description	Price:
18567 7"x7" Hot/stir plate Ceramic top/digital	\$512.51
185677.5"x7.5" Hot/stir plate Ceramic top	\$298.95
18570 12"x12" Hotplate Aluminum top/digital	\$317.29
18503212"x12" Hotplate Graphite top (220v)	\$704.65
1857115.75x23.5" Hotplate Alum. digital (220v	/) \$559.33
18503115.75x23.5" Hotplate Graphite top (220)	v)\$1,288.42
18540 Magnetic Stirring Bar assortment	\$68.99
18540-51/2" x 5/16" Spinbar	\$6.75
18540-11" x 5/16" Spinbar	\$6.84
18540-22" x 5/16" Spinbar	\$11.52
18540-33" x 5/16" Spinbar	\$24.60
18610Overhead Stirrer-variable speed 80W	\$505.00
18610Overhead Stirrer-variable speed 60W	\$339.45

Cupels and Cupel Blocks

#### Bone Ash Cupels

For assayers that prefers the traditional bone ash cupel. High lead absorption with low and consistent silver loss.



Item #	Size	Wall	#/case	Price::
16907	(1.25") Ultra	Straight	100	\$122.58
16915	(1.5") Ultra	Tapered	100	\$102.36
16916	(1.5")	Tapered	300	\$214.13
16925	7A(1-9/16")	Straight	300	\$234.25
16924	7A(1-9/16")	Tapered	300	\$211.42
16926	8(1-3/4")	Tapered	216	\$224.63
16913	8AB(1-3/4")	Tapered	100	\$148.61
16927	9(2") Ultra	Tapered	100	\$189.62
16930	2.5" Ultra	Straight	80	\$213.45

## Cupels - MABOR® Magnesia

100 years manufacturing the worlds best cupels! MABOR cupels are consistent, reliable & accurate. They will rapidly absorb a large quantity of litharge & will not crack or split. The cupellation losses are less with 'MABOR' cupels than with other brands & experience has proven that by their use, greater accuracy is secured & a truer yield of bullion recorded.



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Item #	Size	Dia"	Height"	Wt. ea	Qty	Price:
			11/16			\$94.45
16715	. 3	1	11/16	16.5g	1080	\$96.05
16215	. PM	1.06	15/16	27g	720	\$88.32
16719	. 4A	1 1/8	7/8	22g	900	\$112.32
16718	. 4	1 3/16	3/4	20g	819	\$88.02
16110	. 5	1 1/4	13/16	24.5g	728	\$101.91
16405	. 5M	1-1/4	1.15	51g	330	\$120.19
16406	. PM5D	1.3	1.02	46g	432	\$120.19
16217	. 6A	<b>1</b> 9/16	1	49g	300	\$69.82
16211	. SA	<b>1</b> 9/16	1	54g	300	\$74.37
16251	. 7A	<b>1</b> 9/16	1 <sup>3/</sup> 16	59g	420	\$111.17
16250	. 7A	<b>1</b> 9/16	1 <sup>3/</sup> 16	59g	300	\$79.40
16253	. 7B	<b>1</b> 9/16	1 3/16	70g	300	\$90.69
16252	. 7X	<b>1</b> 9/16	1 3/8	73g	300	\$101.83
16310	. 8	1 3/4	1 1/16	72.5g	240	\$86.47
16351	. 8AM	1 3/4	1 3/8	105.5g.	200	\$91.71
16352	. 8A	1 3/4	1 3/8	100.5g.	200	\$90.25
16355	. 8S	1 3/4	1 9/16	107g	180	\$92.90
			1 1/8			\$94.56
16410	. 9C	2	1.32	126g	160	\$91.56
16411	. 9F	2	1.57	138.5g.	128	\$86.76
16500	. 10	2 3/8	1 5/16	148.5g.	140	\$106.27
16600	. 11	2 1/4	1 3/4	197g	125	\$108.02
			1 <sup>15/</sup> 16			\$104.96
			2 <sup>13/</sup> 16			\$118.65
16855	. 15	6	5	4725g	4	\$129.59

## Cupel Block - MABOR® Magnesia

Run multiple cupellations with more consistent heating. MABOR cupels are consistent, reliable, & accurate. They will rapidly absorb a large quantity of litharge and will not crack or split. The new easy open carton has fold down sides for easy handling.



Item #	Size	# Dep	Pb Wt.	Qty	Price:
16801	. 4HB	4	82 g	224	.\$117.16
16802	. 10HB	10	261 g	60	.\$104.43
168031	. 12HB	12	173 g	105	.\$124.47
168032	. 12HB(L) .	12	318 g	105	.\$110.28
168041	. 14HB	14	312 g	56	.\$126.06
16805	. SA Block.	4	272 g	60	.\$104.02

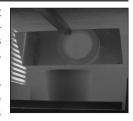
## **MABOR® Production Cupels**

MABOR Production Cupels are designed for refineries & others with large amounts of precious metal bearing base metal alloys. With a weight of over 30 pounds, this large cupel is ideal for commercial refining jobs. 10 inches diameter, 6 inches tall.

Item #	Size	Dia."	Pb Wt.	Qty	Price:
16850	PC	10	16,000	1	\$106.65

## **Cupel Mirrors**

The cupel mirror has a long lightweight handle which allows the polished mirror surface to be held over the cupels in the oven to monitor progress. This is especially helpful with deep bowl cupels, larger furnaces and when you want to remove cupels at precisely the moment the process is completed (when the cupels "blick").



Item #	Description	Price:
19242	43" cupel mirror/4.5x2.5"	\$149.57
192422	54" cupel mirror/10x4"	\$166.76
192421	Replacement Mirror/4.5x2.5"	\$43.50
192423	Replacement Mirror/10x4"	\$113.19

## **Cupel Forks**

These loading forks greatly increase the speed of loading and unloading large numbers of cupels. **Custom sizes for any size cupel and pattern can be fabricated.** All high heat surfaces are stainless steel.



Overall length 58". Forks for #7 cupels can also be used with #6A, 7A, SA, 7X, and other 1-9/16" and 1-1/2" cupels. Forks for #8 cupels can also be used with #8A, 8AM, and #8S.

Item #	Description	Price:
19-7-6X6	#7 cupels-6 wide 6 deep	\$347.51
19-7-4X6	#7 cupels-4 wide 6 deep	\$347.51
19-7-6X8	#7 cupels-6 wide 8 deep	\$347.51
19-7-8X6	#7 cupels-8 wide 6 deep	\$295.00
19-8-5X7	#8 cupel-5 wide 7 deep	\$280.26

## **Cupel Tongs**

"Hairpin" shaped cupel tongs for picking up individual cupels. Available in 3 lengths: 36", 42", and 60". Mild steel spring steel construction. Can also be used for dropping lead buttons onto cupels.





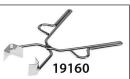
Item #	Description	Price:
19200	36" cupel tongs .	\$39.95
19236	42" cupel tongs .	\$42.95
19240-12	42" cupel tongs	(large cupels)\$129.35
19202"	60" Cupel Tong	\$167.40

## Scissor Tongs

Tongs for crucibles, parting cups, cupels and other general laboratory uses.

Item #	Description	Price:
19237	9" Long	\$6.29
19238	18" Long	\$11.57
19239	9" Long SS	\$15.08
19160	9" Flask tong.	\$26.45
19253	20" Boekel	\$40.76
19243	19" Bent	\$18.06
19244	19" Cruc/Flask	\$17.02
19255	39.25" Crucible	\$51.80
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#### Lead Button Loader - Automated

Load an entire charge of lead buttons into the oven with a single motion. Minimizes heat loss. Reduces assayers exposure to vapors & allows simultaneous dropping of the lead buttons onto pre-heated cupels. Other sizes and Custom patterns available- see www.Lmine.com





#### Cupel Trays

Made of cast iron. Handle sold separately. Handy for transporting lead assay buttons, cupels, lead assay boats, etc.

Item #	Description	Price:
16050	.Tray, 16 place	\$25.31
16055	.Tray, 24 place	\$32.91
16060	. Handle	\$13.97



Assay Crucibles

#### AP Green Fire Clay Assay Crucibles

Premium fire assay crucibles have several features that make them ideal for mining assays. The high quality materials used in their manufacture, coupled with carefully managed production procedures, ensure more heats per crucible, thus more value.



Item #	Size	OS D x H	Qty/case	Price:
17604	15 gr	2.3"x 3'	'100	.\$239.52
17600	20 gr	3.1" x 3	3" 100	.\$252.99
17601-48.	30 gr	3.4" x 4	·"48	.\$140.52
17601	30 gr	3.4" x 4	·"75	.\$217.33
17602	40 gr	3.5"x 4.	.9"48	.\$148.74
17599	45 gr	2.8"x 5.	.2"48	.\$187.08
		4" x 5.4		
		4.1" x 6		
17310	#5	4.6" x 5	5.5"24	.\$140.12
17311	#6	4.6" x 6	5.5" 18	.\$103.47
17320	#12	7.1" x 8	3.1"6	.\$184.58
17315	#14	5.5" x 1	1.1" 9	.\$297.48

## Standard Fire Clay Assay Crucibles

Ecnomical fire assay crucibles blend quality and price for outstanding value.



Item #	Size	OS D" x H"	Qty/case	Price:
17705	5 gr	1.96x2.83	100	\$73.78
17939	20 gr.	3x3.88	50	\$62.15
17930P	30 gr.	3.46x4.21	48	\$69.37
17941	40 gr.	4.1x5.31	36	\$60.06
17942	45 gr	4.1x6.1	36	\$65.52
17750	50 gr	4.1x5.8	36	\$65.52
17937	#F5	4.65x5.71	24	\$44.07

#### Crucibles - Fused Silica

Made of clay bonded fused silica for melting temperatures up to 2500F. Fused silica maintains the lowest coefficient of thermal expansion of any commercially available material. Excellent Refractoriness - reliable performance to extreme temperatures and pressures.



Item #	Size	Dia x Ht	Qty	Price:
17550	18 oz	2-3/4"x2-3/4"	Ea(1)	\$13.76
17413	45 oz	3.5"x3.5"	Ea(1)	\$18.87
17414	80 oz	4"x4-1/2"	Ea(1)	\$24.27
17415	150 oz.	4-3/4"x5-1/4"	Ea(1)	\$29.53
17703-6.	"K-eco"	4-15/16x7-9/1	6"Cs(6)	\$59.17
17410-6.	"K"	5-1/16"x7-1/2	"Cs(6)	.\$240.59
17427-6.	"L"	5-9/16"x8-7/10	6"Cs(6)	.\$266.69

## Roasting Dishes

Dishes are composed of fireclay\* or fused silica\*\* and are highly resistant to lead & other metallic corrosion. Besides roasting, try using smaller round dishes for oxidizing fusions of small samples with a small amount of acid flux and granulated lead (scorification).



Item #	Size	Pack Qty	Price:
Round:			
17501-12*	2-1/2"	12	\$50.88
17502-10*	3"	10	\$43.95
17506-10*	3-1/2"	10	\$53.61
17510-5*	5"	5	\$55.84
17515**	10"	1	\$29.50
Rectangular	;		
18115**	6x3x1.2"	1	\$50.53
18117**	8.5x4.2x1.9"	1	\$58.58
18118**	10.8x5.8x2.5"	1	\$66.79
18119**	11.9x7.9x2.5"	1	\$75.49

## Markers - High Temperature

Ceramic Marking Crayons are used for the labeling or identification in both industrial & laboratory uses. Ideal for the labeling cupels and crucibles.



Item	#Description	Price:
18365	.Blue/Blk 1/2"(Ceramic) 3000°F	\$6.36
18367	.Blue/Blk 5/16"(Ceramic) 3000°F	\$5.88
18368	.China Marker - 5 color	\$15.88
18368Y	.Yellow Refill - Pack of 6	\$11.20
18368R	.Red Refill - Pack of 6	\$11.36
18368B	.Black Refill - Pack of 6	\$11.36

## **Crucible Tongs**

Legend Crucible Tongs are made of steel for durability. They increase safety by distancing the user from the oven or furnace. Available is 3 standard lengths of 36", 48" and 58" for a range of crucible sizes. Charge tongs are a straight rod, with crucible ring on end and include an eye for hanging. Pour tongs are "hairpin" shaped and clamp the crucible into the ring for holding while inverted. Other types and sizes can be custom made

#### **Crucible Charging Tongs**

	0 0 0	
Item #	Crucible Size	Price:
19218-15	. 36", 15g	. \$61.82
19218-20	.36", 20g	. \$61.82
19218-30	. 36", 30-40g	. \$61.82
	. 36", 50-60g	
	.36", #5 & "K"	
	. 48", 15g	
19211-20	. 48", 20g	. \$69.74
19211	. 48", 30-40g	. \$69.74
19211-50	48", 50-60g	. \$69.74
19211-5	.48", #5&K	. \$69.74
19226	. 58", 15g	. \$76.02
19217	. 58", 20g	. \$76.02
19210	.58", 30-40g	. \$76.02
	. 58", 50-60g	
	.58", #5 & K	
Coursible F	Daniel Tanas	



#### Crucible Pouring Tongs

Crucible	Pouring Tong	js
Item#	Description	Price:
19219-15	36", 15g	\$49.95
19219-20	36", 20g	\$49.95
19219	36", 30-40g	\$50.79
19219-50	36", 50-60g	\$49.95
19219-5	36", #5&K	\$54.95
19218-12	36", #12	\$52.95
19224-15	48", 15g	\$55.95
19224-20	48", 20g	\$55.95
19221	48", 30-40g	\$45.95
19224-50	48", 50-60g	\$55.95
19224	48", #5&K	\$55.95
19224-12	48", #12	\$104.95
19220	58", 30-40g	\$64.67
19220-15	58", 15g	\$59.95
19223	58", 20g	\$59.95
19225	58", 50-60g	\$59.95
19222	58", #5&K	\$59.95



#### **Crucible Forks**

These loading forks greatly increase the speed of loading and unloading large numbers of Crucibles. Custom sizes for any size crucible and pattern can be fabricated. Overall length 58".

Item #	Pattern	Price:
19270-3x1	3 widex1	deep \$229.00
19270-4x1	4 widex1	deep \$245.00
19261-1x3L	1 widex3	deep \$140.00
19261-1x4L	1 widex4	deep \$145.00
19261-1x6L	1 widex6	deep \$150.00



#### Vertical Crucible Tongs

Loading & pouring tongs for top loading furnaces. Can be used with graphite, silicon carbide, fused silica, and fireclay crucibles.

Item #	Description	Price:
19224V	.#8 Budget Graphite	tong.\$108.34
19224-12V	#10 Budget Graphite	e tong\$107.88
19247-24	. Hinged, 24" long	\$178.12
19247-30	. Hinged, 30" long	\$208.08



#### Graphite and SiC Crucibles

## Crucibles - Silicon Carbide (SiC)

Premium quality carbon-bonded Silicon Carbide crucibles designed for optimised performance. Provides superior erosion resistance. Excellent thermal shock resistance. High mechanical strength. Faster melting speeds.



Item #	Description	OS D x H	Each:
173602	.#4BB	. 4.75x5.875"	.\$167.24
173603	.#6BB	. 5.5x6.25"	.\$193.88
173604	.#8	. 6x7"	.\$202.76
173605	.#10	. 6.5x8.12"	.\$213.12
173606	.#20	. 8.5"x11"	.\$293.04
173607	.#30	. 9"x12"	.\$346.32
173797	.#100BB w/Lip	. 13.7x16.8" .	\$1505.16
17409	.#150 x/Lip	. 15x18.7"\$	\$1083.75
269342	.Graphite TL-6 w/Lip	. 7.12x9.2"	.\$377.40
269362	.TL-60 w/Lip	. 10.75x15"	\$1213.60
17408-BB	.SiC Base Block - 12x1	2x5"	.\$467.68

## Salamander Super A Graphite Crucibles

Ceramic bonded clay graphite crucibles manufactured by plastic forming techniques. Consistent performance in fuel-fired furnaces and medium/high frequency induction furnaces. Typically used to melt precious metals, ferrous, and non-ferrous alloys.

Item #	Size	OS DxH	Price:
17387	A0.5	2.68x3.07"	\$21.46
17388	A1	3.11x3.82"	\$23.19
17389	A2	3.74x4.30"	\$28.49
17390	A4	4.49x5.55"	\$38.26
17391	A6	5.12x6.50"	\$63.64
17392	8A	6.14x7.25"	\$84.36
17393	A10	6.30x7.87"	\$100.64
17394	A12	6.73x8.27"	\$116.92



## Graphite Crucibles - Premium

Premium clay bonded graphite crucibles.

Item #	Size	OS DxH	Price:
17325	#0000.	2.5x3.25"	\$51.80
17335	#1	3.5x3.75"	\$56.24
17330	#2	3.8x4.5"	\$62.16
17340	#3	4.3x5.25"	\$74.00
17342	#4	4.75x5.6"	\$76.86
17347	#6	5.5x6.75"	\$96.20
17350	#8	5.75x7.25".	\$121.36
17355	#10	6.25x8"	\$150.96



#### Graphite Crucibles - Budget

Durable and economical crucibles. Size number equals approx. melting capacity of copper in Kg's.



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Item #	Size	OSDxH	Price:
18287	20 ml	1.5" x 1.82	\$4.72
17353	#1	1.85" x 2.95"	\$9.99
172871	#1.5	1.85" x 2.95"	\$12.18
17362	#2	3.25" x 3.75"	\$15.23
17363	#4	4.3" x 4.75"	\$20.81
17364	#6	4.75" x 5.75"	\$22.52
17365	#8	5.4" x 6"	\$27.42
17366	#10	6" x 7"	\$31.97
17367	#12	7" x 8"	\$42.04
17368	#16	7" x 8.5"	\$47.13
17368-18	#18	7.25" x 8.75"	\$49.95
17369	#20B	7.5" x 9"	\$56.53
17958	#25	8.5" x 11"	\$56.53
17371	#30	9.25" x 10.5"	\$69.85
17373	#45	9.5" x 11"	\$78.57
17372	#55	9.5" x 12.25"	\$82.40
17376	#80	12." x 15"	\$127.31
173781	#150	15" x 18.5"	\$182.70
173782	#200	16.5" x 20.5"	\$406.38
1737821.	#225	17.75" x 20.5"	\$507.26

## Stir Rods - Graphite

12 "Superfine grain, high density extruded graphite stir rods. 24" Superfine grain, high density extruded graphite stir rods. 48" Medium grain, high density extruded graphite stir rods.

Item #	Size	Price:
18298	12" x 1/2"	\$22.50
18214	24" x 3/4"	\$58.87
18299	24" x 1" .	\$91.70
18297	48" x 1.5"	\$223.58



## Graphite Zirconium Low Form

Zirconium is a reactive metal. It has a high affinity for oxygen & as such forms a protective oxide film that enables it to perform well in a wide variety of conditions. Zirconium exhibits superb corrosion resistance in most organic & inorganic acids, salt solutions, strong alkalis and a few molten salts. The passive oxide film (corrosion barrier) is stable in both reducing & oxidizing conditions. Zirconium is excellent in both acidic & basic solutions. ... Low Form.

Item #	Size	Price:
18280-25	25 ml	.\$59.31
18280-35	35 ml	.\$61.99
18280-45	45 ml	.\$65.49
18281	55 ml	.\$68.90



#### Crucible Mixer

## **Crucible Mixers**

Crucible Mixer for 30-40 gram Crucibles.

The Legend Crucible Mixer is designed to automate the mixing of fire assay crucibles. Because the operators are removed from the mixing operation, there are significant savings of time as well as substantial safety benefits due to reduced fatigue and repetitive motion reduction not to mention the benfits of removing the operator from the potential contact with lead dust while mixing.



The versatile Legend Crucible Mixer is ideal for a variety of mixing duties including samples for fire assay, pulp and flux in crucibles. It provides thoroughly mixed samples within 10 to 20 minutes, depending on fullness of the crucible or can. No covers are required, since crucibles or cans are sealed by a disposable layer of poly film is put between the crucibles and foam to eliminate any cross contamination. The lid clamp uses a new improved "acme thread" jack screw with hand wheel for rapid opening and closing- no tools or compressed air are needed for operation. Includes batch timer and door interlock switch.

Item #	Description	Price
17800	24 Place (4 x 6)	\$9,488.65
17847	84 Place (7x12)	\$11,129.00

## Crucible Mixer - Replacement Parts

Item #	Description	Price:
17840	Poly Film, 3000'	\$37.49
17800A	12 RPM AC Gear Motor	\$957.56
17809	Mixer Cage, complete	\$2280.00
17815	V-Belt	\$18.85
17820	Extra Crucible Pallets	\$59.94
17823	Bearing for Crucible Mixer	Axle \$110.09
17824	Gas Strut for Crucible Mix	er\$24.09
17827	Nut for threaded shaft w/ \	Nasher\$166.86
17828	Brass Bearing surface	\$32.56
17829	Door switch	\$30.45
17832	Timer switch	\$49.72
17811	Electrical Cord & Plug, 110	0v\$3.00

#### Bismuth Trioxide

Assay grade bismuth oxide (Bi2O3) is used as a substitute for litharge (lead oxide) in fire assaying and is less-toxic. Minimal silver content.

Item #	Description		Price
15275-25K	25kg (55 lbs) P	ail	\$861.75

Litharge and Assay Fluxes

## Assay Litharge

**GOLD FREE Granular Assay Litharge.** A yellow / orange granular assay litharge that is C.P. grade (chemically pure). This material is used for fire assaying processes for the quantitative determination of gold in an ore. 5 pound (25kg) bags.

**GOLD & SILVER FREE Granular Assay Litharge.** A reddish/orange assay litharge that is C.P. grade (chemically pure). For the quantitative determination of precious metals in an ore. It is the purest form of litharge, particularly low in silver and gold. 55 pound (25kg) bags.

Item #	Description	Price:
152012-55	Gold Free Litharge	.\$187.39
15220-55	Gold & Silver Free Litharge	.\$240.93

## Flux - Pre-Mixed Fire Assay

24 pound buckets. PbO: Gold Free Litharge, SA: Soda Ash, B: Borax, SI: Silica, FI: Flour

Item #	Components%	Price:
Gold Free H	ligh Litharge Fire-Assay Flux:	
17201	PbO:50.5, SA:35.9, B:10, Si:3.6	\$78.00
Gold Free F	ligh Litharge Fire-Assay Flux with F	lour:
1720000	PbO:69, SA:23.3, B:3.5, Si:2.2, Fl:2	\$87.36
Standard G	old Free Oxide Fire-Assay Flux	
17200-24	PbO:70, SA:23.3, B:4.5, Si:2.2	\$96.48

## Gold Smelting/Refining Flux

Chapmans Recipe Refining Flux

For complex and difficult ore types. Component percentages: Borax:40 Soda Ash:20 Manganese O2:20 Silica20%

 Item #
 Description
 Price:

 1720061-50
 50 lbs
 \$79.50

Legend's Standard "Refining" Flux

Contains nitrates. Component percentages:

K Nitrate:20 Soda Ash:8.75 Borax:62.5 Silica:8.75% Item # Description Price:

## **Custom Fire Assay Fluxes**

Our Custom Fire Assay Flux is made to your specific formulations and various packaging options are available. For a quotation on a Custom Flux please contact Legend, Inc.

#### Zinc - Merrilite

Use for chiddy assays, and other cyanide tests. Merrilite zinc is a special high surface area finely ground product for precipitation of gold and silver out of cyanide solutions.



 Item #
 Description
 Price:

 18322-50..50 lbs Merrilite Zinc......
 \$240.50

## Flux Components & Chemicals

For preparing your own flux, or making additions and modifications to premexed fluxes. Assay grade.

Item #	Description	Price:
17105-55	.Soda Ash (Na2CO3) 55 lbs Bag	\$21.76
	.Borax Anhydrous - 55 lbs Bag	
17120-50	.Fluorspar (CaF2) 50 lbs Bag	\$76.88
17182-50	.Potassium Carbonate - 50 lbs Bag	\$169.35
17110-50	.Silica 70 Mesh (SiO2) 50 lbs Bag	\$15.70
17128	.Manganese Dioxide (MnO2) 50 lbs Bag	J\$96.42
17125-25	.Wheat Flour Assay Grade - 25 lbs. Bag	\$15.59

#### **Nitrates**

UN Rated Hazmat Items. Available for shipping UPS Ground and LTL Freight. Technical Grade.

Item #	Description	Price
17181-50	Sodium Nitrate (NaNO3) - 50 lbs	\$142.31

#### Acids

Special Reagent Grade Acids. 2.5 liter bottles with Safety Coat. Must ship by truck. No parcel shipping available. Call for pricing. Only Sold by the Case.

Item #	Description
17170-EMD	. Hydrochloric Acid, ACS Grade
17175SC	. Nitric Acid, ACS Grade
17180SC	. Sulfuric Acid, ACS Grade
17176	. Hydrofluoric Acid, ACS Grade
17177	. Perchloric Acid, ACS Grade

#### Calcium Gluconate Gel

Used to neutralize Hydrofluoric acid exposure. Calcium gluconate combines with Hydrofluoric acid to neutralize the powerful Fluoride ion. Active ingredient; calcium gluconate 2.5%.



 Item #
 Description
 Price:

 17129......25 gram tube ......
 \$61.34

## Measuring Spoons/Cups

Stainless Steel, for measuring flux components and other laborator tasks..

Item #	Description	Price:
20102	Spoons, 1 Tbsp, 1, 1/2,	, ¼ tsp\$8.51
20103	Cups, 1, ½, 1/3, and ½	cup\$26.33

## Test Lead - Granulated

**Granulated Test Lead** is a high-purity, low silver, granular lead. It is used in scorification, cupeling, chemical testing, trace oxygen sensor anodes, chiddy assays, and other analytical producures.



Item #	Description	Price:
152552-10	.10 lb Test Lead	\$129.90
15258	.10 kg (22 lb) Test Lead	\$159.39
152551	.50 lbs Test Lead	\$551.72

## Lead Foil & Sheets

Specially prepared lead foil contains very low concentrationsofsilver. Rollfoilare5pounds: 0.006" thick by 3" wide +/- 0.0005" thickness & +/- 0.010" width.



Item #	Description	Price:
18311P	Premium Low Silver Lead Foil (USA)	\$129.60
18311P2	Premium Low Silver Lead Foil (Imported)	\$69.74
183111	Low Silver Lead Foil	\$47.94
183135	Sheets-2x3"x0.008"(265 pcs)	\$48.21

#### Assay Boats/Cups

**Lead** Assay Cups for bullion analysis. Each cup weighs approx. 15 grams. 100 per bag.



Item #	Description	Price:
183121	Cups only 3/4" OD x 3/8"H	\$49.00
183121-C	Cover (lid) only -100pk	\$16.50
183122	Lead Cups with covers- low	Ag\$87.06

**Bismuth** Assay Cups & covers for bullion analysis. 100 per bag. Available with lids (sold seperately)

Item #	Description	Price:
15261	. 19mm OD x 9mm H	\$181.25
15262	. Cover - 100pk	\$137.75

Assay and Refining Molds

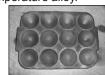
#### Molds

NOTE: Molds labeled "HR" are manufactured from a heat resistant cast iron containing more Chrome and Copper which can withstand greater temperatures & last longer.

## **Conical Depression Molds**

Cast iron molds are conical in shape. Assay molds are used for pouring fire assay fusions. Made from high temperature alloy.

	-	_
Item #	Dep/Pattern	Price:
18372-HR	2	\$59.00
183732	2 (Large)	\$97.90
183733	3 (Large)	\$97.90
18373-HR	6/3x2	\$89.90
18320-HR	6/6x1\$	165.30
18373E-HR	7/7x1\$	175.45
18370-HR	12/3x4 \$	120.35
18371-HR	24/6x4\$	165.30





## Conical Slag Molds

The 19" diameter mold has pins on the side for use of a dolly. Conical slag molds can be used at the bottom of a cascade to collect the slag, or for producing conical metal buttons. Heat resistant cast iron construction.







#### Pour Bars

Used for pouring fire assay fusions with either lead or bismuth collection. The bottom of the mold can be numbered with reverse marking to make lead identification positive. 24 cavities per bar. See web site for numbering diagram.



Item #	Bottom	Numbered	Price:
Straight Side	•		
18350	Flat	Unnumbered	\$465.45
18350L	Flat	Narrow Left	\$532.15
18350R	Flat	Narrow Right	\$532.15
Tapered Side	е		
18351	Conical	Unnumbered	\$465.45
18351L	Conical	Narrow Left	\$532.15
18351R	Conical	Narrow Right	\$532.15
18352	Flat	Unnumbered	\$465.45
18352L	Flat	Narrow Left	\$532.15
18352R	Flat	Narrow Right	\$532.15
Taperer Side	Large Bor	е	
18353	Flat	Unnumbered	\$465.45
18353L	Flat	Narrow Left	\$532.15
18353R	Flat	Narrow Right	\$532.15
18351-LB	Conical	Unnumbered	\$465.45
18351-LBL	Concial	Narrow Left	\$532.15
18351-LBR	Conical	Narrow Right	\$532.15

## Dolly for 19" Slag Molds

Dolly for 19" Slag Mold. The large 12" diameter steel wheels and unique leveage allow this dolly to easily move loaded and empty slag pots.

Item #	Description	Price:
183791	.Dolly for 19" Slag Mold	\$2,084.82



## Dipping Ladle

For dipping molten melts in the refinery.

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Item #	Description	Price:
19245	Ladle 11" handle 3" o	lia, 2oz \$20.42
192452	SS Ladle, 24" handle	e, 4-3/8: dia, 10 oz . \$44.12

#### **Bullion Bar Molds**

Cast Iron rectangular ingot molds for refining of precious and base metals. Sized by troy ounce gold capacity.



Item #	Capacity Au	Price:
18335-HR	20 oz	\$40.60
18345-HR	50 oz	\$63.80
18355-HR	100 oz	\$68.15
18375-HR	250 oz	\$88.45
18378-HR	500 oz	\$130.50
18395-HR	1000 oz	\$319.00
18397-HR	1655 oz	\$316.11
18396-HR	2000 oz	\$353.72

#### Molds - Pouring

Cast iron molds. Pouring molds can be used in a cascading array for larger pours producing multiple bars. Sized by troy ounce gold capacity.



Item #	Cap Au/Spout	Price:
18364-HR	500 oz Side	\$269.70
18361-HR	1000 oz Side	\$324.80
18362-HR	. 1000 oz End	\$356.70
18363-HR	1700 oz Side	\$481.40
18357-HR	3500 oz Side	\$1,300.65

#### Molds - Universal

Heat resistant cast iron, with steps incorporated for various ingot sizes. For precious & base metal bars. Capacity. in troy ounces.



Price:

Item # Capacity 18391-HR. 5-10 oz (Ag) ...\$48.84 18392-HR. 1-5 oz (Au).....\$33.35

Mold Release Sprav

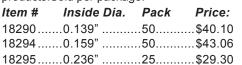
## 18393-HR. 5-10 oz (Au)....\$43.50

Mold Release sprays have anti-stick properties that keep the metals and slag from sticking and adhering to the cast iron surface. Recommended for all rectangular and conical molds.

Item #	Description	Price
183981	.Mold Release Spray 16 oz Can	. \$9.60
18460	.Metallon Ingot Spray 16 oz Can	. \$8.70
18407-20.	.MetLube CL-42 Mold Release 20 oz	\$19.97
18407	.MetLube CL-42 Mold Release 1 gal\$	119.80

#### Pin (Vacuum) Tubes

Produce pin tube samples from refinery pours products. Sold per package.





## Pin Tube Holders/Tong

The 20" holder is used when sampling from a steel maker's ladle spoon and the pintube is held at right angles. The 30" holder is used by precious metal samplers and others where the sample is taken directly from a small steep-walled furnace and crucible. The Pintube is held close to vertical.

Item #	Length	Price:
18291	20"	\$91.76
18292	30"	\$106.56



#### **Bullion Rolling Mills**

Bench top rolling mills used for rolling out bullion or other highgrade samples. Increases surface area, a necessity in the parting process. Heavy cast frames and highly polished rollers. Flat mills have a smooth surface the entire roll width; combination mills have both flat surface and wire cutting groves. Each manual mill includes one handle.

#### **Durston Electric Mills**

Durston's new bench top power mills have cast iron bases, cast iron gearbox with powerful motors and of course the standard one piece cast iron mill frame incorporating our high quality steel rolls which run in heavy duty roller bearings guaranteeing a perfect rolled product. Variable speed (0 - 30 r.p.m.). Max. Roll Opening 5.5mm (Roll 100mm x 50mm).



Description Item # Price: 20379 ...... 130mm TUI 130 ...... \$2778.47

#### **Durston Manual Mills**

Self lubricating maintenance free bearings and hardened helical drive gears with special form for maximum drive. Also included is our new highly efficient gear box with a reduction of 4 - 1. Max. Roll Opening 6mm (Roll 100mm x 50mm)



Item # Description Price: 20365.... 76 mm Mini-Rolling Mill \$391.11 20396.... 80mm Combo Mini Mill \$1,079.65 20374 .... 100mm DRM F100 Mill \$1026.77 20375.....130mm DRM F130 Mill \$1294.89

#### Button and Bead Tools

#### Forceps & Tweezers

Item#	Description	Price:
19497	10" Nickel-Plated Steel Straight	\$9.32
19498	12" Nickel-Plated Steel Straight	\$11.62
194971	10" Plastic Coated Jaws	\$12.06
19498C	12" forcep, curved tip, SS	\$14.93
19494-D	5.25" Dumont - Fine Narrow SS	\$35.45
19494	4.75" Ultra-Fine Narrow Point SS	\$4.88
19496	4.5" Microfine Tip, 5A Pattern	\$8.58
194970	4.75" SS Extra-Fine-Pointed	\$6.99
195002	6-1/2" Curved Point	\$6.88
19501	4.5" Round Tip SS 2A Pattern	\$7.78
19503	4.5" Curved SS Pattern 7B	\$11.69
19505	4.5" Curved round Tip SS	\$7.78

#### Spatulas

Item #	Description	Price:
19476	8" SS Spatula (Double	\$12.50
19477	8" SS Spatula (Double	\$18.71
19478	9" SS Double End Spatula	\$15.10
19473	10-3/4" Long SS Spatula	\$8.50
19479	12.5" Long SS Spatula	\$10.50
194791	14" V-Spatula - Pack of 10	\$18.32

## **Button Slagging Hammers & Tongs**

These Estwing Hammers have a bonded and molded Shock Reduction Grip. The head and handles are forged in one piece and fully polished. These tools have unsurpassed balance and temper. Two sizes to choose from: 11" Long with 12 ounce Head and 12" Long with 18 ounce Head.

	9	
Item #	Description	Price:
05127	12 oz Slagging Hammer .	\$38.07
05128	18 oz Slagging Hammer .	\$39.37
19235A	ButtonTong 8"x3/4" wide.	\$37.60





## Dore Pliers, Brush & Hammer

Special tools designed for ease of handling and cleaning of dore' beads and buttons.





Item # Description	Price:
19470 2 oz. Dore' Ball Pein Hammer	\$12.12
19410 Bent Nose Dore Plier - Spring Loaded	\$32.56
19495 Palm Grip Dore' Plier	\$39.57
19415 Bent Nose Dore Plier - Double Spring	.\$21.40
19234 Bead. Button brush	\$7.03

#### Dore Anvils

Anvil used in the fire assay process for flattening dore beads. Item 19480R - Top and bottom surfaces polished. One side has a radius corner, the other a square corner. Heat treated hardened tool steel.



Item #	Description	Price:
19480R.	Dore Anvil-Tool St	eel (3"Dx2"H)\$154.50
19481	Dore Horn Anvil	\$32.12

Parting/Annealing Cups & Trays

## Parting Cups (Porcelain Crucibles)

High-form porcelain crucibles, glazed inside & out except for outside bottom surface and rim. Pack of 12.

Item #	Descripti	on	Price
18200-12.	.Coors # 3	(5ml)	\$72.83
18210-12.	.Coors # 4	(10ml)	\$81.69
18220-12.	.Coors # 5	(15ml)	\$78.78
18230-12.	.Coors # 7	(30ml)	. \$122.84
18231-12.	.Coors # 8	(40ml)	. \$143.94
18232-12.	.Coors # 9	(50ml)	. \$147.44
18233-12.	.Coors # 1	0 (100ml)	. \$172.05
18234-12.	.Coors # 1	2 (250ml)	\$232.57



## **Covers for Parting Cups**

Item #	Description	Price ea:
18202	#3 (5ml)	\$11.80
18203	#4 (10ml)	\$11.80
18221	<b>#5</b> (15ml)	\$13.27
18235	#7 (30ml)	\$12.15
18236	#8/9 (40/50m	ıl) \$13.82
18237	<b>#10</b> (100ml)	\$15.07
18238	# <b>12</b> (250ml)	\$20.96



## Gooch Porcelain Crucibles- Perforated

With perforated bottom, glazed inside and out except for outside bottom surface and rim.

Item #	Description	Price ea.
18205	Gooch 13 ml	\$14.16
18206	Gooch 25 ml	\$15.42
182051	Gooch 40 ml	\$16.69

## Annealing / Ashing Cups - Fire Clay

Made of the finest selected fire clay. Used for annealing gold buttons & ignition of precipitates. Sold by the pack.

Item #	Size (Dia x ht)	#/pk	Price:
18259-12	"0" - 1-1/16"x1-1/16"	12	\$44.33
18258-12	"1" - 1-5/16"x1-5/16"	12	\$45.98
18257-12	"2" - 1-3/4"x1-5/8"	12	\$36.84
18256-9	"3" - 1-3/4"x2-1/8"	9	\$47.40



## Capsule Dish - Porcelain

Straight sides and flat bottom, glazed inside and out except for rim.

Item #	Size	Price:
18240	12 ml	\$10.45
18245	25 ml	\$15.31



## Parting / Annealing Trays

Stainless steel trays, of heavy guage to resisting warping. Annealing trays include bars welded under the holes that support the cups above the rim, and prevent breakage upon cooling. Parting cup trays include a welded handle while the annealing trays utilize a removable handle.

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Item #	Place/Pattern	Price:	
Parting Fo	or 10ml Cups		
19444	15/3x5\$	100.00	
19465	24/4x6\$	105.00	
19466	36/6x6\$	\$110.00	
Parting Fo	or 15ml Cups		
19447	15/3x5	\$99.75	
19464	24/4x6	\$100.00	
19459	30/6x5	\$110.00	
Parting Fo	or 40-50ml Cups		
19455	12/3x4\$	105.00	
19458	24/6x4	3110.00	
Annealing	For 10ml Cups		
19444A	15/3x5\$	133.00	
19468A	24/4x6\$	138.00	
19466A	36/6x6\$	142.00	
Annealing	For 15ml Cups		
19447A	15/3x5\$	133.00	
19464A	24/4x6\$	138.00	
19459A	30/6x5\$	142.00	
Annealing For 40ml Cups			
19455A-4	0 12/3x4\$	133.00	
19458A-4	0 24/6x4\$	3176.10	
Annealing For 50ml Cups			
19455A	12/3x4\$	133.00	





# Removable Handles for Annealing Trays 19469......36" Long .......\$81.69

19471......12" Long .......\$76.87

19458A-50 24/6x4.....\$146.50

#### Casserole Dish - Porcelain

Coors Porcelain Casserole Dish with lip & flat porcelain handle, glazed inside & out except for rim & top of handle.

3		
Item #	Size	Price:
18242	. 20 ml	.\$22.16
18243	. 60 ml	.\$27.09
18252	. 140 ml	.\$36.93
18239	. 210 ml	.\$43.94
18241	.500 ml	.\$75.03



## Evaporating Dish - Porcelain

Coors Porcelain Evaporationg Dish with lip, shallow form, glazed inside except for rim.

Item #	Description	Price:
18251	75 ml	\$20.01
18246	120 ml	\$18.94
18247	250 ml	\$30.95
18247-UG	250 ml(unglazed	d).\$34.44
18244	385 ml	\$73.63
18248	525 ml	\$106.89
18249	2100 ml	\$195.28



## Spot Plates - Porcelain

Coors Porcelain Spot Plate. Color-reaction or spot plates, glazed except for bottom surface.

ltem #	Description	Price:
18250	3 Depression	\$23.55
18255	12 Depression	\$27.25
18260	12 Depression	\$30.33
18265	12 Depression	\$50.67
18266	30 Depression	\$104.63



#### Parting Basket-Trays

Quartz glass trays with slotted thimbles for imersion in acid for parting and for annealing in the oven up to 1000C.



Item #	Description	Price:
19448	25 place Basket w/thimbles	\$671.11
19449	Quartz thimbles (each)	\$11.73
19450	Beaker for 25 place basket	\$55.84

#### **Buchner Funnels**

#### **Buchner Porcelain Funnels**

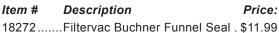
Porcelain Buchner Funnels with fixed perforated plate, glazed inside and out except for rim.



Item #	Description	Price:
18271	700 ml Capacity	\$142.44
18261	. 1060 ml Capacity	\$198.28
18267	. 1860 ml Capacity	\$387.88
18269	. 4500 ml Capacity	\$656.16
18268	Hirsch 130 ml	\$87.86

#### **Buchner Funnel Seal (Filtervac)**

Molded rubber adapter designed to support and seal in place a filter crucible or a funnel in the neck of a filter flask. Inside diameter of the socket at top is 32 mm, and outside diameter of the disc is 76 mm. The bottom of the disc is flat, so that it seals tightly against the top lip of the flask. Can be used with most buchner funnels and most sizes of flasks.





## **Buchner Poly Funnels**

These rugged, economical funnels are light-weight and not top heavy to balance in a flask. Can be steam autoclaved at 121° C (250° F). Two-piece funnels can be separated for effortless washing. Polypropylene Buchner funnel body with high density polyethylene pierced plate to support filter paper.

Item #	Plate Dia.	Price:
18277	104 mm	\$32.99
18276	122 mm	\$42.53
18270	42.5 mm 2pc	:\$11.08



#### Assay Safety Equipment

## Respirators - North 7700 Series

The 7700 Series is the most comfortable and durable half mask available. Its soft nonallergenic silicone seal provides excellent protection, comfort and fit. Compatible with all North cartridges, filters and accessories.

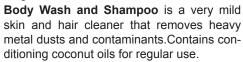


Item #	Size	Price:
15225	Small	\$45.84
15226	Medium	\$41.72
15227	Large	\$45.84
15228	Particulate Filters (2pl	k) \$11.50



## Lead Removal Soaps & Wipes

**Hand Soap** is extra strength to effectively remove heavy metals. The smooth, fine scrubbers provides a gentle cleaning assist and fast acting cleaning power to remove the toughest contaminants.



**Disposable Towels** are generously saturated with a gentle pH balanced cleaner to quickly remove lead and heavy metal dusts. The soft towels lift, bind and hold lead and other heavy metal dusts and take them away without smearing. Tub of 150, 6" x 6.5".





Item #	Description	Price:
19356	.1 Gal. D-Lead Hand Soap	.\$28.50
19356A	.4 x 8 oz D-Lead Hand Soap	\$4.62
19357	.D-Lead Body Wash&Shampoo 1 Gal	.\$21.56
19357-W	. D-Wipe Disposable Towels	\$13.25
193542	. D-LEAD All Purpose Cleaner, 1 gal	\$20.50
19348	. D-Lead Surface Cleaner Concentrate	\$7.84
193543	. D-LEAD Skin Cleaning Hand Soap 32 of	z\$7.84
19354	. D-Lead Respirator&Laundry Detergent	\$16.73

## Other Safety Protection

Item #	Description	Price
05601	.Estwing # 6 Safety Goggles	\$4.10
05630	.Tomahawk Clear Safety Glasses	\$7.38
11464	.EAR Soft SuperFit - Case 200	.\$61.19
11466	.Dust and Mist Respirator - Box 20.	.\$49.40

## Lead Dust Swipe Testing Kit

The Test Kit is designed for detection of lead contamination on surfaces. This kit will detect as little as 20 micrograms of lead. Use on respirators to check effectiveness of respirator cleaning procedures. Not suited for detecting lead in oil, water, soil or paint.



Item #	Description	Price:
19358	.Swipe Testing Kit for Lead Dust	\$88.99

## **UV Safety Protection - Oberon**

Oberon Clear UV400 Protective Faceshield with Ratchet. Provides enhanced protection against UV light that can cause burns to the eyes and face. Effective 100% protection from 200nm to 400 nm. 8" x 14" x .105" thick. Spectacles are made of impact resistant polycarbonate. The top and side-shield design provides full UV protection for the eyes.Goggles are constructed of specially formulated plastic giving optimum viewing contrast and lessened eye fatigue.







#### Heat Reflective - Oberon HR Series

The Oberon HR Heat Reflective Series is manufactured using space-aged reflective technology. The shields are coated with a mirror like surface of pure 24K Gold to reflect the radiant energy away from the user's face. Headgear is Ratchet Adjustable and comfortable. Ideal for shop, industrial and laboratory use. Made in USA.



Item #	Shield Color	Price:
19280	Clear/Gold	\$156.21
19280G	Dark Green/Gold	\$140.36
19280GG	X-Dark Green/Gold	\$156.21

#### Aluminzed Kevlar PBI Hood - Oberon

6 oz. Aluminized Hood - 60% Kevlar, 40% PBI with rip stop knit is a lightweight and comfortable material. It is soft and flexible. The inner layer of 7 oz. FR Indura Cotton adds additional protection from molten metal splash. Window .080" thick polycarbonate. Headgear - Ratchet Headgear. Made in U.SA.



Item #DescriptionPrice:19367-PBI...HR Series PBI Hood .......\$679.41

## Aluminzed Rayon Hood - Oberon

The Oberon HR Aluminized Rayon Hood comes standard with Oberon's Clear window with Clear Gold HR coating. Window .080" thick polycarbonate and meets ANSI 287.1 safety standard. Material. Ratchet Headgear. Protection up to 2000 degrees fahrenheit. Made in USA.



Item #	Description	Price:
19367	HR Series Rayon Hood	\$468.60

## Oberon Faceshields - SR-Series (Clear)

The Oberon SR-Series Scratch Resistant Faceshields are protected by the SilicoteTM-1 Scratch resistant coating. These faceshields typically last 3 to 5 times longer then a standard shield. Meets ANSI Z87.1. Made in USA.



Item #DescriptionPrice:19281......Oberon SR-Series Faceshield....\$48.32

Assayer Gloves, Mitts, Jackets

## Aluminized Aprons

Light weight aluminized clothing offers excellent high temperature insulation against radiant heat. These garments reflect 90% of all radiant heat which keeps the wearer cool & comfortable in high temperature environments. One size fits all.

Item #	Dimensions	Price:
19282	24" X 36	\$68.45
19369	24" x 42"	\$95.46



## Aluminized & Kevlar Sleeves

23" Kevlar Twill Heat Sleeves protects the arm and shoulder above the glove from direct and radiant heat. Also can be used for protection when cut and burn hazards are present. Aluminized Rayon is good for moderate exposure to molten metal splash & offers the best freedom of movement. Sold by the pair.



Item #	Description	Price:
19311	18" Kevlar Twill	\$45.14
19312	23" Kevlar Twill	\$56.09
19302	18" Aluminized	\$51.43

#### Aluminized Jackets & Coats

Aluminized jackets can withstand high temperatures and are good in abrasion resitance. Aluminized clothing effectively reflects radiant heat and is capable of shedding molten splash.

## Item #Size Price:

30" Jacket	
19360 Small\$217.56	6
19359\$217.56	6
19361\$217.56	6
19362X-Large\$217.56	6
193632X-Large\$239.32	2
193653X-Large\$253.10	)
193684X-Large\$284.20	)
1936815X-Large\$326.82	2
50" Coat	
19360-50 Small\$288.60	)
19359-50 Medium\$304.88	3
19361-50 Large\$304.88	3
19362-50 X-Large\$304.88	3
19363-502X-Large\$335.37	7
19365-503X-Large\$365.86	6



## Aluminized Chaps & Boot Covers

Aluminized Rayon is a permanent flame retardant (PFR) rayon made with a herring-bone weave. Good for moderate exposure to molten metal splash and offers the best freedom of movement.





## Aluminized Gloves - Heat Reflective

Item #	Description	Price:
19301	14" Glove with Carbon Kevlar Back	\$55.13
19303	14" Aluminized Gloves	\$73.95
19310	14" with Double Aluminized Back	\$87.69

#### Exam Gloves

The **Black Lightning** latex-free, nitrile gloves are super strength and medical quality. Heavy resistance to tearing and moisture. Box of 100.

Item #	Size	Price
19344	Small	\$13.95
19345	Medium (Box of 100	\$13.95
19346	Large (Box of 100	\$13.95
19347	X-Large (Box of 100	\$13.95

The Micro-Flex E-Grip MAX L92 glove latex glove is powder-free with a rough finish and beaded cuff. Tan in color. Box of 100.

Item #	Description	Price
12921	Evolution One - Small	\$19.04
12922	Evolution One - Medium	\$19.04
12923	Evolution One - Large	\$19.04
12924	Evolution One - X-Large	\$19.04

## Assayers Mitts Gloves

Made with non-asbestos fabrics. Reinforced items feature a double palm and give extra abrasion and heat resistance.





Item #	Length/Material	Price:
Assayers	Mitts	
19308	14" He-Tex	\$50.03
19305	23" He-Tex	\$88.58
1914MT	14" Kevlar-PBI reinforced	. \$106.19
1918MT	18" Kevlar-PBI reinforced	. \$185.53
1923MT	23" Kevlar-PBI reinforced	\$159.84
1930MM	18" Para-Aramid Aluminized Mitt M	\$69.55
1930LM	18" Para-Aramid Aluminized Mitt L	\$69.55
19306	"Over Mitts" - Pair	\$39.74
Assayers C	Gloves	
19307	18" Wool Lined	\$65.49
19300	23" Wool Lined	\$86.93
1918PBI	14" Kevlar-PBI reinforced	\$223.26
1918PBI	18" Kevlar-PBI reinforced	\$223.26
1918PBI	23" Kevlar-PBI reinforced	. \$271.43
19334	14" Kevlar Double Palm	\$71.78
193092	23" Cotton Lined Kevlar	. \$102.75
1930M	18" Para-Aramid Aluminized Glove N	Л.\$69.70
1930L	18" Para-Aramid Aluminized Glove L	\$69.70
1930XL	18" Para-Aramid Aluminized Glove	(L\$69.70

#### Inquarts

# Inquarts are pieces of cut wire that contain a precise amount of silver

In order to ensure complete parting, assay beads containing too little silver must have additional silver added. Adding this additional silver is called inquartation. Usually a total of four or five times as much silver as gold is required. Assayers believed that the best alloy for parting contained one-fourth gold and three-fourths silver. The Latin translation of the word for parting, quartatio, is "fourthing". Inquarts with various weights of silver should be available to allow for fast and accurate addition of additional silver. The precision (reproducibility of silver weight) in the inquarts is more important that the exact weight of contained silver.

## Inquarts; Lead-Silver

Lead-silver alloy pellets containing a known weight of silver. Each vial of inquarts contains 1000 inquarts. Lead-silver inquarts can be custom made to customer specifications and weight.

Item #	Ag Contained	Price:
183041M	. 1.6mg	\$86.62
183041	. 2mg	\$89.27
18300	. 2mg <b>Herman</b>	\$169.93
18304	. 2.5mg	\$103.38
183042	. 4mg	\$109.13
183046	. 6mg	\$113.90
183048	. 8mg	\$123.40



## Inquarts; Pure Silver

Legend, Inc Inquarts are manufactured to maximize reproducibility rather than exact weight. Made from pure silver wire containing a known weight of silver.

Item #	Ag Wt	Approx #/Via	l Price:
183001	2 mg	1000 pcs	\$66.80
183011	2.5 mg	1000 pcs	\$66.80
183064	4 mg	1000 pcs	\$69.90
183061	6 mg	500 pcs	\$62.42
183062	8 mg	500 pcs	\$52.70 _
18306	10 mg	500 pcs	\$54.60
183065	15 mg .	500 pcs	\$57.20
1830653	20 mg	500 pcs	\$62.77
183083	40 mg	20g (~500 pc	s)\$67.40
183006	50 mg .	25g (~500 pc	s)\$72.56 <b>"</b>
18308	100 mg	.1 ozt (~311 p	cs)\$84.47
18308125R	125 mg	.1 ozt (~249 p	cs).\$101.22
183068R	200 mg	1.1 ozt (~156 p	cs).\$100.74
183069R	250 mg	.1 ozt (~125pd	cs)\$99.30
18309R	300 mg	1.1 ozt (~104pc	cs)\$95.65
183091R	350 mg	.1 ozt (~89 pc	s)\$95.45
18303S	500 mg	.1 ozt (~62pcs	3)\$96.35



## Inquarts; Copper-Silver

Copper-silver alloy pellets containing a known weight of silver. Vial of 1000 inquarts.

Item #	Ag Contained	Price:
183021-2	2mg	\$78.50
183021-4	4ma	\$97.20

#### Gold

Item # Call for Pricing

18302-10G ...... 10 Gram .9999 Ingot

## Silver - High Purity

Description

Item #

High purity silver medallions, silver wire & silver foil. Use for bullions, inquarting, or making standards.

18330 Medallion	(round), 1 OZT, 999 fir	ne \$44.08
	Γ 99.95% Pure (.005" >	
.999 fine wire	,	ν 2 ) ψ00.92
183004 0.005"	•	A STATE OF THE STA
183002 0.010"		
1830090.020"	•	
183023 0.048"		

#### Inquarts - Pure Copper

Ideal for spiking fire assays to give the cupel a noticeable green coloration or for making up bullion proofs.

Item #	Description	Price:
18315	~1 gm ea, ~390 pcs/1 lb	\$61.72
18315-85	50mg Copper Inquarts-100 pieces	\$4.59
18315-250	250mg Copper Inquarts-100 pieces	\$7.34

## Sample Drying Pans

Pans in many other sizes and materials are available.

Item # Des	cription	Price:
20159 Galv	. Steel 5-7/8x3-1/8x2-1/4"	.\$10.70
20153 SS F	Pan 6-7/8x4-1/4x2"	.\$16.80
20151 SS F	Pan 10"x6-1/2x2"	. \$46.77
27277 SS F	Pan 12-5/8x12-5/16x2.5"	.\$39.00
20164 SS F	Pan 16-1/2x10x2.5"	. \$52.61
20158 SS F	Pan 12-3/4x10-3/8x2-1/2"	.\$22.72
20154 SS F	Pan 20-3/4x12-3/4"x 2 1/2"	.\$36.56
20156 SS F	Pan 20-3/4x12-3/4x6"	. \$73.26



Price:

## Sieve Cleaning Brushes

The proper brush is essential for keeping sieve openings clear without damaging the sieve cloth.

Item #	Description	Price:
23952	6" Round	\$31.86
23953	8" Long handle Wire	.\$31.86
23957	5.5" Wire Loop Handle	\$8.88
23954	8.5" Plastic handle Wire	\$5.28
239522	11"x2.5" Fine Cleaning Brush	1.\$9.42
239521	6" Fine	\$27.00





#### Alconox

Concentrated, anionic detergent for manual and ultrasonic cleaning. Ideal for cleaning contaminants from glassware, metals, plastics, ceramic, porcelain, rubber and fiberglass. Excellent replacement for corrosive acids and solvents. Each carton is 4lb.





#### **Ultrasonic Cleaners**

Digital Ultrasonic Cleaner uses the process of "cavitation" in cleaning items with more efficiency and much shorter cleaning time. It also uses digital program to control the unit, according to the quantity and condition of the items to be cleaned. 2.5L capacity. 110v/50/60Hz

**Tank Dims:** 9.8"x6"x3.15" (250mm x 150mm x 80mm)

Item # Description Price: 23945.... Ultrasonic Cleaner \$179.00

This sieve cleaner produces ultrasonic vibrations in a fluid bath which results in contaminants becoming dislodged from the sieve frame and cloth. Cleans one 8" (200 mm) diameter full height stainless steel or brass test sieve at a time.



Item # Description Price:

23971-US. Sieve Cleaner 115v/50-60Hz......\$2550.84

## Hand Sifter

Geologist Field sifter with hardwood handle for screening soils, drill cuttings, and other geologic samples. The 6" Double Mesh sifter features a double tinned, rigid, double medium-density mesh. Approximately 14 mesh screen. The 8" Double Mesh sifter features a double tinned, rigid, double medium-density mesh. Approximately 18 mesh screen.

Item #	Description	Price:
23956	.6" Single Mesh	\$5.24
23956-D	. 6-1/4" <b>Double Mesh</b> .	\$9.42
23955-D	.8" Double Mesh \$	12.49



## Material Scoops & Funnels

Material scoops are made from molded PP plastic or one piece heavy duty die cast aluminum. Designed to handle concrete, sand, soils, etc. in the laboratory or field.



Item #	Description	Price:
03501	2 oz Sterile Disposale	\$1.44
03500	8 oz Sterile Disposale	\$2.47
20116	14.5" Aluminum, Round Nose	\$30.78
20116-9	9" SS Material, Round Nose	\$15.30
20116-10	10" Aluminum, Round Nose	\$21.31
20116-12	12.5" Aluminum, Round Nose	\$27.23
20114	SS Balance Tray/Scoop-12x6x2.8".	\$121.13
20113	SS Balance Tray/Scoop-17.2x11x3.	4" \$86.42
23964	7" Material Funnel - Steel-7/8x2-5/8	3"\$41.90

Testing Sieves and Screens

## Tyler Brass & Stainless Steel Test Sieves

#### 3" Diameter Testing Sieves

Three inch (3") SS Testing Sieves are available in both full and half height.

3" SS Full Height	Overall Height: 1-3/4"	Depth to Cloth:1-1/4"
3" SS Half Height	Overall Height: 1-1/4"	Depth to Cloth: 5/8"

#### 8" Diameter Testing Sieves

Eight inch (8") diameter Testing Sieves are available in either Brass or Stainless Steel. Available in both full and half heights.

8" Brass & SS Full Height	Overall Height: 2-5/8"	Depth to Cloth: 2"
8" Brass & SS Half Height	Overall Height: 1-5/8"	Depth to Cloth: 1"

#### 12" Diameter Testing Sieves

Twelve inch (12") diameter Testing Sieves are available in either Brass or Stainless Steel. Available in both full and half heights.

12" Brass & SS Full Height	Overall Height: 4-1/4"	Depth to Cloth: 3-1/4"
12" Brass & SS Half Height	Overall Height: 2-5/8"	Depth to Cloth: 1-5/8"

#### 18" Diameter Testing Sieves

Eighteen inch (18") diameter Testing Sieves are available only in Brass with Stainless Steel cloth. Half heights not available.

18" Brass Full Overall He Height	ight: 5-1/2" Depth to Cloth: 4-1/2"
----------------------------------	-------------------------------------

#### Tyler Sieve Covers & Pans

	Full Height	Half Height	Price:
	Item #	Item #	
8 Inch Diameter:			
Cover SS	23900	na	\$31.52
Cover + Ring SS	23910	na	\$47.42
Bottom Pan SS	23920	23920-H	\$59.02
Bottom Pan w/Rim SS	23930	23930-Н	\$71.50
Spacer Ring SS	23435	na	\$83.80
Cover Brass	23400	na	\$20.39
Cover + Ring Brass	23410	na	\$27.28
Bottom Pan Brass	23420	23420-H	\$32.57
Bottom Pan w/Rim Bras	s . 23430	23430-Н	\$54.38
12" Inch Diameter:			
Cover SS	23900-12	na	\$60.25
Cover + Ring SS	23910-12	na	\$44.23
Bottom Pan SS	23920-12	23920-12-H. S	125.18
Bottom Pan w/Rim SS	23930-12	23930-12-Н.	\$104.98
Spacer Ring SS	23435-12	na	\$126.25
Cover Brass	23400-12	na	\$82.54
Cover + Ring Brass	23410-12	na	\$89.42
Bottom Pan Brass	23420-12		\$57.45
Bottom Pan w/Rim Bras	ss.23430-12	23430-12-Н	\$52.83
18 Inch Diameter:			
Cover Brass	23400-18	na	\$85.43
Bottom Pan Brass	23420-18	na	\$230.04
3 Inch Diameter:			
Cover SS	23900-3	na	\$23.31
Cover + Ring SS	23910-3	na	\$26.11
Bottom Pan SS	23920-3	23920-3-H	\$44.98
Bottom Pan w/Rim SS	23930-3	23930-3-H	\$52.89
Spacer Ring SS	23435-3	na	\$73.25

## **Testing Sieves**

Brass and stainless steel testing sieves. 8" diameter, full height. Half height, 3", 12" and 18" diameter are available.

8"x2" Full Height							
N.B.S.	ASTM	Tyler	Opening	BRA	ASS	STAINLE	SS STEEL
Inches	mm	Mesh	Inches	Cat. #	Price	Cat. #	Price
4	100.0		4.00	23002		23503	
3-1/2	90.0.		3.50	23003		23504	
3	75.0		3.00	23004		23505	
2-1/2	63.0		2.50	23005		23506	
2	50.0		2.00	23006		23516	
1-3/4	45.0		1.75	23007		23507	
1-1/2	37.5		1.50	23008		23508	
1-1/4	31.5		1.25	23009		23509	
1.06	26.5		1.06	23000		23519	
1	25.4		1.00	23010	\$83.80	23510	\$83.80
7/8	22.6		0.875	23020	φοσ.σσ	23520	Ψου.σο
3/4	19.0		0.75	23030		23530	
5/8	16.0		0.625	23040		23540	
1/2	12.5		0.500	23050		23550	
7/16	11.2		0.438	23060		23560	
3/8	9.5		0.375	23070		23570	
5/16	8.0	2-1/2	0.312	23080		23580	
1/4	6.3	1/4	0.250	23090		23590	
0.265	6.3	3	<del></del>				
0.205	0.3	3	0.265	23095		23595	
Number	Microns		+			1	
3-1/2	5600	3-1/2	0.233	23100-SS		23600	
			0.233				
<u>4</u> 5	4750	4	<del></del>	23110-SS	Ф <del>7</del> 4 44	23610	
	4000	5	0.157	23120-SS	\$74.41	23620	
6	3360	6	0.132	23130-SS		23630	
7	2800	7	0.111	23140-SS		23640	
8	2360	8	0.0937	23150		23650	
10	2000	9	0.0787	23160		23660	
12	1700	10	0.0661	23170		23670	
14	1400	12	0.0555	23180		23680	
16	1180	14	0.0469	23190		23690	
18	1000	16	0.0394	23200		23700	\$83.80
20	850	20	0.0331	23210		23710	
25	710	24	0.0278	23220		23720	
30	600	28	0.0234	23230	\$74.41	23730	
35	500	32	0.0197	23240		23740	
40	425	35	0.0165	23250		23750	
45	355	42	0.0139	23260		23760	
50	300	48	0.0117	23270		23770	
60	250	60	0.0098	23280		23780	
70	212	65	0.0083	23290		23790	
80	180	80	0.0070	23300		23800	
100	150	100	0.0059	23310		23810	\$86.31
120	125	115	0.0049	23320	\$75.01	23820	\$88.30
140	106	150	0.0041	23330	\$81.89	23830	\$96.32
170	90	170	0.0035	23340	\$89.61	23840	\$105.42
200	75	200	0.0029	23350	\$99.93	23850	\$113.81
230	63	250	0.0025	23360	\$113.77	23860	\$129.43
270	53	270	0.0021	23370	\$136.84	23870	\$149.54
325	45	325	0.0017	23380	\$168.88	23880	\$171.04
400	38	400	0.0015			23890	\$215.21
450	32	450	0.0013	23395	\$226.87	23892	\$246.97
		500	0.0010	23396	\$264.61	23894	\$275.69
500	25	300	0.0010	20090	04.04.01	23054	UZ 1 U.U.U











Sieve Shakers

## Sieve Shaker - Wet / Dry Vibrating

Economical, electric sieve vibrator that works great in wet sieving applications. Designed to sit atop a bucket, but can be used over a sink or standard sieve pan. Vibrating unit is mounted to plastic-coated aluminum frame. Can accept 4 half height or 2 full height sievess. Includes 3-wire plug for 115V 50/60Hz operation.



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2396001 ..... Wet / Dry Sieve Shaker 115v/50/60Hz ......\$544.64

## Ro-Tap Sieve Shaker RX-29

Description

Item #

The industry standard in test sieve shakers, Tyler's Ro-Tap has a unique two-dimensional operation: a horizontal, circular motion and a vertical, tapping motion. The RX-29 model is designed for testing with 8" diameter test sieves.



Item #	Description	Price:
23970	. RX-29 - 110v / 60Hz	\$3,661.92
23970-16	. RX-29 - 220v / 60Hz	\$3,661.92
23970-10	. RX-29 - <b>220v / 50Hz</b>	\$3,770.05
23971	. Sound Enclosure Cabinet	\$1,039.18
23972	. Ro-Tap Shaker Test Stand	\$594.19

## Ro-Tap Electronic Sieve Shakers

The compact Ro-Tap RX-29-E (8" Test Sieves) unit requires minimal space on a laboratory countertop. Controls can be remotely mounted for convenient operation. The Ro-Tap RX-30-E is a floor mounted unit for use with 12" Test Sieves.



Item #	Description	Price:
23970E	.8"-110-230v/50-60Hz	\$6,409.60
23970EE	.12"-110v/60Hz	\$7,009.71

## Sieve Shaker - Tyler RX-812 Portable

The Tyler Portable Sieve Shaker is able to process both 8" and 12" diameter sieves. Transport from one field test site to the next quickly and simply. Compact and portable. Capacity: 7 full height, 8" sieves with pan and cover. Digital timer.



Item # Voltage Price: 23975...... 110 /60Hz ..\$1.922.51

#### Sieve Shaker - Gilson SS-15

The Model SS-15 Sieve Tester is a budget, portable, 8-inch (203mm) sieve shaker designed to outperform other comparably priced equipment. Recommended primarily for No. 4 to No. 200 size range.



Item # Price: Voltage 239721 ..... 110v/60hz .. \$1.580.64

## Ro-Tap - Spare Parts

View exploded parts diagram and full parts list online. Go to: www.lmine.com

Item #	Description	Price
23978	Minor Maintenance Kit	\$171.10
23979	Major Maintenance Kit	\$796.45
23982	Upper Carrying Plate (#9)	\$158.36
23984	Cam Gear (#12)	\$338.37
23990	Main Shaft (#8)	\$100.28
23991	Eccentric Disc (#14)	\$61.26
24009	Plug - <b>Cork</b> (#27)	\$3.89
23996	Plug - <b>Rubber</b> (#27)	\$14.55
23997	Lower Carrying Plate (#10)	\$642.32
23998	Tie Rod (# 29)	\$61.26
23999	Bearing (# 35)	\$22.93
24000	Bearing (# 34)	\$22.23
24057	Ro-tap Block (#15)	\$61.26
23983	Ro-tap Timing Belt #43	\$17.02
23988	Rotating Guard Assembly #5.	\$44.37
23994	Ro-Tap® Sheet Guard #4	\$15.78

## Wet Sieving

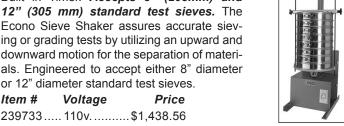
The RO Tap Wet Test Kit allows the user to take advantage of the benefits and accuracy of mechanical sieving when a "stack" of sieves is to be used. Included in the kit package is all the necessary equipment to convert a standard Ro-Tap into a wet testing station (the kit does not include a shaker).



Item #	Description	Price:
23966	.Ro-Tap Wet Test Sieving Kit	\$1,415.84
23962	.Poly Wet Sieve Funnel	\$92.40
23962-S	.Poly Wet Sieve Funnel w/ Spacer Rir	ng . \$182.50
23962-T	.Wet Sieve Pan w/ Funnel - Steel	\$199.00

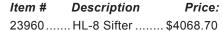
## Sieve Shaker - Econo SS-100

Effective design for accurate separation of materials. Suited for laboratory or field use. Built in Timer. Accepts 8" (203mm) and 12" (305 mm) standard test sieves. The Econo Sieve Shaker assures accurate sieving or grading tests by utilizing an upward and downward motion for the separation of materials. Engineered to accept either 8" diameter or 12" diameter standard test sieves.



## Sieve Shaker - HL-8 Vibratory (Combs)

With high speed vibratory action and optional sieve tappers, the "HL" can handle most any product. Using standard 8" diameter testing sieves, the "HL" will hold 16 half-height or 8 full height sieves. Ideal for wet sieving.





Item #

## Riffle (Jones) Splitters - Stainless Steel

Riffle-type, for dividing or halving dry materials, such as ores, drill cuttings, cement, gravel, coal, sand, soils, etc. Includes 4 pans, scoop, and cleaning brush. All hoppers and chutes are stainless steel. Cat. No. 20100 is fully enclosed to contain dust.



Item #	Chute Width	Chute Width	No. Chutes	Hopper Size	Price:
20119	1/8" Micro	3.2mm	12	3.25"x4.25"	\$511.00
201194	1/4" Micro	6.3mm	12	3.5x4.5"	\$587.88
20100	3/8"	10 mm	14	4.5" x 11"	\$534.58
20105	3/8"	10 mm	14	7" x 8"	\$544.64
20112	1/2"	13 mm	14	7" x 11"	\$559.44
20110	1/2"	13 mm	12	8.5" x 11"	\$534.58
20120	3/4"	19 mm	12	8.5" x 14"	\$522.14
20125	3/4" All SS	19 mm	14	6.5" x 14.5"	\$621.60
20130	1"	25 mm	16	9" x 20"	\$657.82
20145	1-1/2"	38 mm	10	9" x 20.5"	\$621.60
20140	2"	50 mm	8	9.5" x 19.5"	\$621.60
20141	2-1/2"	65 mm	8	9" x 24"	\$865.80

## Riffle Splitter Pans & Accessories

Item #	For Splitter	Pan Size	Price:
20129 *	. 20100	6" x 7" x 3.75"	. \$49.73
20131	. 20105	5/8" x 6 3/4" x 4-1/4"	. \$30.46
20131	. 20110	5/8" x 6 3/4" x 4-1/4"	. \$30.46
20132	. 20120&20112	12/16" x 6 1/8" x 4-3/4"	. \$29.60
20133 *	. 20125	14 1/2" x 7 3/4" x 5 1/8".	. \$69.19
20135	. 20130/40/45	19 5/8" x 7" x 5 1/8"	. \$41.03
20142 *	. 20141	23" x 7 8/16" x 5 1/8" \$	\$126.54

<sup>\*</sup> All Stainless Steel Construction

## Three Tier Riffle Splitter 8:1

A Legend exclusive, this three-tier splitter is designed for use in the field or in the lab. Ideal for drilling projects where large quantities or big samples need to be reduced in size quickly. Open design reduces clogging and makes cleaning between samples a snap. Discharges into two pans. Reduces samples 8:1



Item #	Description	Price:
20200	.1" Three Tier Splitter	\$3,231.15
20200-1	.1.5" Three Tier Splitter	\$3,191.84
20200-2	.2" Three Tier Splitter	\$3,191.84
20200-3	.2.5" Three Tier Splitter	\$3,309.29
20200-4	.Add Wheels	\$150.00

## Sample Splitters - Gilson

Gilson's patented combination of adjustable chutes and gate release hoppers assures top accuracy for mixing and reducing bulk samples to representative smaller test quantities. Since the hoppers have a gate release, only the included sample collecting pans are necessary for proper use; but extras are available.



Item #	Description	Price:
20175	SP-3 Mini-Splitter: 1/4" (6.4mm) to Powders	\$736.49
20177	SP-2.5 Versa-Splitter: 3/4" (19mm) and Smaller Sizes	\$1094.02
20180	SP-2 Porta-Splitter: 2" (51mm) to Sand Sizes	\$971.25
20190	SP-1 Sample Splitter: 4" (102mm) to Sand Sizes	\$1359.75
20210	Mass Splitter SP-0	\$4084.80

Item #	Description	Dimensions	Each
20176	Pan for SP-3*	7.5"x3.7"x2.3"	\$8.88
20178	Pan for SP-2.5*	12.5"x6.25"x4"	\$120.77
20185	Pan for SP-2	19" x 7" x 6"	\$87.08
20195	Pan for SP-1	25" x 9" x 8"	\$114.26

<sup>\*</sup>aluminum pans

## Sample Splitter - Fractional 16 to 1

Consists of an adjustable slit hopper mounted over a cast aluminum channel way. The aluminum casting contains symmetrically placed rejection chutes and diversion pyramids so that the final sample is reduced to 1/16 of the original. The 16:1 splitter is constructed of a rugged aluminum frame, supplied with removable legs. Pans not included.

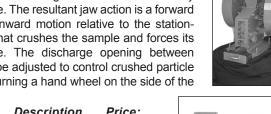


Item # Description Price: 20400 ...... 16 to 1 Fractional Splitter ..... \$1,525.02

Crushers

## Chipmunk Jaw Crusher - BICO

The upper end of the jaw travels in a circular path driven by the eccentric shaft. The lower end oscillates through a short arc described by the toggle. The resultant jaw action is a forward and downward motion relative to the stationary jaw that crushes the sample and forces its discharge. The discharge opening between jaw can be adjusted to control crushed particle size by turning a hand wheel on the side of the crusher.



Item # Description Price: VD Chipmunk Crusher: 2-1/4" x 3" 243016 ..... 2 Hp/3 Ph ..\$8,569.67 243011 ..... 2 Hp/1 Ph .. \$9,546.79 2430161 ... 3 Hp/3 Ph .. \$8,161.59 WD Chipmunk Crusher: 2-3/8" x 4" 243000 ..... 3 Hp/3 Ph .. \$9,641.84 2430002...3 Hp/1 Ph .......\$8311.68



\*\*FULL LISTING OF PARTS ONLINE @www.Lmine.com"

## Badger Jaw Crusher 5" x 7" - BICO

The Badger Crusher has the largest capacity of the three Bico crusher models. All it's crushing surfaces are readily accessible for cleaning, and the single-toggle, dual-motion makes these crushers unique to the industry. This oscillation allows for smaller, more efficient motors to be used without sacrificing productivity. This 5" x 7" laboratory jaw crusher features heavy-duty fabricated steel main frame, double end shaft motor to apply power evenly to the machine, heavy duty heat treated reversible jaw and cheek plates (several plate styles available), heavy duty sealed spherical roller bearings.



Item #	Description	Price:
24302	.Badger 220v/3 ph	. \$18,126.59
243021	.Badger 230v/1 ph	. \$19,068.75
24297	.Badger B-57 Base	\$2,006.88

## **Badger Spare Parts**

Item #	Description	Price:
24315	B-3CA/B-10CA Chrome Alloy Jaw Pla	tes\$826.12
24316	B-3N/B-10N Ni-Hard Jaw Plate Set	\$826.12
24458	B-7 Spring Rod Anchor for Badger	\$17.23
24321	B-17 Cheek Plate	\$268.41
24325	B-20 Toggle block	\$317.68
24323	B-23 Wedge Block	\$369.39
24322	B-24 Adjusting block	\$1,041.72
24326	B-27 Spring Rod only (2 Req)	\$34.47
24324	B-30 Toggle	\$224.10

\*\*FULL LISTING OF PARTS ONLINE @ www.Lmine.com\*\*

#### Double Roll Crushers - Marcy

Designed for intermediate crushing of virtually any material. Especially recommended for assay offices, metallurgical, soil and other commercial / industrial laboratories. The rigorous demands of a pilot plant operation call for equipment which is tough, yet easily operated. All Marcy Laboratory / Pilot Plant Equipment is constructed to meet and exceed these demands. The Marcy double roll crusher is an excellent intermediate crusher. Features heavy solid white chilled iron rolls and can reduce feed from 1/2" to 20 mesh. Units come complete with V-belts, TEFC motor, guards, and tubular base.

Call for pricing.

Item #	Description	Price:
24368	Marcy 6000 6.5" x 6"	Call
24360	Marcy 8000 9" x 12"	Call



#### Morse Jaw Crushers

Designed for crushing virtually any material, the Morse Jaw Crusher is especially recommended for assay offices, metallurgical, soil and other commercial/industrial laboratories. The rigorous demands of a pilot plant operation require tough equipment, quickly & easily adjusted. Morse Hi-Capacity Jaw Crushers deliver two crusing blows per revolution to speed crushing of friable rock or similar rock-like materials down to minus 1/4 in. Matching flywheel guards are included, but not shown.



Item #	Description	Price:
24305	Morse 1000: 2-1/4" x 3-1/2"	\$11,620.86
24306	Morse 4" x 6" Jaw Crusher	\$16,443.01
24307	Morse 5" x 6" Jaw Crusher	Call
24308	Morse 8" x 8" Jaw Crusher	Call

\*\*FULL LISTING OF PARTS ONLINE @ www.Lmine.com\*\*

## Cone Crushers - Marcy

Marcy Gy-Roll cone crushers reduce 1/2" feed as fine as minus 10 mesh in a single pass. The product delivered is ideal feed for ball or rod mills, laboratory pulverizers, gravity concentration tests, sizing analysis, and sampling. Units come complete with v-belts, driven sheave, guards & feed chute assembly. Stand Sold Sperately.



Item #	Size	Price:
24350	6"-1/2 hp/3ph \$	313,370.26
24355	10"-2 hp/3ph \$	319,210.37
24356	Stand	\$1,894.71

\*\*FULL LISTING OF PARTS ONLINE @ www.Lmine.com\*\*

#### Rolling Pin

Naturally cool, smooth & highly polished stainless steel surface. Typically used for breaking clumps of pulp and filter cake against rolling cloth. Heavy weight and evenly balanced. 10" rolling surface. Nylon bearings.



Item #DescriptionPrice:19610......19" Stainless Steel Rolling Pin ...\$36.17

#### **Rolling Cloth**

Rubberized cotton sheeting is nonconducting. Ideal for rolling and homogenizing pulps. For blending pulverized material or other small samples. Sold by the full yard of length (36" x 36"x1/32").



Item #	Description			Price:
20300	Rolling Cloth	1/32"		\$70.25
203012	.Heavv rolling	cloth	1/16"	\$79.16

#### Mortars and Pestles - Porcelain

Mortar with lip is glazed outside. Pestle is glazed to grinding surface and is oversized for hand comfort in grinding. Mortars and pestles priced and sold separately.

Item #	Descri	ption	Price:
19145	90mm N	lortar	\$38.71
19146	157mm	Pestle	\$32.05
19140	130mm	Mortar	\$62.52
19141	194mm	Pestle	\$48.98
19150	163mm	Mortar	\$132.24
19151	222mm	Pestle	\$96.70
19156	210mm	Mortar	\$279.13
19157	262mm	Pestle	\$131.79



## Mortar & Pestles - Steel

The H-1675 Steel Piston Mortar / Pestle can be used as a compaction mold used to prepare powdered samples to test softening point of resins and other bituminous materials using ring-and-ball method. Mortar, pestle, sleeve, knock-out button and ring support are C.R. steel.

Item #	Description	n Pric	е
19050	.C.R. Steel .	\$237.6	31

Hardened Tool Steel Mortar & Pestle H-17280. Made from hardened tool steel in accordance with specifications for Powdered Glass Test. Meets U.S. Pharmacopeia XIX. Mortar has a flat-bottomed cylindrical cavity. Mortar: 76.2mm. O.D. Cavity: 50.8mm dia x 43.9mm deep. Pestle: 50.4mm dia - 108mm overall length



Item #	Description	Price:
19112	.Hardened Tool Steel	\$744.74

## Mortar and Pestle - Alumina

99.5% alumina; extremely hard. Surface unaffected by tungsten carbide, only slightly scratched by diamond. Glazed except for inside grinding surface and outside bottom. Mortars & pestles priced & sold separately.

Item #	Descri	iption	Price:
19148	. 50mm	Mortar	\$102.79
19149	57mm	Pestle	\$54.39



#### Mortar & Pestles - Cast Iron

Cast iron mortar & pestle, for field use, to crush & pulverize small samples for analysis by hand.

Item #	Style/Size	Price:
19111	European 1/2 pint	\$29.00
19116	European 1 pint	\$33.35
19121	European 1 Quart	\$110.20
19120	BICO 1 Quart	\$236.42



#### **UA Belt Drive Pulverizer - Bico**

The UA belt drive pulverizer will accept a 1/4" dry friable material and reduce it to a fine powder of 150-200 mesh at approximately 1 lb per minute (based on quartz). The 8" grinding plates can be adjusted and locked into position to obtain the required particle size.



Plates are offered in a variety of materials & hardness to suit the users grinding needs & budget requirements. The entire grinding chamber is accessible for easy cleaning and greater sample recovery.

Item #	Description	Price:
24310-2-1PH	.2 hp / 1 ph	\$9,952.72
24310-2	.2 hp / 3 ph	\$9,197.95
24310-3	.3 hp / 3 ph	.\$9,112.01
24310-5	.5 hp / 3 ph	\$9,907.75

\*\*FULL LISTING OF PARTS ONLINE @ www.Lmine.com\*\*

## Pulverizer/Grinding Plates

Plates have a carefully engineered contour pattern which provides efficient pulverizing and long life. Sets contain 1 stationary & 1 revolving plate. The stationary plate (with the feed hole) aligns with the revolving plate mounted on the flange.



	Description	
24400	Mild Steel: UA-51/52	\$248.65
24420	Manganese Steel: UA-83/84	\$1,364.21
24430	Hardened Steel: UA-85/86	\$510.89
24450	Ceramic: UA-92/93	\$2,309.87
24470	Chrome Alloy: UA-2000	\$1,270.73
24480	Super-Iron: UA-94/95	\$398.51
24485	Semi-Steel: LD-03/04	\$326.01

## Pulverizer/Grinding Plates - Aligner

Proper plate intallation and maintenance is essential and when done properly, will extend plate life. This tool will assist the installer to ensure plates are in perfect alignment.



Item #	Description	Price:
24471	Plate Aligner - UA-1000	\$108.92

## Cleaning Media

This highly abrasive media can be used for cleaning plate pulverizers, as well as ring and puck pulverizers.

Item #	Description	Price
17114-100	0#6 Cleaning Sand -100 lbs	\$18.39
171113	16 Mesh Cleaning Sand -50 lbs	s\$17.95
171112	30 Mesh Cleaning Sand -50 lbs	s\$13.49
24570	Glass Beads - 50 lbs	\$55.10

#### **Bond Mill**

Designed by F.C. Bond for use by cement companies & quality control laboratories throughout the world. Can be used in calculating the grindability of all ore. The digital counter indicates the countdown and it shuts off the direct drive gear motor.



All Ball Mills come standard with one 44.5 lb. charge of iron balls, iron stand, receiving pan, and hand screen pan. 12" x 12" Cast Iron Drum. Operates at 70 RPM.

Item #	Description	Price:
25300	. Bond Mill	\$10,595.60

## Bico (VP-1989) Vibratory Ring Pulverizer

VP-1989 Ring and Puck Pulverizer: For efficient grinding of production samples. The Vibratory Pulverizer uses two rings and a puck inside an 8" hardened chrome alloy steel grinding bowl. A specially designed motor directly coupled to a rotating eccentric swings the bowl and components at a precise speed and distance for maximum grinding efficiency. Our 250 ml. bowl will readily reduce a 1/2" (13mm) wet or dry sample of minerals, ore rock, soil, and similar material to a final grind of 400 mesh.



Application: Wet or dry pulverizing of minerals, ore, rock, soil, sand, slag, coal, coke, glass and similar materials to analytical fineness of 100 to 400 mesh from an original size of 1/2" or more. Features sound damping enclosure with anti-noise lining, and timerfor cycle selection.

Item #Description Price:

25100 ...... VP-1989 Ring Pulverizer ...... \$14,098.35

\*\*FULL LISTING OF PARTS ONLINE @ www.Lmine.com\*\*

#### Pulverizer Bowl Sets - 250 ml

Includes lid, two rings and a puck inside an 8" ( 250 ml ) grinding bowl. For use on BICO, TM, Angstrom, and other vibratory ring pulverizers that use the same mounting system. Nominal diameter: 250 ml: 8"



Item #	Description	Price:
25200	.BICO 250 ml Set - VP-45/50	\$3,881.13
25430	.Legend 250 ml Set	. \$1,814.72

<sup>\*\*</sup>Other sizes, alloys, and parts @ www.Lmine.com\*\*

#### Pulverizer Bowl Sets for LM2

Chrome steel construction.

Item #	Description	Price:
256385	.B300 (2 rings, puck)	\$1,131.57
256385	.B400 (2 ring, puck)	\$1,027.13
25632	.B800 (Disk)	\$1,413.21
25640	.B1000 (Disk)	\$1,585.36
25641	.B2000 (Disk)	\$1,594.57
256415	.B125/B300/B400 spacer	\$320.62
256416	.B800/B1000 spacer	\$320.62

<sup>\*\*</sup>Other parts for LM2 pulverizers @ www.Lmine.com\*\*

#### **Ball and Rod Mills**

These laboratory ball and rod mills will grind from 1000 to 2500 grams per batch. The yoke is attached to the lid for fast, easy use, and the heavy duty construction includes machined rolling rings to keep the mills from walking on the roll drives. The lid features an exclusive o-ring for positive sealing of either wet or dry charges. Grinding media sold separately. Mild steel (MS) or stainless steel (SS) construction.



Item #	Description	Price:
24652	.8" x 8" Ball/Rod Mill-MS	\$1,448.81
24651	8" x 10" Ball/Rod Mill-MS	\$1,529.20
24662	.8" x 8" Ball/Rod Mill-SS	\$1,752.66
24664	.8" x 10" Ball/Rod Mill-SS	\$1,912.95

#### **Drive Rolls - Counter Top**

Counter top drive rolls for bottle roll tests, blending, or small ball or rod mills. 24" long, 2" dia.rubber covered rollers, 60 RPM fixed speed ¼ hp motor, or variable RPM via VFD.





Item #	Description	Price:
24810	Fixed speed-2 rollx24"	\$3,283.00
24805	Fixed speed-3 rollx24"	\$3,661.00
24810-V	Variable Speed-2 rollx24	" \$3,819.13
24805V	Variable Speed-3 rollx24	" \$4,182.05
Heavy D	uty, 4.5"x32" rollers, 3 ro	II, 1/2hp variable speed:
24821	Variable Speed-3 rollx32'	' \$5,696.92
Single b	ottle roll drive for Lifterb	ottle™, variable speed:
24840	120-230v/60-50hz	\$174 00

#### Ball Charge

The standard ball charge consists of equal weights of 1" and 1-1/4" forged alloy steel spheres.

	9 , .	
Item #	Description	Price:
24670	20 lb, 1"&1.25" Steel	. \$54.00
24671	20 lb 1"&1.25"-SS	\$463.82
25302	44.5 lb Bond Charge Steel .	\$446.20



Other types and sizes of grinding media available. Forged steel, stainless steel, and alumina are kept in stock. Check <a href="https://www.Lmine.com">www.Lmine.com</a> for details.

## Rod Charge

Rod mill charges consist of a total of 24 steel rods made up as follows: 9 rods x 3/4", 8 rods x 5/8", and 7 rods x 1/2". Also available in mild steel and stainless steel.

item #	Description	Price:
24685	8" Rod Charge - Steel	\$339.02
24686-10M	IS 10" Rod Charge -Steel.	\$576.45
24686-8	8" Rod Charge -SS	\$569.38
24686-10	10" Rod Charge- SS	\$718.35

#### LifterBottle™

Wide mouth bottle with integrated internal lifters. Typically used for cyanide agitation tests with 1000 grams of sample at 40% solids. Internal lifters aid in agitation and blending. Lifters are approximately 1/2" high. Also useful for mixing and blending ground pulp samples and other tests. Bottles are rotated by a powered drive roll (usually with rubber covered rollers). Approximate dimensions: 11.5" x 5.5" diameter.



Item #	Description	Price:
11211	KCA LifterBottle® 3.5L HDPE	.\$39.07
11212	KCA LifterBottle® 3.5L PP	.\$48.84

Flotation

#### Flotation Machine - Denver/Metso D-12

**NEW** Model D-12 Laboratory Flotation Machine with updated drive featuring a digital tachometer/speed controller. Utilizing a VFD for speed controll allows for more accurate speed adjustment. CE rated for safety. Includes various tanks and accessories. Machine comes wired for 110v/60hz operation but can be easily connected to 220v/60 or 50hz by changing a jumper in the VFD and adding the desired plug.



Item #	Description	Price:
24962	Metso D-12CE-110-220 volt/50-60 hz.	.\$19,572.75

## Flotation Machine - Spare Parts D-12

Item #	Description	Price:
249601lı	mpeller - Closed 2-7/8" Diameter	. \$142.93
249602lı	mpeller - Open 2-7/8" Diameter	. \$143.19
249603lı	mpeller - Open 3-3/4" Diameter	. \$142.93
249604H	lood, Diffuser 3-3/8" Diameter	. \$181.93
249606H	lood, Diffuser 5-1/4" Diameter	. \$181.93
2496055	SS Impeller - Open 3-3/4" Diameter	. \$328.80
2496095	SS 2-7/8" Impeller for Urethane Hood	. \$253.02
**FULL LI	STING OF PARTS ONLINE @ www.L	mine.com**

Pressure Filters

## Pressure Filter "Type B"

Unique cam action lifting mechanism raises barrel off of the base and swings our of the way. Includes safety pressure relief valve, bleed valve, filter paper and cloth. Mild steel construction. Originally designed by the US Bureau of Mines in the Salt Lake Research Facility to run small batch filter samples for the purpose of filter cake and filtrate analysis. Base grid and top gasket are formed from cast vinyl for long wear and virtually no maintenance. SS (stainless steel) models include stainless steel barrel and base.



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Item #	Description	Price:		
24635	Legend "Type B" Pressure Filter	\$9,092.00		
24635SS	Legend "Type B" Pressure Filter SS	\$9,321.00		
24620FH	S 8" Gasketed Filter Cloth	\$42.00		
**FULL LISTING OF PARTS ONLINE @ www.Lmine.com**				

#### Pressure Filter-Table Top

3-gallon (8" Diameter x 14" Height) and 6-gallon (10" Diameter x 20") table top pressure filters. The lid screw utilizes acme thread which has much longer life and smoother action than standard threads. The hand wheel with speed handle greatly increases the ease and speed lowering and raising the lid. The new captured lid stays with the yoke assembly and eliminates additional handling. The yoke assembly tilts back and is self supporting. Available with either lift off barrels, or with barrel lift and swivel mechanism. The steel base has a poly waffle grid drainage pattern. The base has a threadded side drain. The cylinder bottom seals against pre-wetted filter paper and cloth on the base. For 100% liquid recovery, the optional high-seal gasketed filter cloth should be used; this polyester cloth has a bonded vinyl perimeter and eliminates leakage. AR models are acid resisantant and have a stainles steel barrel and coated base with SS lined drain port.





Item #	Description	Price:
Lift off ba	rrel	
24620	. 8" dia with Lift-off barrel	\$3,300.89
24620AR.	. 8" dia with Lift-off barrel, AR	\$4,747.04
Barrel Life	t & Swivel mechanism	
246255	. 8" dia With integrated lift mechanism	\$4,702.35
246211	. 10" dia With integrated lift mechanism.	\$8,643.45
246211AR	10" dia With integrated lift AR	\$8,822.00
Optional g	gasked filter cloth	
24620FHS	8 8" Gasketed Filter Cloth	\$42.00
24625FHS	3 10" Gasketed Filter Cloth	\$55.28

Furnaces and Ovens

## Model "A" Pot Furnace

Use with #8 graphite or Silicon Carbide crucibles (or smaller). May also be used with some #10 graphite crucibles depending on size and application. The Model "A" furnace will melt bronze in 15 minutes and cast iron in 30 -90,000 BTU and operates at 20 PSI LPG. Inside dimensions: 8" diameter x 9.5" tall. Outside dimensions: 12" diameter x 13.5" tall. 25750F maximum temperature. Body and lid are made of a lightweight ceramic fiber with a total weight of 25lbs.



Item #	Description	Price:
27403	Model A	\$485.44

## Cress Assay Furnaces

These electric furnaces feature high temperature coiled alloy wire elements mounted in easily removable porcelain element plates on each side of the chamber. Solid state zero voltage switching of power to elements and Digital LED Display Temperature controller is accurate to within 0.1% of span. Maximum temperature: 2200 F. All single phase power requirements. Other voltages by special order. Exhaust Blowers and High limit controls can be added to any furnace.



Item #	Chamber		Model	Voltage	Price	
	W	D	Н	#		
26100	8.5"	10"	6.5"	C100-6	115	\$1060.68
Furnaces	below	come	with L	Digital Cor	ntroller	
26100-B	8.5"	10"	6.5"	C100-6	115 (1.4KW)	\$1,459.50
26116	8.5"	9"	5.5"	C401H	115 (1.6KW)	\$2,432.30
26112	8.5"	10"	6.5"	C601	115 (1.4KW)	\$2,366.15
26113	8.5"	10"	6.5"	C601	220 (1.4KW)	\$2,353.48
26110	10.5"	13"	8"	C136	220 (3KW)	\$5,145.50
26120	12"	20"	8"	C-1228	220 (5KW)	\$5,981.30
26125	12"	20"	12"	C-122012	220 (5KW)	\$7,061.75
26115	12"	32"	8"	C-1232HP	220 (5KW)	\$6,538.92
26126	16"	20"	10"	C-162010	220 (9KW)	\$8,175.80
26130	16"	32"	10"	C-1632	220 (10KW)	\$11843.24

## C100-6/601 Spare Parts

Item #	Description	Price
26210	115 v Cress 100-6 Element	.\$92.40
26210-230	230 v Cress 100-6 Element	.\$87.02
26215-50	Ceramic Rods for Element (50)	.\$71.40
26220	Hearth Plate Cress C100-6	.\$25.90
26232	100-6 Wired Furnace Liner	\$547.73
26605	3.5 in Thermocouple	.\$50.76

## C-136 Spare Parts

Item #	Description	Price:
26310	230v Furnace Element	\$67.20
26320	208v Furnace Element	\$67.20
26330	Element Plate	\$47.25
26340	Hearth Plate 10" x 12	\$28.35
26345	Replacement Door with Skin.	\$429.63
26350	230v Pre-Strung element	\$178.51
26350A	208v Pre-Strung element	\$178.51
26370	Roof for C136 Furnace	\$324.40
26610	6 in Thermocouple	\$52.00
26696	Short Door Spring	\$14.70
26355-S.	Liner with Skin	\$1,419.01

## C-1228/1232/122012 Spare Parts

Item #	Description	Price:
26410	230/460v Furnace Element	\$67.20
26420	208v Furnace Element	\$67.20
	Full Element Plate	
26440	1/2 Element Plate	\$44.10
26450	230v Pre-Strung 1228/122012 Element \$	180.58
26450A	208v Pre-Strung 1228/122012 Element \$	180.58
26455	Door with Skin 1228/1232\$	392.33
26460	Hearth Plate 1228/122012	\$46.20
26460H	Hearth Plate SiC with Curb\$	295.83
26465	Replacement Roof 1228/122012\$	340.53
26610	6 in Thermocouple	\$52.00
26460G	Hearth plate 1228/122012	\$53.65
26470-S	1228 liner with Elements & Skin\$1,	528.82
26490	Pre-Strung 1232 Element\$	238.60
26485	Hearth Plate 1232- 2 req	\$43.05
26480	Liner 1232 with Elements & Skin \$2,	197.04
26459	Door with Skin 122012\$	557.06
26475	Liner 122012 with Elements & Skin \$1,	728.77

## C-162010 Spare Parts

	_	
Item #	Description	Price:
26430	.Full Element Plate	\$65.10
26440	.1/2 Element Plate	\$44.10
26551	.LH Side Pre-strung Element	\$234.45
26560	.RH Side Pre-strung Element	\$234.45
26561	.Liner Elements & Skin	. \$2,273.71
26565	.Hearth Plate	\$59.05
26566	.Element for C-162010 Furnace	\$103.60
26610	.6 in Thermocouple	\$52.00
26695	.Long Door Spring C-162010	\$31.50

## C-163210 Spare Parts

Item #	Description	Price:
26410S	230v Cress Element	\$67.20
26413	Element Support Brick	\$18.65
26420	208v Furnace Element	\$67.20
26430	Full Element Plate	\$65.10
26440	1/2 Element Plate	\$44.10
26510	Hearth Plate Set (2 piece)	\$107.10
26511H	Hearth Plate SiC w/curb (1 piece)	393.97
26529	Replacement Roof C1632	\$519.76
26535	Door with Skin	\$597.46
26550	Pre-strung Element	\$334.50
26610	6 in Thermocouple	\$52.00
26695	Long Door Spring	\$31.50
26510G	Heavy Duty Hearth Plate Set	\$136.02
26527-S	Liner with Elements Skin	\$3,662.98
26550C	Pre-Strung Element 208 volt	\$1338.51

## Other Cress Spare Parts

Item #	Description	Price:
26139	30 Amp Solid State Relay	\$32.25
	Watlow PM3T Controller	
26360	Variable Heat Switch 220v	\$32.12
26416	Element Lead Terminals 10/pk	\$12.43
	On-Off switch 220V	
	Furnace Insulation 1" x 2 ft x 3 ft	
26532	Furnace Insulation 1.5"x2'x3'	\$88.75
26534	Element blocking plates	\$13.47
26542	Kao 2000 rope, 1/2" dia, per foot	\$11.15
26610	6 in Thermocouple	\$52.00
26611	12 in Thermocouple	\$53.87
	Thermocouple meter (Analog)	
	Thermocouple wire- per foot	
26635	Element jumperwire- per foot	\$6.22
26636	Panel wire glass covered 12 ga	\$2.28
26639	Ceramic element bushing	\$3.11
26650	75 amp solid state relay	\$142.49
26660	Mechanical Relay PRD7AGO	\$87.05
26661	Mechanical Relay PRD11AGO	\$93.05
26662	Mechanical Relay PRD5AYO	\$64.73
26710	Furnace patch cement	\$19.68
266101	Thermocouple Protection Tube 6	\$24.36
266111	Thermocouple Protection Tube 12"	\$29.90
26640D	25 amp Solid State Relay (DC)	\$81.98

## Furnace Scrapers

Special tools for scraping spills and smoothing & applying furnace bedding.



Item #	Description	Price:
19231	Oven Shovel/Scraper Set 10" wide	. \$381.32
19233	Serrated/blade scraper 10"wide	\$94.25
19232	Scraper/smoother 10" wide	. \$149.12
	Furnace bedding packing tool 14" wide	
192309	Furnace bedding breaker/lift tool 5" wide	. \$129.22

## Dual Laser InfraRed (IR) High Temp

Fast and Easiest-to-use IR Thermometers. Dual lasers identify exact measuring spot when they converge to a single spot. Fast response is ideal for quick checks of multiple spots in a process or for catching spikes in temperature. High 50:1 distance to target ratio measures smaller surface areas at greater distances. Dual Laser Targeting indicates ideal measuring distance when two laser points converge to 1" target spot.



Item #	Description	Price:
18354	.(IR) Thermometer Gun	.\$749.65
18354A	.Economy IR Gun 1650°C/3002°F	.\$209.67

## Johnson Gas Assay Furnaces

Sturdy gas assay furnaces feature ultra-violet safety controls. Model 142DL is available with either a single door or with split clamshell type doors. Call for pricing.

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9.5
9.5
9.5"



## **Drying Ovens - Electric**

Economical drying ovens feature quality products at low cost. These electric ovens feature adjustable shelves, double wall construction, thermostat, and heater pilot body lights. Options include: extra shelves & rails, floor cabinet, exhaust adapter, timer, 208 / 230V, & thermometer.



Fan Foi	Fan Forced Convection					
Item #	Chamber	Cu. Ft	Model #	Volt- age	Kw	Each
18577	13.5x13.5x13.5"	1.5	Digital*	115	1.2	\$529.78
18561	17" x 12" x 17"	2.5	Digital*	115	1.6	\$596.74
27000	25.5" x 20" x 24"	7	21-250	115	1.1	\$2441.25
27100	25.5" x 20" x 24"	7	21-350	115	2.1	\$2541.00
271001	25.5" x 30" x 24"	10.6	31-350	230	2.1	\$2877.00
27110	25.5" x 20" x 22"	6.6	51-550	230	2.8	\$2953.13
18535	39" x 38" x 39"	35	Digital*	230	6.6	\$6950.29

Gravity Convected						
Item #	Chamber	Cu. Ft	Model #	Volt- age	Kw	Each
27200	12" x 10" x 10"	0.7	10GC	115	0.8	\$675.00
27210	13" x 13" x 13"	1.3	20GC	115	1	\$780.30
27220	18" x 16" x 12"	2.0	30GC	115	1.6	\$943.20

\* Stainless Steel Interior

#### DFC 810 Furnace

- •Digital, solid state temperature controller using Type-K thermocouple
- •Dual set point, low temperature idle feature, extending refractory and heating element life
- •High alumina vibrocast refractory lining, allowing even heat distribution
- •Heavy cross section Nichrome heating elements, easily replaced from the front
- •Exhaust blower and hood, with butterfly type damper system for variable air flow control to minimize and/or prevent oxide buildup
- •Swing away door allowing full access to heating chamber. 460v/3ph/60hz.



Item # Description
266200 ..... DFC 810B Furnace Call for Pricing

#### **DFC 810 Furnace Parts**

Item #	Description	Price:
266281	.Top/Bottom Door Jam by JWC	\$58.00
266283	.Side Door Jam by JWC	\$43.50
268711	.Top Tile by JWC	\$275.50
268712	.Top Tile with vent by JWC	\$275.50
268713	.Side Tile by JWC	\$137.75
268714	.Bottom Tile by JWC	\$268.25
26953	.Straight Element Clamp by JWC	\$75.40
26872	.Furnace Back Tile by JWC	\$348.00
266144H .	.High Curb Hearth Plate SiC by JWC	\$611.41
26633H	.Hearth Plate SiC by JWC	\$522.11
26634	.Standard Door by JWC	\$725.00
26621	.Corner Clamp by JWC	\$78.62
26632	.Terminal Clamp by JWC	\$69.55
25993	.Type K Thermocouple	\$133.90
259991	.T/C Protection Tube 8"	\$18.56
26619	.Ceramic Element Insulator	\$5.15
26621	.Corner Clamp	\$78.62
	.Terminal Clamp	
26951-D	.Standard Element	\$165.52
26952-D	.Terminal End Element	\$183.62

#### \*\*FULL LISTING OF PARTS ONLINE @ www.Lmine.com\*\*

#### Miscellaneous Furnace Parts

Item	Description	Price
2661501	2661501 SiC Hearth Plate for Williams and Wilson 22-7/8"x15-7/8"x4-1/2"	
266374H	SiC Hearth Plate for MAS-3 Furnace - 23" x 19" x 4-3/8", 3" curb	\$474.38
266371	Estrin Hearth Plate - 22" x 32" x 4"	\$370.00
266372	W&W/MAS-3 Silicon Carbide (SiC) Glo-Bar Heating Element "Round" 1.15 ohm	\$156.00
266373	W&W/MAS-3 Silicon Carbide (SiC) Glo-Br Heating Element "Spiral" 2.73 ohm SE/SG. Set of 4.	\$1,230.00
267201	PF25/PF50 Multi Pour Hearth Plate - 24" x 24" x 1 (2 req'd for PF50)	\$441.54

#### Fire Brick

Thermal Ceramics was first to introduce insulating firebrick (IFB) to the industry in the 1930's. Low temp IFB are manufactured with a unique slurry casting process which creates a network of microporosity which produces low thermal conductivity and good thermal shock characteristics.

Item #	Description	Price:
26700	IFB -9" x 4.5" x 2.5" K23	\$5.69
26700-HD	.Super Duty Brick- 9" x 4.5" x 2.5"	\$6.91
26700-DP	.Dry Pressed Clay - 13.5" x 4.5 x 3"	\$14.64
26707	IFB -13.5"x9"x3" 2600F	\$28.16

## Cements - Refractory

Item #	Description	Price
17150	155 lbs Refecrete KS-4 PLUS Castable	\$52.90
17152	50 lbs Buffalo Patch 411B/SiC Crucible	\$104.05
17152-10.	10 lbs Buffalo Patch 411B/SiC Crucible	\$35.00
17160	.Sairset (Tenex) - General Fireclay Mortan	\$94.88
26710	.1 Quart Furnace Patch Cement	\$19.68
17161	.Korundal Mortar (55 lb pail)	\$184.78
17154	.Kastolite 30LI Refractory 3000°F	\$93.61
17151	.Green Patch 421 3200°F	\$91.17
171511	.Green lite 45-L Castable 2500°F	\$75.70

#### Vcella Furnaces

These electric furnaces feature high temperature coiled alloy wire elements mounted in grooves in the furnace walls and back . Digital Temperature controller. Maximum temperature: 2200°F. Standard single phase power. Other sizes and/or voltages by special order.



Item #	CI			Chamber		1		Price
	W	D	Н	#	(wattage)			
26977	10"	9"	6.5"	#11	120v(1800w)	\$2,260.50		
26900-1410P	12"	12"	8"	#13	240v(3600w)	\$2,415.00		
269731	16"	17"	20"	#40	240v(7200w)	\$4,617.60		
26920	20"	20"	20"	#50	240v(8640w)	\$5,313.00		

#### Vcella Furnace Spare Parts

Item # Description Price
26220 Hearth plate Vcella #9: 8x8x1/2"\$25.90
2695013Hearth Plate #12/13: 11x11x1/2"\$42.00
26911 Hearth Plate #18: 16 x 16 x 5/8"\$69.00
269105Hearth Plate #40: 14 x 14 x 5/8"\$51.00
269103BThermocouple Vcella 8 ga Bare\$84.00
26950AElement Model 13 & 80 - 200\$93.00
26950BElement 1012, Model 18&TL60\$90.00
26950CElement 1008, Model 16&all 120v .\$54.00
26950DElement 1009, #9 240v\$67.50

\*\*FULL LISTING OF PARTS ONLINE
@ www.Lmine.com\*\*

## Furnace Bedding

Hearth Plate Bedding and Furnace Lining Powder. Use these economical powders to line your furnace to protect the brick and hearth plates. Absorbs spills and protects against wear and abrasion.

Item #	Description	Price
17108M	.55 lbs-Maborite (88% magnesia)	.\$81.51
17108-10.	.10 lbs-Maborite (88% magnesia)	.\$29.82
17118	.55 lbs-Bone Ash Tri-calcium Phosphate	\$160.80

#### Books: Assaying

#### Fire Assaying

by Orson Cutler Shepard & Waldemar F. Dietrich, 1940. 277 pages

The objectives of this book are to present the art of assaying as a self-study text for the practical individual, as a text for the technical institute student, as a general reference, and as a college text for the student of metallurgy. It meets all these objectives.

Item No. 17202A \$19.95

#### A Textbook of Fire Assaying

by Edward E. Bugbee, 2013

This is a reprint of the 2nd edition, 1940. 315 pages (Paperback). The book is accepted as the premier reference text on fire assaying. There is a complete discussion on the fire assay process, including PGM (platinum group metals) assays, complex ores, mill and smelter products, plus bullion and lead assays. The coverage of the theory of fire assaying has made the book popular as a school text. Also the section on practical assaying as well as suggestions for commercial assaying have generated a great interest in this publication. ISBN: 0965392325

Item No. 17206 \$19.95

#### The Sampling and Assay of Precious Metal

by Ernest A. Smith, 1987

This is a reprint of the 2nd edition, 1947. 505 pages (Paperback) An excellent Classic Text on the subject and still referenced today by Assayers and Chemists. This book covers almost ever aspect of precious metals from the Assay Office, Furnaces, Balances, Physical and Chemical Properties of the Precious metals, Sampling, Sample Preparation, Fluxes, Cuppelation and more. It then goes with Chapters specifically on the Assay of Silver, Gold, The Assay of Complex Gold and Silver Ores, The assay of Gold, Silver and Base Bullions, Cyanide Assays, and then the assay of the Platinum Group Metals.

ISBN 10: 0931913233 / ISBN 13: 9780931913235

Item No. 17203A \$29.99

#### A Manual on Fire Assaying and Determination of the Noble Metals in Geological Materials

by Joseph Haffty, L. B. Riley, and W. D. Goss, 1977, 58 pages (Paperback).

Detailed directions are given for use of fire assay techniques to separate and concentrate the noble metals (Ag, Au, Ir, Os, Pd, Pt, Rh, and Ru) from many types of samples. Also included are methods used by the Geological survey.

Item No. 90240 \$7.95

#### Small Scale Refining of Jewelers Wastes

by Roland Loewen, 1995, 257 pages, (Softcover).

This book explains in graphic details the refining of precious metal scraps containing such metals as gold, silver, platinum and palladium. Descriptions are for small scale recovery and refining operations. This book is meant for the practical person and oriented to the layman. There are some fifty illustrations that visually describe the equipment.

Item No. 17208

\$29.60

#### How To Smelt Your Gold & Silver

by Hank Chapman Jr. - 2019 Revision 5

This book is intended for amatures and professionals who are smelting and refining concentrates, ores, and other metallurgical products. It is an excellent "how to" manual with specific fluxes recommended for various products. If you are getting started with refining and smelting, this is an excellent starting point.

\$29.60

Item No. 17208

#### How To Mill Your Gold and Silver

by Hank Chapman Jr.

Over 100 pages with color photos of the authors experience and insight on determining if a mining property will be profitable for you, then how to actually run it. He describes proper sampling, assaying and identifying your ore, calculating values, the difference between fire assay, ICP, AA, DCP and XRF, milling with various circuit equipment like crushers, tables, metal detectors, and roasters. He details circuit design, concentrating, leaching and recovery methods and much more. This book is a must for anyone with an interest in mining and milling procedures.

Item No. 90519 \$28.83

#### **Gold Refining**

by Donald Clark MME

Over 120 pages with pictures, diagrams, and sketches. Original copyright 1909.

Item No. 19518 \$21.97

#### Methods for the Analysis of Ores, Rocks and Related Materials

by Elsie M. Donaldson, 1982, 569 pages, (Paperback). Analytical chemical methods acceptable for the determination of elements found in ores, rocks, and related materials are covered in this Canadian monograph. Several laboratory methods are considered. This book is out of print, but is available as a used book.

Item No. 17207 \$108.48

Pierre Gy's Sampling Theory and Sampling Practice by Francis F. Pitard, 2nd edition, 1993, 488 pages (Hardback). This is a concise, step-by-step guide for process variability management and methods. Provides a comprehensive study of heterogeneity, covering the basic principles of sampling theory and its various applications. The variability of dynamic process streams using variography is discussed to help bridge sampling theory with statical process control. Essential to any professional concerned with the control of dynamic material systems and optimizing sampling protocols.

Item No. 17209 \$430.65

#### De Re Metallica

by Georgius Agricola, translated by Herbert Clark Hoover and Lou Henry Hoover, 1950, 638 pages (Paperback)

Item No. 90873 \$56.48

#### Manual of Mineralogy (after James D. Dana)

by Cornelis Klein, 1993. 681 pages (Softback). Mineralogy is an integral part of geology and assaying. This book serves as a textbook toward training in mineralogy as it relates to geology and assaying. In this, the 21st edition, there is a balance between concepts and principles on the one hand and the more systematic and descriptive treatment of mineralogy on the other. A balanced presentation requires the coverage of many subjects. This edition incorporates many major revisions and additions from the previous edition and is highly qualified as a textbook for mineralogy.

Item No. 17218 \$23.50

#### The Metallurgy of Gold

by Thomas Kirke Rose & W. A. C. Newman, 1986\*, 573 pages, (Softcover). This book is the seventh edition in a series of publications on the metallurgy of gold. This seventh edition was published in 1937 and is a highly technical treatise on gold treatment.

Item No. 17204 \$29.00

# Methods Manual- Vol 1: Gold Analysis in Alkaline Cyanide Solutions

A Society of Mineral Analysts Publication, 59 pages, (Paperback). This document is a collection based on a survey of analytical methods in current or past use within the mining industry for the determination of gold in alkaline cyanide solutions.

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A Society of Mineral Analysts Publication, 1989, 45 pages, (Paperback). This document is a collection of specific methods used in the analysis of mill product solids, including flux mixtures and recipes. These are not standard methods, but rather methods in actual use in the mining industry.

Item No. 90520 \$16.00

## Methods Manual- Vol 3: Amenability of Gold Ores and Process Solids to Cyanide Leaching

A Society of Mineral Analysts Publication, 1989, 45 pages, (Paperback). This document is a collection of specific methods used in the analysis of mill product solids, including flux mixtures and recipes. These are not standard methods, but rather methods in actual use in the mining industry.

Item No. 90521 \$16.00

#### Refining Precious Metal Wastes

by C. M Hoke, 1940, 362 pages. This book does not cover assaying of metals but does cover in detail the secondary refining of precious metals to permit their further employment in art, science, and industry.

Item No. 17205 (softcover) \$29.77

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