**Flare Tools**

**Deluxe Flare Tool**
Faceted, hard chrome finished cone rolls out and burnishes perfect 45° flare above the tube holding mechanism. Original wall thickness is maintained at the baseline of the flare. Large handle for good leverage and precision threads on feed screw make flaring effortless. 1/8” thru 3/4” capacity.

**Rol-Air Flare Tool**
Flares roll out above the die bar by super smooth faceted cone. Automatically burnishes flare face. Slip-on yoke permits use in tight quarters. Heat treated dies grip tubing without scoring. 3/16” thru 5/8” capacity.

**Tips for Flaring**
- An incorrect flare is one of the most common sources of leaks. To help prevent leaks, cut tubing with a sharp wheel for a clean right angle cut. To avoid tube constriction, don’t feed the screw too fast.
- Since unremoved burrs can break off into the tubing or scratch the flared surface, remove burrs with a deburring tool.
- A flare tool with burnishing cone puts a high polish on the flare and rolls out a perfect 45° flare for a good seal. Over or under flaring prevents a good seal. Use a drop of oil on the flaring cone and feed screw for precise action.

**Papco Flare Tool**
One piece unit with swing away cone assembly facilitates quick easy flaring even in tight quarters. 3/16” thru 5/8” capacity.

**Grabber Flare Tool**
Self adjusting tube holder permits flaring any size tubing within its range. Automatically burnishes flare face. 3/16” thru 5/8” capacity.

**Large Size Flare Tool**
Flares up to 1-1/8” O.D. tubing. Yoke fits over flare bar and locks into place. Long handle and precision threaded feed screw. 3/4”, 7/8”, 1”, and 1-1/8” O.D. capacity.

**Papco Cutting Tool**
Enclosed feed mechanism and wide rollers provide clean cuts on all grades of copper or aluminum tubing. Includes fold away reamer and spare cutting wheel. 1/8” thru 1-1/8” capacity.
Sherlock Leak Detector
Sherlock Low Temp leak detector is designed specifically for finding gas leaks at sub freezing temperatures. No mixing required.

1 pt Bottle w/Brush Top Empty

Teflon Tape
Specially selected teflon tape is high density for excellent sealing on gas applications.

TT31202 1/2 X 520”
TT31212 3/4 X 280”

Pure Anhydrous Methanol
Pure anhydrous methanol is extremely effective in neutralizing moisture in propane storage containers. It has a high affinity for water and a boiling point lower than water. Available in 1 gal, 2-1/2 gal, 5 gal or 55 gal.

Pipe Joint Compound

PLS2 1/4 pt
PLS2 is a gray, opaque, viscous, non-hardening, smooth paste with a high solids content.

Gasoila 1/4 pt
Gasoila is a blue/white, opaque, viscous, non-hardening, smooth paste with Teflon.

Rectorseal #5 1/4 pt
Rectorseal #5 is a slow dry, soft set, yellow paste for general piping service.

Rectorseal #5 1/2 pt.
Rectorseal #100 1/4 pt
Rectorseal #100 is a white, opaque, viscous, non-hardening, smooth paste with Teflon.

Gas Valve Grease
Y70AA-1 Gas Valve Grease provides excellent lubrication for gas valves from 32° to 175°F. 2-1/2 oz tube

Zoom Spout Oiler
High grade, light weight oil with retractable zoom spout to get into the tighest spots.

17-076
**Safety Approved Flashlight**

Mine Safety and UL approved flashlight incorporates circuit breakers that separate a broken bulb from the battery source instantly. Eliminates the source of ignition from a glowing filament in a cracked or broken bulb.

**Truck Wheel Chock Blocks**

Heavy duty ribbed aluminum construction. Sold in pairs with 3 ft. connecting chain.  
**LWC** Light Wheel Chock for pickups and small service trucks.  
**HWC** Heavy Wheel Chock for bobtails and large service trucks.

<table>
<thead>
<tr>
<th>Model</th>
<th>Description</th>
<th>Width</th>
<th>Length</th>
<th>Height</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>LWC</td>
<td>Light Weight Chock</td>
<td>6”</td>
<td>7”</td>
<td>6”</td>
<td>10 lbs</td>
</tr>
<tr>
<td>HWC</td>
<td>Heavy Weight Chock</td>
<td>7”</td>
<td>10-3/4”</td>
<td>8”</td>
<td>16 lbs</td>
</tr>
</tbody>
</table>

**Railcar Chock Blocks**

Cast Steel blocks with heat treated spurs which bite into track to keep chocks from slipping. 25 lbs. shipping weight. Sold in pairs with 3 ft. chain.

**Edmont Seamless Monkey Grip Gloves**

Raised Finish Winter Monkey Grip gloves have a textured surface that provides an excellent grip for easier, safer handling of wet and dry materials. Tough, flexible vinyl coating provides a seamless surface to resist liquid penetration and abrasion. A soft, comfortable non-woven inner lining insulates against the cold.

**Edmont Tuf-Duk Gloves**

Winter Tuf-Duk gloves are vinyl impregnated in two-tone brown and gold. The material repels liquid but the gloves are not liquid proof because of the seams. Provide excellent grip and long wear.

**Rail Sign Post**

Easy on, easy off sign post holds safety sign during railcar unloading. Sign not included.

**STOP TANK CAR CONNECTED**

---

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Paint Cost

The cost of the paint is only about 25% of doing the paint job. With this in mind, it doesn’t make much sense to buy anything but a top quality paint. The price per gallon is not a reliable indicator of the total cost of painting. You should also consider the solids per gallon. (See the “What About Paint Coverage” inset).

Silicone Alkyd Enamel

Highest Quality. The best choice for large storage tanks. You can’t beat silicone for resistance to weathering, especially ultra-violet light. It gives the pigments far better protection. Superior durability for large storage tanks. Outperforms standard enamels.

Polyurethane Enamel

Excellent durability. The best choice for domestic tanks. The toughness of the polyurethane film gives outstanding exterior durability and chemical resistance plus better gloss and fade resistance than standard enamels.

Alkyd Enamel

Good durability. Good choice for domestic tanks. Formulated with durable alkyd resins and exterior grade pigments. The alkyd enamel provides high gloss that resists wear and weather with good one coat hiding.

Primer

High quality primer for all steel products. Heavy on the rust inhibitive additives makes this primer an exceptional first coat for all steel surfaces. Provides both barrier and great adhesion for the final paint coat.

Ringmaster

Phenolic protection you can count on. Ringmaster phenolic is a must for cylinder bottom protection. It penetrates rust and coats the cylinder bottom and all the crevices around the footring for a hard, long lasting protective finish.
Keep it easy

The 5 gallon bucket with a metal grid and bucket bonnet is a real easy system for daily tank painting.

The metal grid allows you to maintain an even paint load on the roller and keeps the drips in the bucket.

At the end of the day, simply hang the roller on the grid and cover the bucket with the bonnet.

MC-5 5 Gal Steel Pail
MG-5 Metal Bucket Grid
PCB-3 Bonnet (3 pk)

What About Paint Coverage?

We are looking for at least 2 1/2 mils coverage for good steel protection.

MASTERKOTE PAINT CONTAINS APPROXIMATELY 50% SOLIDS BY VOLUME

Here’s what happens when we roll the paint out.

<table>
<thead>
<tr>
<th>TOTAL VOLUME</th>
<th>SOLIDS IN GALLON</th>
<th>COVERAGE PER COAT</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 GAL 231 cu in</td>
<td>.50 GAL 115.5 cu in</td>
<td>642 sq ft 1 1/4 mil thick</td>
</tr>
</tbody>
</table>

The 50% vehicle in the gallon evaporates. The 50% solids in the gallon spread out to a 1 1/4 mil film covering 642 sq.ft. A second coat provides an additional 1 1/4 mils. Total coverage 2 1/2 mils.

Use ONE gallon to apply two coats on a 1000 gal tank to get 2 1/2 mil protection.

The chart assumes that we are trying to protect the tank with 2 1/2 mils of the finished coat. The numbers are based on Masterkote paint which averages 500 sq. ft. per gallon and requires two coats for proper finish. Lesser quality paints will require more paint to attain the same protection.

ASK ABOUT THE SOLIDS IN THE CAN!
Full Function Digital Multimeter
Read volts, amps, continuity with this high accuracy large display ruggedized meter. Includes digital multimeter with boot, 9v battery, 10A and 5A fuses, and rubberized test lead set. 5 YR warranty.

Thermocouple Testing
Use the DC Volts 400m range which provides a best resolution of 0.1 millivolt.

Powerpile Testing
Use the DC Volts 4v range which provides a best resolution of 1 millivolt.

Combustible Gas Leak Detectors
Pinpoints gas leaks fast and easy. LED and alarm indicators.

<table>
<thead>
<tr>
<th>SPECIFICATION</th>
<th>CD100A</th>
<th>CD200</th>
</tr>
</thead>
<tbody>
<tr>
<td>Size</td>
<td>8” X 4” X 1-1/2”</td>
<td>8-3/4” X 3-1/4” X 2-1/2”</td>
</tr>
<tr>
<td>Flexible Probe</td>
<td>18”</td>
<td>18”</td>
</tr>
<tr>
<td>Sensitivity</td>
<td>50 ppm</td>
<td>50 ppm</td>
</tr>
<tr>
<td>Lighted Tip</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Tic Adjustment</td>
<td>Thumbwheel</td>
<td>Thumbwheel</td>
</tr>
<tr>
<td>Tic Indicator</td>
<td>Single Flashing LED</td>
<td>Six graduated LEDs</td>
</tr>
<tr>
<td>Adjustable Alarm</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Ear Phone</td>
<td>Option</td>
<td>Included</td>
</tr>
<tr>
<td>Carrying Case</td>
<td>Option</td>
<td>Included</td>
</tr>
<tr>
<td>Battery</td>
<td>9 volt</td>
<td>4 - AA</td>
</tr>
</tbody>
</table>

Electronic Manometer
A digital, time saving alternative to U-tube pressure measurement.

Use to measure gas or draft pressures in light commercial and residential systems.

<table>
<thead>
<tr>
<th>SPECIFICATION</th>
<th>EM151</th>
</tr>
</thead>
<tbody>
<tr>
<td>Range</td>
<td>-20” to +20” W.C.</td>
</tr>
<tr>
<td>Accuracy</td>
<td>+/- 1.0% FS</td>
</tr>
<tr>
<td>Battery Life</td>
<td>50 hours</td>
</tr>
<tr>
<td>Auto Power Off</td>
<td>Yes</td>
</tr>
<tr>
<td>Warranty</td>
<td>1 Year</td>
</tr>
</tbody>
</table>
Filling Information Signs

S1279 Refilling Info Decal
Covers in depth the procedures for filling cylinders and permanently mounted vehicle tanks. 11” X 17” Vinyl

Vehicle Signs and Decals

--- CAUTION ---
THIS VEHICLE MAKES FULL STOPS AT ALL RAILROAD CROSSINGS

17042 5-1/2” X 20” Steel

WE STOP AT ALL RR CROSSINGS

17042D 2” X 36” Vinyl

Cylinder Filling Chart
12” X 12” Poly

P-101

Cylinder Conditions
12” X 12” Poly

P-102

Motor Fuel Procedure
12” X 12” Poly

P-108

Cylinder Procedure
12” X 12” Poly

P-109

--- CAUTION! ---

Cyl 20 GA
Cylinder Must Be Hauled
10” X 14” Steel

EMERGENCY SHUTOFF
V-134 2.5” X 6” Vinyl

1075D 11” x 11” Vinyl
1075G 11” x 11” Magnetic
1075P 11” x 11” Poly

1075
12” x 12” Poly

CG-126 Flip Type Placard
1075 - 1005
13.5” X 13.5” Aluminum

MPH69 Slide-in Placard Holder
(Placard sold separately)

V-31 Annual 6” x 15.5” Vinyl
V-32 Five Year 6” x 15.5” Vinyl

V-65 3” X 4.5” Vinyl
V-66 3” X 6.5” Vinyl
Cylinder Stickers

SDOT
DOT Compliance
1.25” x 3.75” Vinyl

SP-53R
Duty to Warn
3” x 7” Vinyl

HZ-116
OSHA Compliance
2.2” x 5” Vinyl

CYL 2 in 1
DOT & Duty to Warn
3” x 7” Vinyl

V-128
NO OPD Sticker
Use for cylinders that cannot be upgraded to the new OPD valve
4.75” x 4” Vinyl

CYL 3 in 1
DOT
Duty to Warn
OSHA
4.75” x 6.5” Vinyl

Cylinder Requalification Stickers

This tank has been visually reinspected in accordance with 49 CFR 180.209(g)

Visual Requalifier Identification Number

Date/Type

0101010101010101010101
020202020202020202
0303030303030303

5-V88-1
5-V88-2

5-V88-3
5-V88-4
## Plant Signs

<table>
<thead>
<tr>
<th><strong>NOTICE</strong></th>
<th><strong>DANGER</strong></th>
<th><strong>NO TRESPASSING</strong></th>
<th><strong>FLAMMABLE</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Authorized Personnel Only</td>
<td>No Smoking Matches or Open Lights</td>
<td><strong>949</strong> 4” X 24” Steel</td>
<td><strong>V-24BB</strong> 4” X 22” Vinyl</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>LIQUEFIED PETROLEUM GAS</strong></th>
<th><strong>PROPA</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>V-302BB</strong> 4” X 36” Vinyl</td>
<td><strong>15” X 15” Vinyl</strong></td>
</tr>
</tbody>
</table>

### PROPANE

- **155-71D** 2” Letters Vinyl (3” X 12”)
- **155-714D** 4” Letters Vinyl (5” X 18”)
- **155-716D** 6” Letters Vinyl (6.75” X 27”)

### NO SMOKING

- **916D** 2” Letters Vinyl (3” X 14”)
- **916D-3** 3” Letters Vinyl 4” X 22”

### STOP TANK CAR CONNECTED

- **945B** Tank Car Sign
  11” X 17” Steel
  (Shown with accessory rail sign post)

### CAUTION

- **CAUTION BURIED GAS LINE**

### EMERGENCY SHUTOFF VALVE

- **P-81** 10” x 12” Poly
- **P-82** 10” x 12” Poly

### LIQUID LIQUID LIQUID LIQUID VAPOR VAPOR VAPOR VAPOR

- **V-90-5** Five Ea
  1” x 4” Vinyl
- **V-91-5** Five Ea
  1” x 4” Vinyl
- **P-148** 12” x 12” Poly
- **P-149** 12” x 12” Poly

### Tank Car Sign

- **945B**
  Tank Car Sign
  11” X 17” Steel
  (Shown with accessory rail sign post)
Hannay Hose Reels

Hannay LP-Gas hose reels are of heavy duty construction and are designed for operating pressures of 1,000 PSI. Complete units are built to order from individual components matched to the hose capacity, piping size, mounting arrangement and rewind direction required. Many different configurations are available to suit individual needs. The most common arrangement with top right rewind, 12v DC explosion proof motor, manual rewind and 1-1/2” connections is shown.

Common Models and Dimensions

<table>
<thead>
<tr>
<th>Reel Model Number</th>
<th>1” I.D. Hose Capacity (Feet)</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>F</th>
<th>G</th>
<th>Ship Wt. (lbs.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>EPB24-23-24</td>
<td>125</td>
<td>21</td>
<td>15.5</td>
<td>10.5</td>
<td>20.5</td>
<td>22.75</td>
<td>29.25</td>
<td>23.5</td>
<td>144</td>
</tr>
<tr>
<td>EPB30-23-24</td>
<td>150</td>
<td>27.5</td>
<td>22</td>
<td>10.5</td>
<td>20.5</td>
<td>22.75</td>
<td>33.75</td>
<td>23.5</td>
<td>157</td>
</tr>
<tr>
<td>EPB24-25-26</td>
<td>150</td>
<td>21</td>
<td>21</td>
<td>10.5</td>
<td>25.5</td>
<td>24.75</td>
<td>29.25</td>
<td>27.88</td>
<td>152</td>
</tr>
</tbody>
</table>

FH3 Roller & Spool Assembly

Add convenience and ease of hose handling with the FH3 roller and spool assembly. Especially helpful for odd angle hose reeling.

FH3
Shown with top wind brackets

Guidemaster

For the ultimate ease in hose handling, use the Guidemaster hose guide.

Guidemaster
Shown with bottom wind brackets
Common Replacement Parts

**Back Bearing 1”**

**H-150G Riser Gasket**

**Front Bearing 1-1/2”**

**Bevel Gears**
- 9914.0372 Ring Gear
- 9914.0394 Pinion Gear

**Motor Sprockets**
- 9910.1117 #35 chain 11 tooth
  1-11/16” long
- 9910.0917 #40 chain 9 tooth
  1-5/16” long

**Chain Pitch Size**

<table>
<thead>
<tr>
<th>Chain Pitch</th>
<th>A Roller Width</th>
<th>B Link Spacing</th>
</tr>
</thead>
<tbody>
<tr>
<td>#35</td>
<td>27.5</td>
<td>22</td>
</tr>
<tr>
<td>#40</td>
<td>21</td>
<td>21</td>
</tr>
</tbody>
</table>

**Chain**
- 9912.0001 #35 chain 10 ft. long
- 9912.0002 #40 chain 10 ft. long

**Brake/Rewind Assembly**
- 9914.0200

**12v DC XP Motors**
- 9915.0003 1/2 HP 650 RPM
- 9915.0009 2/3 HP 500 RPM

**Bevel Gears**
- 9914.0372 Ring Gear
- 9914.0394 Pinion Gear

**Rectangular Switch**
- EXPB-2A

**Switch Bracket**
- ESH-2A

**XP Switch**
- EPS-1

**12v Solenoid**
- 9917.0025

**Circuit Breaker**
- 9917.0021 50 Amp
- 9917.0027 70 Amp
FH3 Roller Parts

Chiksan Swivel Joints

Chiksan swivel joints are high performance malleable iron units for 1,000 PSI service. All swivels are equipped with -175°F “AD” stainless steel, spring loaded teflon packing. Unsurpassed for long, leak-free service under the extreme temperature conditions experienced in liquid propane service.

Stock Sizes:
3/4” thru 2” FNPT

FH3 Roller Identification

FH3 Roller Part Numbers

<table>
<thead>
<tr>
<th>Key #</th>
<th>Part Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>9940.0010</td>
<td>Roller Tubing (specify length)</td>
</tr>
<tr>
<td>2</td>
<td>9940.0009</td>
<td>Roller Rod (specify length)</td>
</tr>
<tr>
<td>3</td>
<td>9940.0008</td>
<td>Trunion Bearing</td>
</tr>
<tr>
<td>4</td>
<td>9940.0002</td>
<td>Black Cap (replaces obs. chrome cap)</td>
</tr>
<tr>
<td>5</td>
<td>9940.0012</td>
<td>Plastic-coated Step Bolt w/washers &amp; Nut</td>
</tr>
<tr>
<td>6</td>
<td>9940.0005</td>
<td>Chrome Spool</td>
</tr>
<tr>
<td>7</td>
<td>9940.0006</td>
<td>Chrome Block</td>
</tr>
</tbody>
</table>

FH3 Roller Length Identification

<table>
<thead>
<tr>
<th>Roller Number</th>
<th>Roller Length w/bushings A (inches)</th>
<th>Mounting Bolts C to C B (inches)</th>
</tr>
</thead>
<tbody>
<tr>
<td>9940-010</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#7 Grease
14-1/2 oz tube
-50 - 212 °F

“AD” Packing Sets
3178521 3/4” - 1”
3178528 1-1/4” - 1-1/2”
3178535 2”

Ball Bearing Sets
1/4-40 3/4” - 1”
1/4-54 1-1/4” - 1-1/2”
3/8-48 2”

“AD” Packing Set