







# Welcome to Galiso, Incorporated Montrose Colorado USA

Dear Customer, Thank you for choosing us to be a part of your success and future. We are dedicated to supporting your needs by helping you select the proper equipment, providing comprehensive training, and unparalleled customer service



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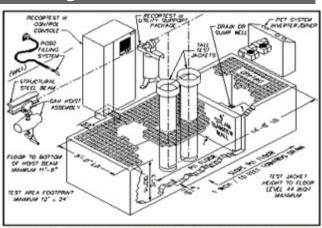
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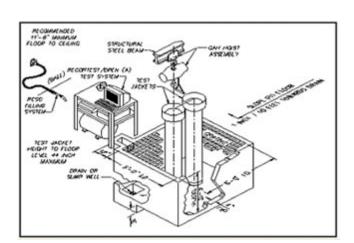


# **Hydrostatic Cylinder Testing**









Email: Sales
Web: www.galiso.net

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# **Becoming a Professional Hydrostatic Tester**

#### Making the right equipment decisions

Making the right equipment decisions at the outset often determines just how successful you will be.

Since 1962 Galiso has manufactured and installed thousands of the finest, most reliable hydrostatic systems and support equipment for customers like the largest major cylinder manufacturing facilities, to the smallest start-up operations. Our interest in your business is in helping you select the right tools to maximize labor and profitability

#### What costs are involved

You can <u>fully</u> equip your shop for under \$16,000 including the test system <u>and</u> support equipment. That is about \$550.00 per month on a 36 month lease purchase plan. Please see our "Leasing Opportunities" page.

#### **Customers Service Support**

Our field service technicians perform on-site start-up installation and training (in some cases a fee may be assessed), or training is available at Galiso at no cost. We are known for offering excellent assistance with our toll free 800 854-3789 number from 7 AM to 4 PM Mountain Standard Time. We also have a combined total of 54 years experience working on and troubleshooting Galiso equipment!

## **Experience counts**

Over the years we listened, watched, and responded with answers to many commonly asked questions. From this, we helped thousands of re-qualifiers succeed in their businesses. We have also watched people stumble down the wrong path so we can help you avoid many pitfalls. We have summarized some of these questions to help you in your equipment decision-making process:

# A local company is selling their old system. Should I start out that way?

Often it costs little more to purchase new equipment. Galiso equipment comes with a standard one year warranty and most importantly training and the experience our customers need to run a successful business.

#### **Help Us Help You!**

Please fill out the Hydrostatic Test System Survey page, and see our System Selection Guide in the catalog. To further assist in making the right steps, Galiso offers a free "Getting Started" booklet that will show how to plan the pit area, select the proper air system, electrical requirements, and point out other useful details

## Have you contacted **DOT**

Do you know about third party site inspections? Are your employees functioning specific certified to test cylinders? Where do you get HAZMAT training? Is leasing a favorable option? It's all contained in the information available from Galiso. As you progress in your planning, call us with you questions. Our Sales Department can offer ideas and suggestions that will help you step through start-up with minimal errors and confusion.

# **Cylinder Testing Methods**

#### **Water Jacket Method**

The water jacket method for hydrostatic testing consist of loading a water filled cylinder into a sealed chamber (test jacket) filled with water and connected to a calibrated glass tube (burette) or Galiso's Electronic Expansion Measuring System (the expansion bowl was invented to replace the burette). The burette or Expansion Bowl is first zeroed and the cylinder is then pressurized to its specified test pressure (test pressure requirements are contained in the U.S. Code of Federal Regulations, 49 CFR 180.205). This test pressure is held for a minimum of thirty seconds.

As pressure is applied to "inflate" the cylinder, the cylinder expands and forces water out of the test jacket and up into the Expansion Bowl or burette. After the thirty second test time has elapsed, the Expansion Bowl or burette is read to determine the Total Expansion (in cubic centimeter) of the cylinder under test pressure. The test pressure is released and the cylinder "deflates". As the cylinder shrinks to its approximate original size, water is allowed to drain back into the test jacket from the burette or Expansion Bowl. In most cases the cylinder will not return to its original size, having been slightly stretched by the pressurization process. This stretching is called the Permanent Expansion. The difference between the "Total Expansion" and the "Permanent Expansion" is called the "Elastic Expansion". The Percent Permanent Expansion of the cylinder is determined by the following formula:

#### Percent Permanent Expansion = (Permanent Expansion+Total Expansion) X100

When the Percent Permanent Expansion exceeds the predetermined limits for the cylinder being tested, (REE), the cylinder must be condemned and removed from service. A high percent permanent expansion value is an indication that the cylinder metal has lost it's elasticity, or that there has been excessive thinning of the cylinder wall and that the cylinder is no longer safe for use. All test records must be saved and maintained for the duration of the re-qualification.

Plus (+) stamped cylinders may be filled to an additional 10 percent beyond the service pressure that is stamped on the cylinder shoulder for certain specified gases. The Water Jacket Method of testing compressed gas cylinders is the only hydrostatic test method that qualifies for filling to 10% over service pressure. Star (\*) stamping makes the cylinder eligible for an extended ten year re-test interval.

The procedures of requirements for plus stamping and star stamping are found in 49 CFR 180.209 (c) for plus stamping and 173.34 (e) (16) for the star. REE values for common cylinder can be found in compressed Gas Association Pamphlet C-5, "Cylinder Service Life, Seamless High Pressure Cylinders". This pamphlet is available from Galiso or go directly from the Compressed Gas Association.

### **Direct Expansion Method**

During the direct expansion test, the cylinder is completely filled with water and the test connection is then screwed into the cylinder neck. Water is pumped into the cylinder until the desired test pressure is achieved. (Test pressure requirements are contained in the U.S. Code of Federal Regulations 49 CFR 180.205).

The Volume of water that is pumped into the cylinder to reach the test pressure is measured to determine the Total Expansion. The Volume of the water that is expelled from the cylinder when pressure is released is measured to determine the Permanent Expansion.

Because air has a different compressibility factor than water, air trapped inside the cylinder will cause inaccurate test results so it is very important that the cylinder is completely filled with water to eliminate trapped pockets of air. The weight of the water contained in the cylinder, the test pressure, test volume (s) and temperature are used to determine the compressibility factor for calculation of the expansion values.

DOT regulations prevent the Direct Expansion Method from being used to qualify cylinders for filling to 10% over service pressure and therefore forbid the Direct Expansion test method to be used to re qualify plus (+) stamped cylinders. The Direct Expansion test method is discussed in detail and example calculations are given in CGA pamphlet C-1, "Methods for Hydrostatic Testing of Compressed Gas Cylinders".



While not generally practiced in this country, the U.S Code of Federal Regulation permit that certain specified cylinders (used exclusively in non-corrosive service) do not require the total and permanent expansion to be calculated. For such cylinders, the Proof Pressure method may be used.

#### **Proof Pressure Method**

The Proof Pressure Test involves pressurizing a cylinder to the appropriated test pressure and then thoroughly inspecting the cylinder, while under pressure, for indications of leaks, deformations, or other indication of possible failure.

### **Ultrasonic Testing (UT) Method**

This method of cylinder testing was introduced in the U.S on exemption basis in 1994. UT differs from other test methods in that the cylinder valve and contents remain intact as no water is used to pressurize the cylinder in this testing procedure.

The UT test involves positioning the cylinder on a rack of rollers that rotate the cylinder, or full immersion of the cylinder in water. Each cylinder is rotated where the entire cylinder sidewall is examined by the inspection probe sensor. This transmits Ultrasonic energy into the cylinder in the form of 'ping-like- sonar soundings from multiple transducers.

A longitudinal beam transducer sends a pulse that echoes straight off the back wall of the cylinder, measuring the time it takes the echo to return, thus measuring the thickness of the cylinder wall.

Shear wave or angle beam transducers send sound waves diagonally through the cylinder wall detecting any cracks, pits, or flaws. These 'soundings' are recorded electronically and reviewed to ensure that each cylinder is safe for continued use.

Certain new UT technology methods are being employed and recently have been granted exemptions for both steel and aluminum cylinders.

# **DOT Regulation / CGA Pamphlets**

DOT - accordance with regulations specified in the United States by the U.S Department of Transportation (DOT) and in Canada by Transport Canada (TC), certain cylinders must be periodically re-gualified and certified safe for use.

The re-qualification procedures and regulations are discussed in detail in the U.S Code of Federal Regulations (CFR), Title 49 Section 180, and Transport Canada (TC) in B339 and B340. You will find a link to the U.S Code of Federal Regulations, available on-line for your review, by visiting <u>Galiso's (DOT)</u> link page at our web site.

Hard copies of the CFR may be obtained directly from Galiso. Telephone us with your request at 1 800 854-3789 or (970) 249-0233 and ask fro Customer Service, or you can mail a written request to:

# Superintendent of Documents U.S Government Printing Office Washington D.C. 20402

CGA Pamphlets - The specifications and procedures for the hydrostatic testing methods are outlined in Compressed Gas Association Pamphlet C-1, "Methods for Hydrostatic Testing of Compressed Gas Cylinders". A series of pamphlets pertaining to certain cylinder types and uses have been compiled for compliance with DOT standards and regulations. Copies of these pamphlets are available from Galiso or by writing to:

Compressed Gas Association 1725 Jefferson Davis Highway, Suite 1004 Arlington, Virginia 22202-4102

# DOT Regulations / CGA Pamphlets

DOT – In accordance with regulations specified in the United States by the **U.S. Department of Transportation** (DOT) and in Canada by **Transport Canada** (TC), certain cylinders must be periodically re-qualified and certified safe for use.

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<u>Regulations</u> (CFR), Title 49, Section 180, and Transport Canada (TC) in B339 and B340. You will find a link to the U.S. Code of Federal Regulations, available on-line for your review, by visiting Galiso's (DOT) links page at our web site, www.galiso.com.

Hardcopies of the CFR and CGA pamphlets may be obtained directly from **Galiso**. **Telephone us with your request at** 

**1 800 854-3789 or (970) 249-0233** and ask for Customer Service, or you can mail a written request to:

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**Compressed Gas Association** 

4221 Walney Road, 5th Fl

Chantilly, Virginia 20151-2923

Phone: (703) 788-2700/ Fax: (703) 961-1831

**Federal Registration (DOT publication)** 

**DOT/RSPA Website** 

**DOT/Hazmat Website** 

**Compressed Gas Association Information** 

**CGA** website

Galiso, Inc.® 1-800-854-3789/+970-249-0233

# Section 2

# **Hydrostatic Testing Systems**













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Web: www.galiso.net

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## **Rec 4 Jacket System**

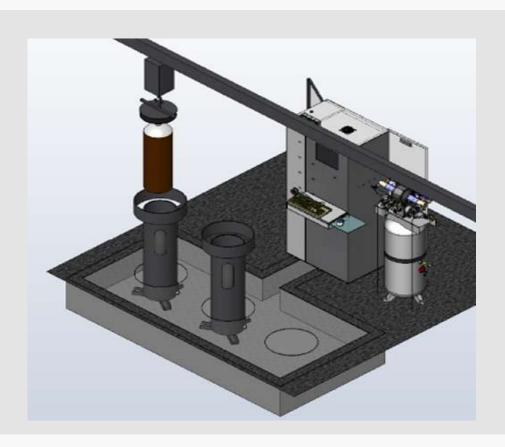
Features of the Console

**General Specifications** 

**Design Features** 

Test Pump Support Package





# **REC 4 CYCLE TEST SYSTEM:**



The Recortest 4 Cycle Test System incorporates PLC and computer technology to provide fast, accurate, and reliable testing.

The flexible Recortest 4 platform with PLC controls accommodates a variety of system component options.

The Rec 4 Steel Jacket System can accommodate up to 4 jackets, which can be tested simultaneously.



#### **FEATURES OF THE CONSOLE:**

DL205 PLC with 1 Ethernet port, 9 RS232 ports, 8 analog inputs, 8 analog outputs, 32 digital inputs and 32 digital outputs.

Windows XP professional PC operator interface and data collection computer networked to PLC control and customer network

0% to +1% Target Pressurization accuracy

Hot swappable duplicate SATA hard drive for rapid recovery from drive failure

17" Flat panel display monitor

Waterproof keyboard and mouse

Barcode test operation control and cylinder serial number entry

USB webcam and speakerphone for operator instruction and internet video conferencing

Remote high visibility LED status light array

Test information is easily imported into Excel spreadsheet

Audio and visual text alarm for error notification.

#### **GENERAL SPECIFICATIONS:**

Console Dimensions	86.4 cm L x 76.2 cm W x 185.4 cm H
Electrical	110 - 240 vac 50 - 60hz
Pneumatic	8.3 bar (120 psi) @ 1274 liters per minute (45 cfm).
System actual footprint	510.5 cm L x 122 cm W x 266 cm H.
System working floor space needed	5.2 meters L x 1.5 meters W (17 ft L x 5 ft W).

#### **DESIGN FEATURES:**

- 1. The Rec 4 Water Jacket Testing System features automated calibration / digital instrumentation to reduce calibration time and provide improved accuracy, calibration and maintenance.
  - 2. The Rec 4 can accommodate up to 4 jackets simultaneously with precise pressure control.
  - 3. Computer keyboard data entry or optional barcode method for cylinder S/N and date of manufacture.
  - 4. Network provides additional recording of test information on a remote file location.
- 5. Cylinder information: Serial number, manufacturer, manufacture date, lot number, liner type, and all cylinder specific data pertinent to the test is entered for all cylinders during the hydro testing of 4 cylinders.
- 6. At the end of each qualification test, the Rec 4 displays a high visibility LED array for pass / fail status on each cylinder tested.
  - 7. Test results data is automatically recorded to local and remote file locations.



The RSP-10DA Recortest 4 Pump Support Package provides accurate automatic pressurization.

#### Features:

A dual action air-operated water pump provides water pressure.

An air storage reservoir is utilized as a mounting base for the Recortest 4 pump equipment.

## **Specifications:**

Dimensions	79 cm L x 71 cm W x 142.2 cm H.
Air Requirements	6.2 - 7.6 bar (90-110 psi) @ 425 liters per minute (15 cfm).
Air Reservoir	113.6 liters (30 gallons) @ 12.06 bar (175 psi) maximum.
Air Filtration	5 microns



# RSP-10 DAP Recortest 4 Utility Support Package

The RSP-10DA Recortest 4 Pump Support Package provides accurate pressurization from 1,000 - 10,000 PSI of any cylinder size without operator adjustments.

### **FEATURES**

- A dual action air operated water pump provides water pressure.
- An air storage reservoir is utilized as a mounting base for the Recortest 4 pump equipment.

### **Specifications**

<ul> <li>Dimensions</li> </ul>	S	79 cm L	x 71 cm W :	x 142.2 cm H
• Air Require	ements	.6.2 - 7.6	bar (90-110	psi) @ 425

Liters per minute (15 cfm).

• Air Reservoir.......113.6 liters (30 gallons) @ 12.06 bar (175 psi)

• Air Filtration......5 Microns.





# REC 4 Open

Test System

A Proven Windows based, PLC controlled hydrostatic test system; the REC 4 Open is designed for fast, accurate testing of compressed gas cylinders up to 10,000 psi.



View Large Picture

#### **Features**

- Each component of the REC 4 Open Test System has been carefully designed to reduce the time required to perform one or more steps of the re-qualification process,insuring significantly greater productivity and accuracy than is possible withmanual cylinder testing equipment.
- Increased productivity: Operator has the ability to add cylinder test data while running the current test.
- The REC 4 Open will test up to 20 medium sized cylinders per hour when manned by one skilled operator
- Test results are no longer subject to operator interpretation or written errors.
- Tests Steel, Aluminum, Composite and Exemption Cylinders
- PLC CONTROL SYSTEM-Extremely durable and industry proven, expandable to include many functions (temp, barcode, etc.)
- DIGITAL INSTRUMENTATION High accuracy digital instruments for pressure and expansion measurements provide superior accuracy and reliability. The digital transducer is rated for 50 million cycles and is accurate to 0.1%.

#### OPERATING ENVIRONMENT

- User friendly Windows based software allowing point and click operations
- Drop down menus allow for quick data entry of cylinder manufacturers, cylinder codes, gas service and cylinder batches.

- 17" flat panel monitor, Dell computer, and laser printer
- · Visual and/or audible system notifications of errors, alerts, cylinder pass/fail and safety issues
- Allows for entry of Pass/Fail of "Eddy Current" information
- Pass/Fail results are immediately calculated and displayed.
- · Operator is free to perform other tasks or prepare another cylinder for the next test while tests are being performed.
- Network capable connecting to your local Domain or Workgroup network.
- Test results are stored on the local hard drive and can also be stored in a centralized corporate network location for backing up and sharing.
- · Remote support Galiso is able to operate, service and support networked REC 4 systems from its office in Montrose CO, USA
- Password protected login screens with login history
- · Powder coated console for durability
- 3 day on-site installation and operator training is included in the cost of the REC 4 Open system.
- Full time Customer Service hardware and software support

### **Options**

- BAR CODE OPTION Allowing the entry of cylinder information to preclude mistakes on the part of the testing operators and speeding up the test procedure
- WEBCAM free internet video calls for REC 4 Open users to other camera equipped computer users worldwide.
- The REC 4 Open can be configured as a dual test system with the addition of a second test jacket
- For low pressure applications, the REC 4 Open can be set up using a low-pressure intensifier pump
- To allow for expansion measurements exceeding 600 cubic centimeters (i.e., one ton containers) a larger capacity scale can be used.
- · Automatic pump speed controls

### **Specifications**

<ul> <li>Dimensions Co</li> </ul>	onsole	29"	L x 40"	W x 56"	Н
	JUSOIE	29	L X 40	OC X VV	

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# GTC Mod-II Manual Test System

The GTC Mod-II is an economical yet full-featured manual test system designed for smaller volume cylinder testing facilities. This test console is economical, easy to use, accurate and reliable..

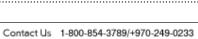
#### **FEATURES**

- Manually tests up to 10-12 high or low pressure cylinders of all types per hour.
- Expansion measured with electronic accuracy to 1/10 CC by the EEMS (Electronic Expansion Measuring System) system by LCD display.
- The console footprint is approximately 5 sq. ft.
- Can be configured to a 1 or 2 test jacket system.
- Tests to pressures of 400psi to 10,000pi.
- Use for Steel, Aluminum, Composite Exemption cylinder testing.
- Low maintenance powder coated cabinet
- Highly reliable air driven intensifier pump.
- No cost operator training at the Galiso facility.
- One year warranty. Extended to 18 months when installed by a Galiso Field Service Technician.

#### **OPTIONS**

- The flexibility afforded by the GTC Mod-II allows it to be used for Direct Expansion and/or Proof Pressure testing with the associated components.
- When used in high/low pressure combinations, an additional pressure gauge is required.
- A Hydrolog software package is available to calculate and record test results electronically for use with a customer supplied PC.
- On-site installation assistance and operator training is available on a fee basis.
- Test Jackets sized for a variety of applications come in 12, 14, 18, 24, 30, and 36 inch diameters.
  - A Quick Connect spud stem on the "G" style head eliminates laborious spud changes for differing size cylinder neck threads.

<ul> <li>Dimensions</li> </ul>	27" L x 27"
W x 64" H	
Electrical	115 Volt, 60 Hz, 220
Volt, 50 Hz	
• Air	
@ 10 CFM	
	6
GPH @ 60 PSI	





# Section 3

# **Test System Components**











Fax: 970/249-0607

Email: Sales

Web: www.galiso.net



# **GHH and OHH Test Heads**

The GHH, (Clean), and OHH, (Dirty) Hydraclose Test Heads are designed to reduce the set-up time for testing by pneumatically sealing the head to the test jacket, and sealing the cylinder test connection.

#### **FEATURES**

- With a slight turn, the test head locks safely into place. The rubber boot portion of the test head expands to create a leak-proof closure when the low pressure air line is attached. This simultaneously activates a diaphragm to compress the speed seals in the cylinder neck ensuring a fast leak-proof connection.
- With a slight turn, the test head locks safely into place. The rubber boot portion of the test head expands to create a leak-proof closure when the low pressure air line is attached. This simultaneously activates a diaphragm to compress the speed seals in the cylinder neck ensuring a fast leak-proof connection.
- The GHH (Clean) Hydraclose Test Head is offered for general cylinder testing of "clean" cylinders such as oxygen, specialty gases, or argon where the presence oil contamination is absent.
- The OHH (Dirty) Hydraclose Test Head is offered for systems that will be testing both "clean" and "dirty" cylinders, this head will reduce the possibility of cross contamination between clean and dirty cylinders.
- Test heads come as the standard "H" (threaded) configuration or the innovative "G" style configuration. This "G" style uses a quick- connect spud that simply snaps a spud in placesaving countlesshours. Hydraclose Test Heads are available in 12", 14", 18", 24", 30" & 36" nominal diameter.







H Head

#### **SPECIFICATIONS**

Air Requirements ......90PSI (Head Seal Pressure)

■ Maximum Test Pressure ......10,000 PSI



# **GTJ Hydraclose Test Jackets**

The GTJ, Galiso Hydraclose Test Jacket is an integral component of all Galiso test systems. The GTJ water jacket is specially designed to accommodate the Hydraclose Test Head.

#### **Features**

- The Hydraclose Test Jacket contains a safety locking device, one or more burst disk crystals, (depending on the diameter of the jacket), a drain valve, a splash shield and connection hoses that attach to the Hydraclose Test Head.
- The Hydraclose Test Jacket contains a safety locking device, one or more burst disk crystals, (depending on the diameter of the jacket), a drain valve, a splash shield and connection hoses that attach to the Hydraclose Test Head.
- The Hydraclose Test Jacket is available in 12", 14", 18", 24", 30' & 36' nominal diameters.

# **Options**

- The Hydraclose Test Jacket is available in Stainless Steel by special order.
- An OTJ (dirty) plumbing option is available to accommodate testing dirty cylinders using the OHH (dirty) Test Head.

### **SPECIFICATIONS**

Max Test

Pressure......11,000psi



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# SCC and LCC Calibrated Cylinders

Galiso supplies calibrated cylinders in 2 size groups; SCC (Short Calibrated Cylinder), and LCC (Long Calibrated Cylinder). In accordance with D.O.T regulations, hydrostatic test systems must be checked daily to assure the accuracy of the test results. The calibrated cylinder is a special steel or aluminum cylinder with a predetermined expansion rate, which is calibrated by Galiso, to be used to check the precision of the hydrostatic test system expansion readings.

#### 11.0 Model SCC-3000-11000; Calibrated Cylinder P/N 01-51-2385

Spec: EEC Directive 97/23

Material: Graphite Epoxy Wound Plastic Liner, Aluminum Neck

Max. Exp. @ 11000 psi; 758.42 bar Nom. Exp. @ 4000: 52.6 cc

Nom. Exp. @ 6000: 78.4 cc

Nom. Exp. @ 10000: 130.1 ccDry Weight: 12.2Lbs; 5.53 kg

2.0 Galiso Model LCC-HP, Part Number 01-51-2378:

Internal Volume: 415 cu. ln.; 6.8 L

Neck Thread: M18 - 1.5

Spec: DOT 3AA600

**Material:** Steel

**Adapter:** 3/4" FPT, 01-31-3186 (3/4")

Max. Test Press: 10,000 psi; 689.48 bar

Internal Volume: 2285 cu in.; 37.44 liter

1/2" F port, 01-32-2607D

Nom. Exp. @ Test Press: 193 cc

Adapterr: 3/4" F port, 01-32-2635D

**Dry Weight:** 267 lbs; 121.11kg

Neck Thread: 3/4" - 14 NGT

PSI (bar)

3,000 (206.84)4,000 (275.79)

5,000 (344.74)

6,000 (413.69)

7.000 (482.63)

8,000 (551.58)

9000 (620.53)10,000 (689.48)

**Optional Point** 

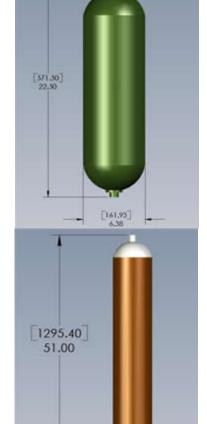
11,000 (758.42)

**Calibration Points** 

9,000 (620.53)

10,000 (689.48)

PSI (bar) 3,000 (206.84)4.000 (275.79)5,000 (344.74)6,000 (413.69)7,000 (482.63)8,000 (551.58)



236.22 9.30

#### **FEATURES**

Galiso calibrated cylinders are specially prepared to provide years of dependable service. Each calibrated cylinder is pre-stressed permanent expansion and protect calibration points

☐ The calibration run is checked by a specialized computer program to insure the linearity of calibration points .

A Stainless steel adapter is included to protect the cylinder neck threads and prolong the life of the calibrated cylinder.

Galiso calibrated cylinders provide stable consistency with calibration points of 400 to 2,500psi, or 3,000 to 10,000psi pressure ranges

# **Calibrated Cylinder Specifications**

#### 1.0 Galiso Model LCC-LP, Part Number 01-51-2342:

Spec: DOT 3AA240 Material: Steel

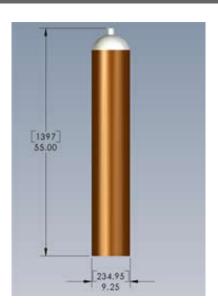
Max. Test Press: 4,000 psi ; 275.79 bar Nom. Exp. @ Test Press: 225 cc Dry Weight: 139 lbs; 63.04 kg

Internal Volume: 2640 cu in.; 43.26 liter

**Neck Thread:** 3/4" - 14 NGT **Adapterr:** 3/4" F port, 01-32-2635D 1/2" F port, 01-32- 2607D

#### **Calibration Points**

PSI (bar) 400 (27.58) 450 (31.03)(34.47)500 600 (41.37) 700 (48.26) 800 (55.16) 900 (62.05) 1,000 (68.95) 1,200 (82.74) 1,400 (96.53) 1,600 (110.32) 1,800 (124.11) 2,000 (137.90) 3,000 (206.84)4,000 (275.79)



### 2.0 Galiso Model LCC-HP, Part Number 01-51-2378:

Spec: DOT 3AA600 Material: Steel

Max. Test Press: 10,000 psi ; 689.48 bar Nom. Exp. @ Test Press: 193 cc Dry Weight: 267 lbs ; 121.11kg

Internal Volume: 2285 cu in.; 37.44 liter

**Neck Thread:** 3/4" - 14 NGT **Adapterr:** 3/4" F port, 01-32-2635D 1/2" F port, 01-32-2607D

# **Calibration Points**

PSI (bar)

3,000 (206.84)

4,000 (275.79)

5,000 (344.74)

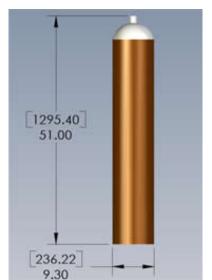
6,000 (413.69)

7,000 (482.63)

8,000 (551.58)

9,000 (620.53)

10,000 (689.48)



## 3.0 Galiso Model SCC-HP, Part Number 01-51-2352:

Spec: DOT E 9909 Material: Steel

Max. Test Press: 9,000 psi ; 620.53 bar Nom. Exp. @ Test Press: 160 cc Dry Weight: 120 lbs ; 23.92 liter

Internal Volume: 1460 cu. in.; 23.92 liter

**Neck Thread:** 3/4" - 14 NGT **Adapterr:** 3/4" F port, 01-32-2635D 1/2" F port, 01-32-2607D

# **Calibration Points**

PSI (bar)

3,000 (206.84)

3,500 (241.37)

4,000 (275.79)

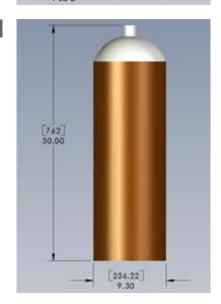
5,000 (344.74)

6,000 (413.69)

7,000 (482.63)

8,000 (551.58)

9,000 (620.53)



#### 4.0 Galiso Model SCC-MP, Part Number 01-51-2340:

Spec: DOT 3AA2015 Material: Steel **Calibration Points** 

Max. Test Press: 3,360 psi; 231.66 bar

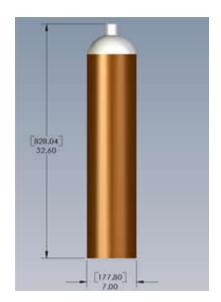
Nom. Exp. @ Test Press: 67 cc **Dry Weight:** 41 lbs ; 18.60 kg

Internal Volume: 995 cu. in.; 16.30 liter

Neck Thread: 3/4" - 14 NGT **Adapter:** 3/4" F port, 01-32-2635D

1/2" F port, 01-32-2607D

(bar)
(68.95)
(82.74)
(96.53)
(110.32)
(124.11)
(137.90)
(172.37)
(206.84)



#### 5.0 Galiso Model SCC-LP, Part Number 01-51-3800:

Spec: None Material: Steel

Max. Test Press: 750 psi; 51.71 bar

Nom. Exp. @ Test Press: 33.2 cc and @ 750 psi ; 65 cc

Dry Weight: 51.5 lbs; 23.36 kg

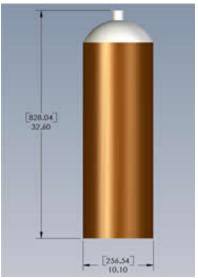
Internal Volume: 2200 cu in.; 36.05 liter

Neck Thread: 3/4" - 14 NGT Adapter: 3/4" F port, 01-32-2635D 1/2" F port, 01-32-2607D

### **Calibration Points**

PSI (bar) 400 (27.58) 450 (31.03) 500 (34.50)

600 (41.37) 700 (48.26) 750 (51.71)



#### 6.0 Galiso Model SCC-MP-A, Part Number 01-51-2343:

Spec: DOT 3AL Material: Aluminum

Max. Test Press: 5,000 psi; 344.74 bar Nom. Exp. @ Test Press: 3,000 psi: 42.8 cc

5,000 psi: 79.1 cc

Dry Weight: 31.7 lbs.; 14.38 kg

Internal Volume: 678 cu. in.; 11.11 liter **Neck Thread:** 0.75 - 14 NPSM - 2B

Adapter: 3/4" FPT, 01-32-2540F, 40-87-6214 w/Oring 1/2" FPT, 01-32-2642F, 40-87-6214 w/Oring

**Calibration Points** 

PSI (bar)

3,000 (206.84) 4,000 (275.79) 5,000 (344.74) 665.48 26.20

203.20

#### 7.0 Galiso Model LCC-100, Part Number 01-51-3804:

Spec: DOT 4BA/4BW Material: Steel

Max. Test Press: 800 psi; 55.16 bar Nom. Exp. @ Test Press: 400 psi: 51 cc

800 psi: 102 cc

# **Calibration Point**

Dry Weight: 45 lbs; 20.4 kg

Internal Volume: 2587 cu. in.; 42.39 liter

Neck Thread: 3/4" - 14 NGT Adapter: 3/4" FPT, 01-32-2635D

1/2" FPT, 01-32-2607D

PSI	(bar)
400	(27.58)
450	(31.03)

**500** (34.47)600 (41.37)700 (48.26)

800 (55.16)



### 8.0 Galiso Model LCC-250, Part Number 01-51-3802:

Spec: DOT 4BA/4BW

**Material:** Steel

Max. Test Press: 850 psi; 58.61 bar Nom. Exp. @ Test Press: 400 psi: 131.5 cc

800 psi: 255.5 cc

**Dry Weight:** 105 lbs; 47.6 kg

Internal Volume: 6583.5 cu. in.; 107.88 liter

Neck Thread: 3/4" - 14 NGT **Adapter:** 3/4" FPT, 01-32-2635D 1/2" FPT, 01-32-2607D

# **Calibration Points**

PSI (bar)

400 (27.58) 450 (31.03) 500 (34.47) 600 (41.37) 700 (48.26)

850 (58.61)



## 9.0 Galiso Model LCC-500, Part Number 01-51-3803:

Spec: DOT 4BA/4BW Material: Steel

Max. Exp. @ Test Press: 800 psi; 55.15 bar Nom. Exp @ Test Press: 300 psi: 300.3 cc 800 psi: 600.8 cc

Dry Weight: 202 lbs

Internal Volume: 57 gal; 215.76 liter

Neck Thread: 3/4" - 14 NGT Adapter: 3/4" FPT, 01-32-2635D 1/2" FPT, 01-32-2607D

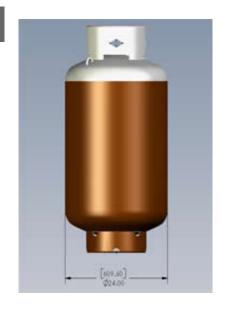
### **Calibration Points**

PSI (bar)

400 (27.58) 450 (31.03) 500 (34.47) 600 (41.37)

700 (48.26)

750 (51.71)



Spec: DOT 3AL2015 Material: Aluminum

Max. Test Press: 3350 psi; 230.97 bar

**Nominal Expansions:** 

@ 2350 psi: 20.5 cc @ 3350 psi: 29.5 cc

Dry Weight: 8 lbs; 3.63 kg

Internal Volume: 283 cu. in.; 4.64 liter

Neck Thread: 3/4" - 16UNF-2B **Adapter:** 3/4" FPT, 01-32-2798 (3/4") 1/2" FPT, 01-32-2447 (1/2")

PSI (bar)

2350 (162.03) 2850 (196.50) 3350 (230.97) 650.24 106.68

#### 11.0 Galiso Model SCC-3000-7500, Part Number 01-51-2385:

**Spec:** EEC Directive 97/23

**Material:** Graphite Epoxy Wound, High Tensile Polymer (HTP)

Liner, Stainless Steel Neck

Max. Exp. @ Test Press: 7500 psi : 758.42 bar Nom. Exp @ Test Press: 4,000 psi: 83.7 cc 6,000 psi: 124.5 cc

**Dry Weight:** 7.5 lbs; 3.40 kg

Internal Volume: 415 cu. in.; 6.8 liter

**Neck Thread:** M18 - 1.5

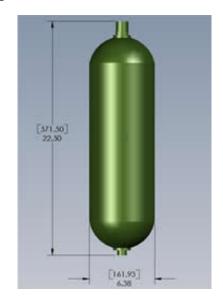
**Adapter:** 3/4" FPT, 01-31-3186 (3/4")

### **Calibration Points**

PSI (bar)

3,000 (206.84) 4,000 (275.79) 5,000 (344.74) 6,000 (413.69)7,000 (482.63)8,000 (551.58) 9,000 (620.52) 10,000 (689.47)

**Optional Point** 11,000 (758.42)





# **MGA Master Gauge Assemblies**

The Master Gauge Assemblies are used for the verification and calibration of the pressure transducer on the Recortest III and Recortest/Open Systems. A Master Gauge Assembly may also be used to extend the recalibrating period for an Analog working gauge to 1 year--instead of 6 months.

### **FEATURES**

- The Master Gauge Assembly features a mirror dial face and a fine pointer needle for increased accuracy and legibility.
- The Master Gauge Assembly also includes a Calibration Certificate.
   All Galiso Mater Gauge Assemblies are certified as having a quality rating (0.25%) of full-scale accuracy.



#### **OPTIONS**

A 20,000 PSI Gauge is available by Special Order.

### **SPECIFICATIONS**

• Dimensions .......6" Dial Face

Pressure Ranges ...... Available From 0 PSI to 1,500; 2,500; 6,600; and 11,000 PSI



# **Section 4**

# **Test System Support Equipment**











Fax: 970/249-0607 Email: Sales Web: www.galiso.net



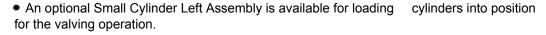
# **GVM-16G Tunair Valving Machine**

The GVM-16G Turnair Valving Machine removes and installs cylinder valves quickly and efficiently. This GVM workhorse continues to serve users with an unprecedented record of reliability and is legendary in the cylinder maintenance workplace.

#### **FEATURES**

- A powerful high quality Air Motor ensures long life and maintenance free operation
- The patented Valve Tongs automatically adjust to grip valve flats from 7/8" to 1 7/8".
- The Valve tong assembly features a power multiplier to increases grip strength as torque increases to hold the valves securely from removal
- or insertion. This eliminates slippage and valve damage caused by conventional methods.
- Cylinders can be left or right side loaded (optional) into the GVM-16G for fast handling.
- Available in 2 models: Caster mounted for portability, or mounted on a stationary base plate.

### **OPTIONS**





 The GVM-16G can be specially equipped with an Electronic Torque Transducer System to provide precise measurement of torque, conforming to current EC directives and safety standards.

Dimensions	
x 114" H	
• Air	15 CFM at 120 PSI at
maximum torque	
Max Torque	
adjusted	
Max Clamping Force	3,000 Lbs. fully
adjusted	
Max Cylinder Size	
62" Tall	



# **REV-12 Electric Valving Machine**

This durable REV-12 brings a 30-year history of trouble-free performance to the Galiso line of support products at an affordable price. Manufactured by L. Ronning AB in Sweden, this unit efficiently removes/installs valves within a range of standard height and diameter steel cylinders.

#### **FEATURES**

- The REV-12 valver can be wall or pillar mounted and consists of 4 components: Electric motor and torque plate; safety cage and clamping assembly; control box; and telescoping shaft with wrench and counterweight.
- The telescoping shaft permits users to service valves on cylinders from 12" to 55" tall. This is variable, according to how each component is space mounted on the wall or pillar.
- Cylinders with diameters of 4" to 12" are pneumatically clamped and held firmly in place by non-slip rubber clamp arms.



- Adjustable torque settings up to 430 foot lbs. Enable users to reinstall valves to proper torque values.
- A set of 7 removable valve wrench inserts allow the REV-12 to grip most standard US valve flats, from 7/8" to 1 3/4".
- The REV-12 is NOT explosion-proof. NOT for acetylene plant applications.

### **OPTIONS**

- A small cylinder lift is available by special order only.
- The REV-12-AL Electric Valving Machine is for use with aluminum cylinders only.
- The REV-12 EP Explosion-Proof Valving Machine is available by special order only.
- A Torque setting Chain and Chain Wheel Kit is available for frequent torque adjustment requirements.

Dimensions	Approx. 6ft. Wide X 11ft. Tall
Electrical	
• Air	
Cylinder Clamping Range	•
	12" to 55" Tall. (depending on wall mounting)



# **Pneumatic Cylinder Belt Vise**

The Belt Vise is a well constructed, base-plate mounted pneumatic cylinder vise, a must for those shops where an efficient means of valve removal is critical to testing and maintenance.

#### **FEATURES**

- The non-slip durable rubber belting eliminates cylinder scratching, and prevents cylinder movement while performing the valving and devalving operations.
- The standard 28" length belt adjusts to fit and firmly grip 4-1/4" to 10-5/8" diameter cylinders. A handy tool and stamp tray is conveniently mounted on the vise.

### **OPTIONS**

 An optional 60" belt is available for gripping cylinders up to 15" diameter



<ul><li>Dimensions</li></ul>	24" L x 18"	•
W x 37" H		
Air Requirements		-00
120 PSI		



# **CIV-16G Acetylene Inspection Inverter & Valver**

The CIV-16G-I Inverter & Valver is designed specifically for servicing acetylene cylinders. This unit combines features of the GVM-16 Turn air Valving Machine and the PCT Cylinder Inverter to provide inspection of the cylinder bottom, porous filler and fusible plugs, and also devalves cylinders when required.

#### **FEATURES**

- The CIV-16G-I is designed for ease of valve removal and proper inspection, of the acetylene cylinder (as described in CGA pamphlet, C-13) by inverting the cylinder to a provide an unobstructed view of the cylinder bottom, fusible metal plugs and foot ring.
- The CIV 16G-I is completely air powered to eliminate the risk of explosion due to electric spark. The system is mounted on heavy-duty casters to allow the unit to be moved from one workstation to another.



#### **OPERATION**

• Operation of the CIV-16G-I is simple. Cylinders are positioned into the clamp jaws and at the push of a button, the cylinder is lifted to the horizontal position to allow visual inspection of the cylinder, Next, the cylinder swings to the inverted position to allow the fusible plugs to be removed for maintenance, or for inspection of the bottom of the internal porous filler. The cylinder is then returned to the upright position and the counter balanced Turn air Valver Head is lowered to remove the valve from the cylinder neck. Once the valve has been removed, the top of the internal porous fill may be inspected and repaired as necessary. After inspection is complete, the Turn air Valve Tongs are used to replace the valve in the cylinder neck.

# **SPECIFICATIONS**

Dimensions	24" L x 18"
W x 37" H	
Air Requirements	120 PSI @ 20 CFM at max
torque	(Volving) 620 ft/lbg (Fully)
Maximum Torque  Adjustable)	(vaiving) 650 l/ibs. (Fully
Maximum Clamping Force 3000 lbs	(Fully
Adjustable)	
Maximum Cylinder Size	
58" Tall	
Maximum Acceptable Cylinder Weight	
400 lbs	

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# **PCT 15-ADW**

The PCT-15ADW is a single cylinder Inverter Drier. The PCT-122 ADW inverts and dries 2 cylinders per cycle. Filtered air in injected into the inverted cylinder, purging out water from the hydrostatic test. To rapidly heat the cylinder walls, hot water (180°) is introduced into they cylinder, followed by a final burst of clean air to produce a 'fresh dried' cylinder ready for inspection.

#### **FEATURES**

- The PCT/ADW (Automated Dry & Wash) models can invert, wash, drain, and dry up to 2 water-filled cylinders in 3 minutes or less depending on cylinder size.
- The PCT/ADW is microcomputer controlled, freeing the operator to perform other duties during the purge/dry process.
   The time value for any cycle is easily programmed via the keypad to match the cylinder sizes or for particular applications.
- This PCT/ADW makes efficient use of workspace by eliminating the need for a cylinder vise, dump rack, and hot air drying manifold.

**NOTE:** The PCT/ADW Inverter Drier requires a Commercial Hot Water heater capable of supplying 180° water and having a minimum capacity of 90 gallons.



### **OPERATIONS**

- When equipped with a detergent supply line the PCT/ADW acts as an internal washer to cleanse cylinders of oils, and residue.
- A PCT-I (inspection) model is available to simply clamp and invert cylinders to inspect the bottoms and exterior walls, or for draining only.

Dimensions 40" H	PCT-15ADW 40" L x 36" W x
Electrical	110 Volts, 60 Hz., or 220 Volts, 50
Hz • Air	90PSI @ 7-10
CFM	_
Water PSI	10 GPM @ 60
Hot Water	10 GPM @ 60
PSI.  Maximum Allowable Cylinder Dimensions:	PCT-15-ADW: 4" to 15" diameter to 60"
Tall	
Maximum Allowable Cylinder Weight  Lbs.	400



# **HDD-8RB Heavy Duty Cylinder Drier**

The **HDD-8RB** Heavy Duty Drier is a rugged, hot air manifold type drier with the capacity to dry as man as 8 drained 9" by 51" cylinders in approximately 25 minutes.

#### **FEATURES**

- HDD driers features a thermostatically controlled 8KW heating element.
- A 1.5 HP (1125 watt) brushless regenerative blower motor moves hot air through each cylinder

at 106 CFM.

- The brushless motor provides quiet, maintenance free operation without the need to periodically replace worn brushes.
- The blower assembly features a convenient 110 Volt outlet to operate the Galiso Opti-Lite for timely inspection of cylinders.
- The HDD driers are thermally insulated to assure maximum heating efficiency.
- HDD driers are shipped partially assembled with easy-to-follow set-up instructions.



#### **SPECIFICATIONS**

Dimensions	122" L x 18" W x 78" H
Electrical	
	1.5 HP, 1125 Watt, Brushless, 106 CFM
Heater Elements	8 KW, Thermostat Controlled
Drier Tubes	1/2" OD x 0.025 Wall x 57 3/4" Long, Quick-Connect

200



# **GCI / IDS Manual Inverter Drier Station**

The new **GCI/IDS** manually inverts, drains and dries cylinders from the short 20 lb. CO2, SCBA and scuba to the largest industrial cylinders like the 100 lb. CO2



### **FEATURES**

- The GCI has a 5 selectable pivot points and a locking containment arm to provided balance and safety to avoid injuries that can occur when employees use makeshift cylinder handing equipment.
- The GCI is characteristic of all Galiso products: Versatile. Durable. Efficient. Constructed of heavy-duty 1/4" carbon steel, the frame, platform, and cylinder cradle (coated to protect your cylinder) provide stability and long life service in any hydro shop environment.
- The small footprint conserves workspace so the GCI can be located near the test station to maximize time and labor savings.

#### **OPERATIONS**

- The GCI is available with the **IDS wash/dry** feature that serves as a cylinder drying station, converting the GCI into a duel function support product.
- Load a cylinder onto the compact GCI/IDS to invert the cylinder, insert the air/water probe into the cylinder neck and —
- A burst of air purges test water from the cylinder.
- Hot water is injected to speed drying.
- Another burst of air "flash dries" the cylinder, so in minutes it is dry and ready for final inspection.
- Convenience at low cost. Affordable to the smallest test facility with limited budgets.
- The GCI/IDS is built to Galiso's high standard of excellence and durability and comes with a 2 year warranty.

Centering Pivot Points for	30", 33", 51", 54", and 60" tall cylinders
• Dimensions	74" L x 24" W x 60" H
Minimum Cylinder Size	
Maximum Cylinder Size	
•	160 LBS



# **GCD-4 Light Duty Drier**

FAST, EFFICIENT, LOW COST. Ideal for Medical D & E's, SCBA's, Scuba and small CO2 cylinders.

#### **FEATURES**

- Powered by a heavy -duty blower, the GCD-4 generates 95 CFM of hot or cold air to efficiently dry small cylinders.
- Drain, invert and place up to 4 cylinders on the drier probes.
- Cylinders are properly dried in a matter of minutes, ready to be inspected and placed back into service.
- The built-in drier motor is quiet, producing temperatures to 175° to accelerate the dying of steel and aluminum cylinders.
- Select the "cool" setting to protect fiber wrapped or composite cylinder, or to simply refresh others.

### **SPECIFICATIONS**

Dimensions	59" L x 21" W x 28" H
Capacity	up to 4 - 35 lb. CO2 Cylinders
Electrical	110 Volt, 60 Hz



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# **LCR-4-WT & LCR-6-WT Loading Cylinder Rollers**



#### **FEATURES**

- The LCR simplifies the process of cylinder rolling and tumbling by eliminating the need to lift heavy cylinders onto a stationary machine. The base of the unit is made of structural steel.
- The cylinder rack of the LCR pivots up to allow standard 10 5/8" diameter by 62" tall cylinders to be easily loaded onto the rack. When loaded the rack tilts down into the horizontal rolling position.
- The loading cylinder rollers are equipped with a timing device that controls the duration and direction of cylinders rotation to more efficiently accomplish cleaning and mixing operations.

#### **OPERATIONS**

- A heavy-duty air piston lifts the cylinder rack into the vertical position for loading.
- After the cylinders are placed, the operator pushes a control valve and the rack pivots to the horizontal position for tumbling.
- Cylinders are rolled in either direction on 8-inch diameter neoprene rollers mounted on heavy steel shafts driven by a powerful motor.
- White rollers are available for sensitive applications.

<b>OPERATIONS</b>	OP	ER	AT	10	NS
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# Maximum Cylinder Load I CR-4-WT

LOIX-T-WI	LOIX-O-WI
4 ea. 10 5/8" Diameter x 62 " Tall	6 ea. 10 5/8" Diameter x 62 " Tall
4 ea. 9 1/2 " Diameter x 55 " Tall	6 ea. 10 5/8" Diameter x 62 " Tall
8 ea. Scuba Size Cylinders	12 ea. Scuba Size Cylinders

I CD C WT

#### **SPECIFICATIONS**

Dimensions	LCR-4-WT	76" L x 64" W x
35" H		
Dimensions	LCR-6-WT	76" L x 85" W x
35" H		
Operating Pressure	2.7 Amps, 220 Volts; 1.35 Am	ps, 440 Volt, 50/60 Hz 3-Phase
Air Requirement		



# **VST-9 Cylinder Tumbler**

The **VST-9 Cylinder Tumbler** is designed for effortless internal dry cleaning of cylinder using abrasive media. The VST-9 works well in conjunction with the ISB-1D Internal Shot Blaster.

#### **FEATURES**

- The entire structure of the VST-9 is fabricated from heavy, 10-gauge steel for rigidity and long life.
- Neoprene rollers cushion the tumbling cylinder, reducing noise and eliminating cylinder marring.
- The direction of cylinder rotation may be reversed easily.
- The VST-9 tumbles cylinders up to, 10 5/8" Diameter x 60" Tall.

#### **OPERATIONS**

- Cylinders can be rolled into the VST-9 and easily tilted to the horizontal position for tumbling.
- The VST-9 is also capable of tumbling 2 or 3 smaller cylinders simultaneously when the machine is loaded in the horizontal position.



#### **SPECIFICATIONS**

Dimensions Loading Position	
Dimensions Tumbling Position	61" L x 15 3/4" W x
Electrical Requirements	5.7 Amps, 115 Volt, 60 Hz, Single
Phase	or 1.5 Amps, 208-230/440 Volt, 50/60 Hz, Three
Phase	• • • • • • • • • • • • • • • • • • • •



# **ISB Internal Shot Blaster System**

The combination of the ISB-1 Internal Shot Blaster with shot catcher and dust collector system and the VST-9 (Cylinder Tumbler) is designed to provide a fast means for cleaning the interior of steel cylinders.

#### **FEATURES**

- The ISB thoroughly and efficiently cleans the cylinder interior in two to ten minutes.
- The ISB-1D also protects cylinder life by removing only the rust, scale and corrosion
  - from the cylinder interior, leaving the cylinder wall intact

#### **OPERATIONS**

- Pour steel shot into the ISB-1 shot reservoir, and now load they cylinder on the VST-9 tumbler and rotate into position for the blasting process.
- Insert the ISB blasting probe into the cylinder and depress the blasting trigger. As the VST-9 rolls the cylinder to allow all the internal surfaces to be blasted clean, the dust collector sucks away the dirt and residue being expelled from the cylinder.
- After the blasting process is complete the VST-9 cylinder roller/ rack is rotated to the shot draining position allowing shot re-cycling. The VST-9 is rotated back to the loading/ unloading position and the cylinder removed, ready for internal inspection.



#### SPECIFICATIONS

Dimensions	ISB: 30" L x 24" W
x 54" H	
Air Requirements	
Required!	,
•	Dust Collector: Set on 55 Gallon drum supplied by
customer.	
Weight	
	3.4 Amps @ 208-220 Volts / 1.7 Amps @ 440 Volts, Three
Phase	



# **Test Results Report Log**

Both of the Recortest Systems provide the operator with the first-class test reporting. Not only are the tests easier to perform, but also the results are well written and documentation of just what was accomplished

### **Test Results are No Longer Subject to Interpretation!**

#### **FEATURES**

- Each cylinder to be tested includes a log of the cylinder serial number, size, and rating manufacture, date of manufacture cylinder service, and capacity
- Tested cylinders will have recorded the test pressure, test duration, reject elastic expansion, REE source, and a short character remarks section.
- Results for cylinders include: total expansion, permanent expansion, percent permanent expansion, elastic expansion and disposition code that indicates the status of the cylinder at test end.
- Test reports may be printed at the end of each work period, stored for a longer period and printed later or archived to another media. Recortest Systems will notify the operator if a cylinder must be retested or rejected.
- At the end of a test period, the Recortest Test Report will print a report that includes test specifications and results for each cylinder tested.

	TTC Registra	Seet the Storenbert Soft of	tion Report	Galiso, In 22 Ponderosa Montrose	i Ct	, co			81401					
			r: Visual Test, 2nd Let I, N=Not Applicable, A											
Оре	vator Name.				Signature:			Stamp:					Date Sign	ned
Cen	tifying				Signature			Stamp:					Date Sign	ned
		I hereby c	ertify that all the fo	flowing tests we	re made under my	supervision	and in accordan	nce with DOT/	CTC rep	gulations.				
	Test Date	I hereby c	ertify that all the fo	Size Service	Cyl MFG, MFG, Date	Supervision	and in accordan	Specified	CTC rep	gulations. Total Elastic	Perm Percen	+* VE	VE Date	Disposition Remark
1	Sand Willen	Emana a	Serial Number	Size	Cyl MFG.	REE	Rating	Specified	Test	Total		1	400000000000000000000000000000000000000	
	Test Time 2/8/2006	Operator	Serial Number Cyl Owner best 14	Size Service 9.25×51	Cyl MFG, MFG, Date 201KA	REE Source 125	Rating Unit 3AA-3600	Specified Actual 6000	Test Time	Total Elastic 60.1	Percen 0.0	1	400000000000000000000000000000000000000	Remark
1 2	Test Time 2/8/2006 12:19 2/8/2008	Operator	Serial Number Cyl Owner test.14 Gates best.106	Size Service 9.25×51 Oxygen 9.25×51	Cyl MFG. MFG. Date 2WKA 092000 Faber	REE Source 125 CS 525	Rating Unit 3AA-3600 PSI 3AA-3600	Specified Actual 6000 6010	Test Time 30	Total Elastic 60.1 60.1	Percent 0.0 0.0 0.0	1	400000000000000000000000000000000000000	PPPNP
1 2 3	7est Time 2/8/2006 12:19 2/8/2008 12:21 2/8/2006	Operator install install	Serial Number Cyl Owner test.14 Gallao test.108 Gallao test.108	Size Service 9.25x51 Oxygen 9.25x51 Oxygen 5.25x14.1	Cyl MFG. MFG. Date 2WKA 092000 Fater 092002 Luxfer	REE Source 125 CS 525	Rating Unit 3AA-3600 PSI 3AA-3600 PSI 3AL2216	Specified Actual 6000 6010 6000 6010 3700	Test Time 30	Total Elastic 60.1 60.1 60.1 37.1	9ercen 0.0 0.0 0.0 0.0 0.0	1	400000000000000000000000000000000000000	Remark PPPNP PPPNP



# **122-ADW Cylinder Inverter Driers**

The PCT-122 ADW inverts and dries 2 cylinders per cycle.

Filtered air in injected into the inverted cylinder, purging out water from the hydrostatic test. To rapidly heat the cylinder walls, hot water (180°) is introduced into they cylinder, followed by a final burst of clean air to produce a 'fresh dried' cylinder ready for inspection.

#### **FEATURES**

- The PCT/ADW
   (Automated Dry & Wash) models can invert,wash,drain, and dry up to 2 water-filled cylinders in 3 minutes or less depending on cylinder size.
- The PCT/ADW is microcomputer controlled, freeing the operator to perform other duties during the purge/dry process.
   The time value for any cycle is easily programmed via the keypad to match the cylinder sizes or for particular applications.
- This PCT/ADW makes efficient use of workspace by eliminating the need for a cylinder vise, dump rack, and hot air drying manifold.

**NOTE:** The PCT/ADW Inverter Drier requires a Commercial Hot Water heater capable of supplying 180° water and having a minimum capacity of 90 gallons.



DOT 400 A DVA/, CO" L . . . . . . . . . . . 40" LI

#### **OPERATIONS**

- When equipped with a detergent supply line the PCT/ADW acts as an internal washer to cleanse cylinders of oils, scale, or other foreign substances.
- A PCT-I (inspection) model is available to simply clamp and invert cylinders to inspect the bottoms and exterior walls, or for draining only.

#### **SPECIFICATIONS**

Di-----

•	Dimensions	
•	Electrical	
•	• Air	90PSI @ 7-10 CFM
	• Water	
•	■ Hot Water	10 GPM @ 60 PSI
	Maximum Allowable Cylinder Dimensions:	
•	Maximum Allowable Cylinder Weight	400 Lbs.



# SCD-4W Small Cylinder Drier P/N 25-54-3148



#### **FEATURES**

- The SCD-4 Small cylinder drier provides a fast, efficent means of draining and drying small compressed gas cylinders after hydrostatic testing.
- The SCD uses compressed air and hot water to drain and flash dry cylinders in under 2 minutes.
- Timer controls allow for individual adjustments
  - 0 60 seconds Drain Air
  - 0 60 seconds Hot Water
  - 0 60 seconds Detergent
  - 0 120 seconds Dry Air

### **SPECIFICATIONS**

• Dimensions	60" L x 13" W x 30" H
Electrical Requirements:	90 - 264 VAC to 12vdc, 50/60 Hz
Capacity	
Max Cylinder Size	10" dia x 30" tall
Air Requirements  contaminant. (reommend 80-11-0046 filter package - 0.01 ppm)	10.cfm@90psi with <0.03 ppm



### **Opti-Lite Cylinder Inspection Kit**

The **Opti-Lite** is a fiber optic projected light system used to inspect the interior of compressed gas cylinders for pitting, cracks, rust and/or corrosion. Fiber optic light transmission delivers maximum brilliance inside the cylinder.

#### FFATURES

- The Opti-Lite provides a margin of safety. Since light is transferred through glass fibers, all heat and electrical current is isolated from potentially flammable gases within the cylinder. The fiber optic illuminator cable is encased in a rugged, silicone wrapped flex line for increased durability.
- Ease of use insert the light guide into a cylinder neck and one can quickly and easily observe/inspect the condition of a cylinders interior surfaces.



#### **SPECIFICATIONS**

Illuminator Box Dimensions	9" L x 5"
W x 6" H	
Illuminator Cable Dimensions	1/8" or 1/4"
diameter	
Electrical	4 Amps, 110 VAC or 2 Amps,
220 VAC	
Light Source	
halogen lamp	
9 1	

# **Black Light Cylinder Inspection Kit**

**CAUTION** – Guessing **is** hazardous to your personnel! Was the oxygen or breathing air cylinder you just tested exposed to hydrocarbons (oil)?

#### **FEATURES**

- The Black Light Kit confirms oil residue in a cylinder by inserting the ultra-violet light-emitting probe into the cylinder to inspect the neck and interior walls.
- Any trace of hydrocarbons become readily visible by appearing white, in sharp contrast to the purple Illumination generated by the light probe.
- When the Black Light Kit is in use, UV coated safety glasses are recommended.
- The probe cable is 12 feet in length making it easy to inspect cylinders of all sizes, yet can be stored out of the way or wall mounted for convenience.

#### **SPECIFICATIONS**



### STAMP GUN KIT



#### Features

- Dates are easy to stamp, legible and stay that way.
- New dates and symbols can be impacted into a cylinder without smashing your fingers or splitting dies..
- By rotating the stamp slowly, the rapid beats (3200 beats per minute) drives the die into the cylinder or cylinder collar without denting the cylinder or the cylinder collar.
- Within 30 seconds you have a new legible date that doesn't fade away when you clean the paint off the cylinder.

#### **OPERATING**

- Oil hammer in accordance with manufacturer's instructions...
- Use only air pressure 90 psi maximum..
- Hold die firmly against area to be marked and squeeze trigger, rotating gun slowly to get complete mark in metal.
- You may want to place cylinders smaller than 60# in a cylinder vise for ease of stamping.
- Before stamping your first cylinder, it is recommended you practice on an old cylinder until you feel comfortable with the air hammer.
- Follow manufacturer's operating instructions.

#### SPECIFICATIONS

- New dates and symbols can be stamped on cylinders with 1/4 inch or 3/8 inch letters as required by D.O.T.
- Only requires 60# of air pressure to impact the new information onto the cylinder.

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# **Automatic Cylinder Filling Systems**

The **RCSG** has been designed to keep pace with the Galiso Test Systems by rapidly and automatically filling cylinders with water in preparation for hydrostatic testing. The RCSG is designed for smaller capacity cylinders.

#### **FEATURES**

- The RCSG cylinder fill system is economical, simple to operate and easy to maintain
- The RCSG is available in configurations of 1, 2, 3, 4 spouts, for quickly filling cylinders. Each configuration is shipped ready to install, with a 10 foot hose and regulator.

#### **OPERATION**

The operation of the RCSG is as simple as inserting the spout into the cylinder neck and triggering the start lever. The RCSG will fill the cylinder and automatically shut off when the cylinder is full.

This frees the test operator to perform other test-related duties while the cylinder is being filled.

#### **SPECIFICATIONS**

<ul><li>Dimensions</li></ul>	10' Hoses, 11 1/2' with fill gun
Water Requirements	30 PSI to 50 PSI Maximum RCSG
Flow Rate RCSG	2
Minimum Neck Size RCSG	11/16" ID



The **CFS** has been designed to keep pace with the Galiso Test Systems by rapidly and automatically filling cylinders with water in preparation for hydrostatic testing. The CFS is designed for large neck, large volume cylinders.

#### **FEATURES**

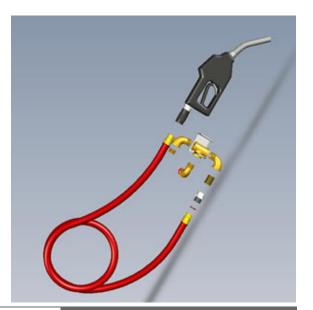
- The CFS cylinder fill system is an economical, simple to operate, and easy to maintain
- The CFS is available in configurations of 1 or 2 spouts for quickly filling a large quantity of cylinders. Combining with an RCSG is also available. Each CFS is shipped ready to install, with a 12 foot hose.

#### **OPERATION**

Operation of the RCSG and CFS is as simple as inserting the spout into the cylinder neck and triggering the start lever. The RCSG and into the cylinder and automatically shut off when the cylinder is full. This frees the test operator to perform other test-related duties while the cylinder is being filled.

#### **SPECIFICATIONS**

• CFS	12' Hoses, 13' with fill gun
Water Requirements 30 PSI to	80 PSI Maximum CFS
Flow Rate CFS	up to 12 GPM @ 80 PSI
Minimum Neck Size CFS	



# **External Shot Blasters**

Galiso makes available a variety of External Shot Blasters that are the most effective and efficient method for removing paint, rust, scale and other surface impurities form the exterior walls of cylinders, from Medical D & E to acetylene to large one-ton containers.

#### **FEATURES**

- These cylinder cleaning systems are chemical-free creating no disposal problems.
- Maximum Safety:
  - -entry door safety lock-out
  - -guarded cylinder lift table
- Easy Load/Unload
  - pneumatic door, cylinder loader and ejector.
- Low Maintenance /Long Life
  - Manganese alloy wear liners
  - variable speed tumbler
- Fast and Efficient
  - One operator can clean 15 average size cylinders per hour.



#### **SPECIFICATIONS**

		GC-301	GC- 110	GC110/30	GC-111	GC-112	GC-113	GC-500	GC- 1000
Overall Dimensions:	Length	72"	107"	107"	112"	112"	114"	204"	258"
Difficitisions.	Depth	50"	42'	55"	80"	93"	42"	90"	90"
	Height	74"	73"	84"	87"	109"	119"	111"	107"
Cylinder	Min. Diameter 1	6"	6"	6"	6"	6"	12"	12"	12"
Capacities:	Max. Diameter	30"	20"	30"	20"	30"	36"	44"	44"
	Max. Length 2	30"	72"	72"	72"	72"	96"	120"	192"
Blast Wheels:	No. of Wheels	2	2	2	2	2	4	6	8
	Diameter	18"	18"	18"	18"	18"	18"	18"	18"
	Horsepower	10	10	10	10	10	10	10	10
	R.P.M.	1725	1725	1725	1725	1725	1725	1725	1725
Features:	Pneumatic Door	Opt.	Opt.	Opt.	Std.	Std.	Std.	Opt.	Opt.
	Cylinder Loader	n/a	Opt.	Opt.	Std.	Std.	Opt.	n/a	n/a
	Cylinder Ejector	n/a	n/a	n/a	Std.	Std.	Opt.	n/a	n/a
	Var. Speed Tumbler	Opt.	Opt.	Opt.	Std.	Std.	Opt.	Opt.	Opt.
Electrics:	Digital Timer	Opt.	Opt.	Opt.	Std.	Std.	Std.	Std.	Std.
	Analog Timer	Std.	Std.	Std.	n/a	n/a	n/a	n/a	n/a
	Ammeters	Std.	Std.	Std.	Std.	Std.	Std.	Std.	Std.
Electrical Requirements:	Blast Motor - H.P. - RPM	2 @ 10	2 @ 10	2 @ 10	2 @ 10	2 @ 10	4 @ 10	6 @ 10	8 @ 10
ixequirements.		1725	1725	1725	1725	1725	1725	1725	1725
	Tumbler Dr H.P.	1/2	1/2	1/2	1 1/2	1 1/2	1	2 @ 1	2 @ 1
	- RPM	1725	1725	1725	1725	1725	1725	1725	1725
	Dust Coll H.P.	3	3	3	3	3	3	5	2@3
	- RPM	3450	3450	3450	3450	3450	2265	1980	2265
	F/L Amps - 220v	61.6	61.6	61.6	64.6	64.6	117.2	177.8	234.4
	- 440v	30.8	30.8	30.8	32.3	32.3	58.6	88.9	117.2

# **GTK Cylinder Collar Tool Kit**

The **GTK, Galiso Cylinder Collar Tool Kit** makes cylinder collar replacement easy because of loose collars, worn cap threads and recently, the high number of ownership changes. The Galiso Cylinder Collar Tool Kit has been carefully engineered to streamline the process of cylinder collar maintenance

#### **FEATURES**

- One man can remove and replace up to sixty collars per eight hour shift.
- These tools can be purchased separately or in the GTK kits.
- Both the GTK-8 and GTK-10 include the CRT-1 Collar Removing Tool, Foot pump the CCR-75"
   M-Pactor", the NDS-5 De-scaling Tool, the
  - NPT-1010 Collar Attachment Tool and the GLS-12 Cylinder Turntable.
- The GTK-10 also contains the CST-2 Collar Sizing Tool in addition to the tools listed above.
- Both kits include a heavy duty tool storage box, face shield, ear
  protector headset, leather gauntlet gloves, tools, and connections and spray lubricant for safe
  operation and maintenance of the collar tools.



#### **OPERATIONS**

Galiso air powered Collar Tools, provide easy operation, concentrated force and maximum safety.
 The GTK is a profitable addition to any cylinder service facility.

## CRT-1 Collar Removing Tool

The **CRT-1** is a tool deigned to remove steel collars from a cylinder within 30 seconds, by use of hydraulic ram force.

#### **FEAUTURES**

• The CRT-1 is provided with a lifting eye for use with an overhead hoist. **Note:** The CRT-1 requires the Galiso 10,000-PSI Turbo Air Foot Pump to operate.

#### **OPERATIONS**

- Place the CRT-1 over the collar to be removed rotating the CRT-1 counter-clockwise and clockwise to ensure seating on the collar.
- Apply hydraulic pressure to the CRT-1 by actuating the 10,000psi foot pump, extending the ram and removing the collar.
- Lift the CRT-1 and extracted collar off the cylinder and move the release handle outward to release the collar from the CRT-1



### **SPECIFICATIONS**

• Air Requirements ......See Galiso 10,000PSI Turbo Air Pump, (foot pump)

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# **NDS-5 Cylinder De-Scaling Tool**

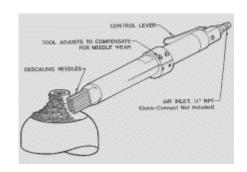
The **NDS-5 Cylinder Neck De-Scaling** tool is a fast and effective means for removing corrosion and scale from the exterior of compressed gas cylinders.

#### **FEATURES**

- Pneumatically driven de-scaling needles rapidly chew away rust and scalefrom the cylinder neck/collar area leaving a bare metal surface, ready to be repainted.
- The NDS-5 can also be used to remove paint from cylinder exteriors to reveal cylinder data, or as medium duty impactor to vibrate loose seized threaded assemblies.

#### **OPERATION**

 THE NDS-5 is easy to operate. Simply position the de-scaling needles on the surface of the cylinder you wish to remove rust, scale, or paint from and squeeze the handle.



#### **SPECIFICATIONS:**

•	Dimensions	
	Air Requirements	90psi clean filtered air @ 5 CFM
	\\/a:=bt	6 lbs.
	Warranty	Six months

### **CST-2 COLLAR SIZING TOOL**

The **CST-2** provides a fast, effective method to conform the height of the collar to properly fit the cylinder neck height. To allow proper attachment of the collar to the cylinder.

#### **FEATURES**

The CST-2 uses a hydraulic ram to stretch or crush the collar from 1.79" to 2.10" tall without damaging the collar threads. Note: The CST-2 requires the Galiso 10,000-PSI Turbo Air Foot Pump to operate.

#### **OPERATION**

To lower collar height place the collar in the non-tapered side of the Stretcher/Crusher Block, positioned in the CTS-2 with the bottom of the collar facing toward the hydraulic ram. To raise the collar height place the collar in the tapered side of the Stretcher/Crusher Block, positioned in the CST-2 with the bottom of the collar facing toward the Hydraulic Ram. When activated, this will stretch the cylinder collar to the desired height.



#### **SPECIFICATIONS**

Dimensions	12 3/4" L X 6 1/2 W X 7 5/8" H
Air Requirements	See Galiso 10,000PSI Turbo Air Pump, (foot pump)
Operating Pressure	
Weight	
Warranty	Six months

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# **CCR-75 Cylinder Swaging Tool**

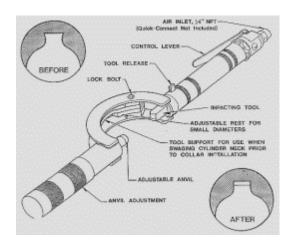
The **CCR-75 Cylinder Neck Swaging Tool** is a "M-Pactor" multipurpose, impacting device with many applications in the compressed gas industry. When servicing cylinder collars, the CCR-75 reshapes the distorted metal that is left around the cylinder neck after the removal of the collar.

#### **FEATURES**

 The CCR-75 will also perform a variety of tasks not related to collar maintenance such as loosening cylinder caps, valves, pipe joints, and other threaded assemblies, which have become corroded or frozen in place.

#### **OPERATION**

 The CCR-75 is placed over the cylinder neck and slowly rotated 360 degrees, while hammering back the metal around the top edge of the neck, to allow the new collar to be slipped into place.



#### **SPECIFICATIONS**

Dimension
Air Requirements
5 CF
Weight
Six months

# **NPT-1010 Collar Attachment Tool**

The **NPT-1010** speeds cylinder collar maintenance by rapidly installing the collar on the cylinder neck.

#### **FEATURES**

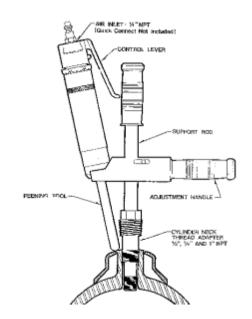
- The NPT-1010 uses a lightweight air driven ram to securely attach the collar in less than one minute.
- The NPT-1010 is adjustable to fit 1/2" and 3/4" and 1" NPT cylinder neck threads. Adapters to fit other size neck threads are available from Galiso.

### **FEATURES**

- Position a pre-sized collar on the cylinder neck and insert the NPT-1010 into the cylinder opening.
- Activate the pneumatic ram to rapidly peen the outer edge of the cylinder neck over the inner lip of the collar. This creates an even, professional looking attachment which holds the collar in place on the cylinder neck.

#### **SPECIFICATIONS**

•	Dimensions	
•	Air Requirements 90psi clean filtered air	
•	Warranty Six mont	ths





# **GMAH Galiso Mini Air Operated Hoist**

The GMAH (Galiso Mini Air Operated Hoist) is an air driven hoist that is preferred to meet the high production rate of the Recortest III Test System, and is also ideal for the Recortest/Open and the GTC Test Systems.



#### **Features**

- •The GMAH comes with a standard 10 foot chain assembly.
- •The GMAH Hoist Assembly includes a chain container and pendant control
- •The GMAH is capable of lift speeds up to 130 feet per minute.
- The GMAH has a 100% Duty Rating
- Very Low Headroom, and Variable Speed Control
- Patented Wear Resistant Brake System

#### **Specifications**

•Dimensions5" H	(incl. Hooks)	15 3/8" L x 6" W x
• Dimensions feet		Lift Chain: 10
Air Requirements		85 PSI

Model Numbers: GMAH-275, GMAH-550, GMAH-1100, GMAH-2200 Maximum Rated Capacity: 275 lbs., 550 lbs., 1,100 lbs., 2,200 lbs



# The World Class Hydrostatic Cylinder Test Facility

At the heart of the modern hydrostatic test facility is the patented **Recortest III Automated Test System** from Galiso, Inc. Along with a full complement of technologically advanced support equipment, one will obtain unbeatable testing speed, accuracy, and simplicity of operation. With the benefit of Galiso's test systems one can truly maximize the number of cylinders tested—each and every shift.

Every Galiso component is engineered and manufactured to be highest quality standard thus ensuring trouble free operation. When operational, service, or equipment training questions arise, Galiso has the best Customer Support group in the industry—ready to help you!

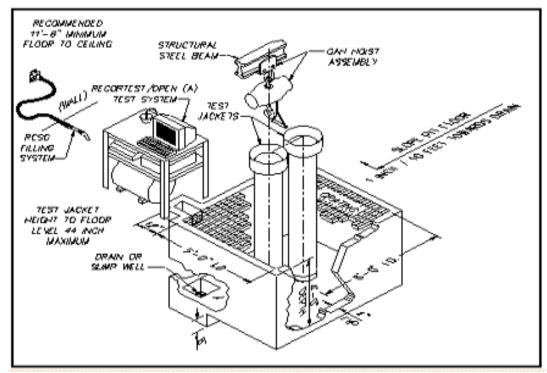
### The Complete Galiso Test Facility Begins with the Recortest III System and is Supported by:

- GVM-16G High Speed Turn air Valving Machines
  - RCSG or CFS Automatic Cylinder Filling Systems
  - GAH Air Operated Hoist
  - PCT Cylinder Inverter and Drier
  - ISB Internal Shot Blasting and VST-9 Tumbling Systems
  - External Shot Blaster
  - Opti-Life Inspection Light Kit
  - GTK Cylinder Tool Kit

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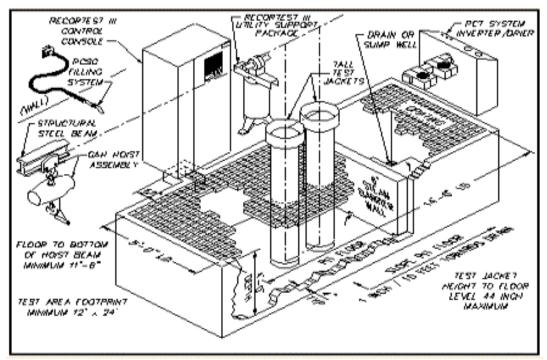
# **Suggested Test Pit Layouts**

Before installing hydrostatic testing systems for compressed gas cylinders, Galiso suggest facility preparations similar to the following basic pit configurations for optimum performance.



**Illustration 1** 

Suggested for a standard tall test jacket installation, with ample room to add a second test jacket at a later date without additional construction cost.



**Illustration 2** 

This extended pit is for a standard tall test jacket(s) installation, but accommodates the PCT Inverter Drier series with a dump area, complete with steam barrier.



# **Hydrostatic Equipment Set-Up Checklist**

Please consult the <u>Systems Selection Guide</u> and complete the Hydrostatic Test Systems Survey to help us evaluate your needs.

# To Keep On-Target Use This Handy Checklist

I. ☐ Place System Order	8. Test Pit Completed
2. ☐ Schedule Installation and Training	9.  Air, Water, Electrical in Place
B. ☐ Contact D.O.T. for Application	10. ☐ Set-up and Operator Training Completed
4. ☐ Order 49 CFR Booklet, Parts 100-185	11. ☐ On-Site IIA System Inspection
5.  Order CGA Pamphlets	12. ☐ Submit Application to D.O.T.
6. ☐ Complete Function Specific Hazmat Training	13. Receive Retest Identification Number
7. ☐ Schedule IIA Inspection	14. ☐ Hold Open House!

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# **Customer Service.**

**Galiso Customer Service Department** is renowned for its dedication to customer support, employing five full-time customer service representatives. Occasionally you may have a question regarding compliance or an operator may have some difficulty with a particular

cylinder. By phoning Galiso, Inc. there is immediate help and direction to get you back on track. Our Customer Service Department will

step you through a procedure, analyze and troubleshoot a problem, and offer the solution.

We are pleased that you have chosen Galiso, Inc. products for your test system and we are ready to provide qualified assistance.

your partner, we can help you make informed decisions about your future. We pledge to you our full support in getting you started on the

right foot and staying with you in the future.

### THE IMPORTANCE OF SET-UP AND TRAINING

To ensure customer satisfaction and minimize start-up difficulties, our policy is to include set-up and training with each automated system

sale. This procedure is user proven, and when your system is professionally set-up, trouble-free performance ensures a faster return on investment.

Purchasing a Galiso automated test system or Galiso's new manual test system represents a major step forward for companies that have hydrotested with the old manual systems for many years. Upgrading to this technology means better productivity, greater accuracy, and eliminations of calculation errors in test results.

To accomplish this, Galiso Inc. has introduced electronics and computer automation into the process. Experience convinces us that regardless

of the level of competence with the hydrostatic process, and the understanding of computers, using this modern test process is greatly enhanced with proper set-up and training by Galiso's technical field staff.

Galiso Inc. is committed to furthering its dominant role in this industry through the manufacture of quality products that bring productivity to our valued customers. Customers are vital to this commitment, and set-up and training is an integral part of serving our customer.

### COMMITTED TO SERVICE AND CUSTOMER SUPPORT!!!

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We are pleased that you have chosen Galiso, Inc. products for your test system and we are ready to provide qualified assistance. As your partner, we can help you make informed decisions about your future. We pledge to you our full support in getting you started on the right foot and staying with you in the future.

#### The importance of set-up and training

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#### Committed to service and customer support



Chris Storeng



Steve Hallenborg



Scott Morton



Ricky Wright



Timothy Coughlin



# **Section 5**

# **Sales Support and Planning**

The World Class Hydrostatic Cylinder Test Facility
Galiso Test Systems Selection Guide
Hydrostatic Equipment Set-up Checklist
Suggested Test Pit Layouts
Hydrostatic Test System Survey
Leasing Opportunities



Sales, Jon Davignon



Sales Manager, Ray Lesniewski

Fax: 970/249-0607 E-mail: <u>Sales</u> Web: <u>www.galiso.net</u>



# Leasing Opportunities

You can now buy a <u>complete</u> test system with support equipment for under \$16,000. Galiso, Inc. can arrange a third-party lease program tailored to the term and cash flow needs of your company.

**OVERCOME BUDGET RESTRICTIONS -** Obtain the equipment you need when you need it. Eliminate large down payments!

100% FINANCING - not 20% or 30% down. Let your working capital do what it does best: WORK!

**LEAVES BANK CREDIT LINES UNDISTURBED -** The credit benefit that doesn't affect your credit!

**LOWER TAXES -** The entire lease payment may be deducted as an operating expense! Call our Sales Dept. for a review of how leasing can benefit your firm and talk with your accountant about recent government tax incentives. Leasing now is a wise way to maximize your dollars.

**HEDGE AGAINST INFLATION -** Use the equipment at today's cost while meeting your payments with tomorrow's inflated dollars.

**EASIER WAY TO OBTAIN CREDIT -** Up to \$75,000 with application only: approved within 24 hours.

**FIXED PAYMENTS -** With leasing, there is no uncertainty over a floating rate. The monthly payment is fixed and will not change, regardless of future economic conditions.

Look at these examples: low monthly rates: (3 year term - \$1 buy-out)

Purchase Amount	Monthly Lease Rate*
\$10,000	\$343.00
\$15,000	\$515.00
\$20,000	\$687.00

(To estimate the cost of a 36 month lease, use this formula: Equipment cost \$13,750 X \$36.00 per \$1,000 = \$495.00 per month (Rates DO CHANGE)

Galiso, Inc. maintains a relationship with reputable, leasing agents who know and appreciate our equipment and are eager to serve your needs. Please contact our Sales Department to make sure you have included hardware, peripherals, software, and freight charges to determine the actual cost to be funded.

To learn more about leasing with **DIMENSION FUNDING, LLC**, visit their website at: http://www.dimensionfunding.com/ or by clicking on their Logo below.

You may call Dimension's Agent, Naomi Phillips at 800-755-0585 ext. 212, or Email her at: <a href="mailto:nphillips@dimensionfunding.com">nphillips@dimensionfunding.com</a>
To fill out Dimension's <a href="mailto:CREDIT APPLICATION">CREDIT APPLICATION</a>, please click <a href="mailto:here.">here.</a>



<sup>\*</sup>Subject to current interest rates



# **Galiso Test Systems Selection Guide**

System	Test Console Type	Test Jackets	Nominal Test Rate	Test Log
Rec 4 - Jacket System	Computer Controlled FULLY-Automated Testing	2 To 4 12 To 36 Inch. Dia.	25 To 30 Cylinders per hour	Printed
Rec 4 - Open Test System	Computer Controlled SEMI-Automated Testing	1 To 2 12 To 36 Inch Dia.	10 To 15 Cylinders per hour	Printed
GTC 10K	Manually Controlled Testing	Single. 12 To 36 inches Dia	6 To 8 Cylinders per hour	Manual *

#### **NOTES:**

**Software:** Both Recortest Test Consoles contain software to compute expansion calculations, notify the operator that the cylinder passed or failed, and prints out a complete and accurate test log of daily test results.

\* The GTC Test Console is available with an optional *Hydrolog* software package to use with a customer supplied PC and printer. Information taken from the console is keyed into the PC to perform expansion calculations, indicate test results, and provide a printed daily Test Log.

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### **Hydrostatic Test System Survey**

Thank you for inquiring about our test systems. We ask you for the following information to properly quote a system specific to your needs. If you have any questions while answering the survey, please call our office at 800/854-3789 and ask for our Sales Department. Upon completion, please fax this document to us at 970/249-0607.

YOUR COMP	ANY:					
LOCATION: _	LOCATION:					
CONTACT: _						
PHONE:			FAX:			
Are you presently using a hydrostatic test system?						
MANUFACTU	RER:	MODEL:		YEAR:		
TEST JACKET	(S): DIAMETER:		LENGTH: _			
YOUR PIT DIM	ENSIONS ARE: LENGTH:		WIDTH:		DEPTH:	
<b>CURRENT</b> MAXIMUM NUMBER C		NDERS TESTED PE	R HOUR: _		_ HOUR:	
PROJECTED N	MAXIMUM NUMBER OF CY	LINDERS TESTED	PER HOUR,	PER DAY:		
HOW MANY CYLINDEF	RS PER HOUR OR PER DA	Y DO YOU WISH TO	O TEST			
	T CYLINDER IN INCHES Y					
WHAT IS THE TALLES	I CTLINDER IN INCHES T	OU PLAN ON TEST	ING	WHALIST	HE DIAMETER	
	Check each of the f	ollowing cylin	ders that	you will	be testing:	
		STELL	☐ ALUMII	NUM		
□ OXYGEN		MEDICAL "D & E"		□ FII	RE EXTINGUISHER	
☐ SCUBA		ARGON		□ C	02	
☐ SCBA		PROPANE		□ H/	ALON	
□ CO2		FREON		□ O	THER: (Please Specify Below	
□ N2		CHLORINE				
	CYLINDER DIAMETER: \$	SMALLEST:		LARGEST:		
	CYLINDER HEIGHT: SH	ORTEST:		ΓALLEST: _		
	TEST PRESSURES (PSI)	: LOWEST:	H	HIGHEST: _		
	CYL. EXPANSION (CC): N	MINIMUM:	N	MAXIMUM:		
	CYLINDER THREADS AR	E: TAPERED:	S	TRAIGHT:		
	CYLINDER NECK INNER	DIAMETER: 1/2": _	3	3/4":	_ 1":	
	Test typ	e required: Ma	rk as app	olicable		
☐ WATER JACKET		DOT CFR 180.205			BS EN 1802:2003	
☐ PROOF TEST		BS EN 1968:2002	N 1968:2002 □ BS EN 1802:2002		BS EN 1802:2002	
		BS EN 1968:2002				
Do you require a data	logging facility (PC Ba	sed)? 🗆 Va	s □ No			
jou loquii e a uata	ggg racinty (FV De		10			

Cylinder Dryer?	Cylinder Vice?	Cylinder Valver-De-Valver?
	ameter	Thread (NPT, BSP, etc)
Total dimensions of tes	t area (length and width)	
DO YOU HAVE A WATER HI	EATER INSTALLED? Yes No	
HEATER MAXIMUM TEMPE CAPACITY (GALLONS)	RATURE (180° F REQUIRED)	
DO YOU HAVE AN EXISTING	G COMPRESSOR? ☐ Yes ☐ No	
		If yes, Maximum PSI
		Maximum SCFM
		Horsepower
Pneumatic Supply		
Pneumatic Supply Nitrogen ☐ Yes ☐ No	CO2 □Yes □No	Workshop Air ☐ Yes ☐ No
Nitrogen ☐ Yes ☐ No	CO2 □ Yes □ No Cycles (Hz)	. – –

Thank You Again!

# INDEPENDENT INSPECTION AGENCIES

# **DOT Cylinder Requalification Program, August 2001**

### (1,2,3,4) Arrowhead Industrial Services, Inc.

Mr. T. F. Vassallo Ph: (252) 237-6663 Mr. John P. Vassall Ph: (336) 578-2777 Fax: (336) 578-2929 3537a S.N.C 119 Graham, NC 27253

## (1,2,4) <u>T.H. Cochrane Laboratories, Ltd.</u>

Mr. P. A. Harris Mr. John A. Harris Ph: (414) 476-2500 Fax: (414) 476-2542 5803 Wext National Avenue Milwaukee, WI 5321-3491

### (1,2,4) Cylinder Services, Inc.

Mr. Russell Stading Ph/Fax: (262) 827-0422 15270 Westover Road, P.O. Box 52 Elm Grove, WI 53122

### **Robert W. Hunt Company**

Mr. Gregory F. Rzonca
Ph: (630) 691-4333
580 Waters Edge, Oak Creek Center
Lombard, IL 60148

### (1) Hydrostatic Pressure Testing

- (2) Acetylene Cylinder Requalification
- (3) Acoustic Emission and Ultrasonic Testing under exemptions.
- (4) DOT 4 Series Cylinder Repair/Rebuild

Catalog Table of Contents

Galiso, Inc.® 1-800-854-3789/+970-249-0233

Home

#### (1,2,3,4) Steigerwalt Associates

Mr. E. E. Steigerwalt Ph: (610) 437-1704 Fax: (610) 437-4545 1121 South 24th. Street Allentown, PA 18103

### Professional Services, Icn.

Mr. David A. Dunn Ph: (630) 691-1490 1901 S. Meyers Rd, Ste. 400 Oakbrook Terrace, IL 60181

# Galiso, Incorporated Building Success One Customer at a Time



For the convenience of our customers, Galiso Incorporated accepts payment by:

# Master Card, Visa and American Express







If you wish to pay by Credit Card please let us know at the time the order is placed!

Customer Must Specify Exact:

- Account Number
- Expiration Date
- Name as it appears on the card
- Interbank Number, if shown

Credit card Shipments can be made to a street address only.

# Galiso Product Warranty

- DURATION: Galiso provides a one-year warranty from date of purchase, to the original purchaser, for standard
  products, unless otherwise specified. For all spare parts purchases, Galiso provides a 90-day warranty unless
  otherwise specified. Soft goods such as our speed seals and O-rings, which are subject to wear in the normal
  course of operation, are not covered under this warranty.
- COVERAGE: Galiso manufactured equipment is warranted against defective materials or workmanship. THIS WARRANTY IS VOID IF:
  - A) THE EQUIPMENT HAS BEEN DAMAGED BY ACCIDENT OR UNREASONABLE USE, IMPROPER SERVICE/MAINTENANCE, IMPROPER INSTALLTION, ABNORMAL OPERATING CONDITIONS, NEGLECT, REPAIR BY ANY PERSON NOT AUTHORIZED BY GALISO, INC. OR OTHER CAUSE NOT RELATED TO MATERIAL DEFECTS OR WORKMANSHIP.
  - B) THE SERIAL NUMBER HAS BEEN ALTERED OR DEFACED.
- 3. PERFORMANCE: Galiso reserves the right to make warranty determination only after inspecting the item at the Galiso manufacturing facility. If the warranty determination indicates that the defective item is covered under warranty, the item will be repaired or replaced with same parts/items, or parts/item of equivalent quality, at the option of Galiso. If warranty replacement is necessary, the replacement until will continue under the original equipment warranty or carry a 90-day warranty, whichever is longer. No charge will be made for warranty repairs, and/or replacement. All freight are the responsibility of the customer requesting warranty service.
- CLAIMS: In the case of equipment malfunction, notify Galiso (1-800-854-3789) and provide the Model Name, Model Number, Serial Number and a description of the problem. A return Authorization Number will be issued.
- 5. SERVICE EQUIPMENT: Galiso attempts to make available, whenever possible, a limited amount of service equipment at a minimal use charge, plus freight expense, for those customers wishing to avoid downtime during repair of their equipment. Such items are available on a first come, first served basis and are billable at the specific service charge applying with a one-month minimum.
- MODEL CHANGES: Galiso reserves the right to make changes in materials and specifications, without notice. Galiso may offer, for a stipulated fee, the opportunity to upgrade your equipment to the latest configuration.
- DISCLAIMERS: Galiso provides technical data assistance to aid customers in the selection and use of our products. There are no implied warranties of merchantability nor suitability for a particular purpose associated with the transmittal of technical data and/or customer assistance.
  - Galiso does not assume liability for any consequential or special damages. Liability under this warranty is limited to repairing, or replacing Galiso equipment items returned to the factory or an authorized facility.
- PC VIRUS PROTECTION: For Systems with Internet access, Galiso equips the PC with competitive virus protection software. Current virus subscriptions are mandatory, and are the responsibility of the equipment owner. Periodic updating may be required. Galiso does not assume liability for damages incurred due to any internet or network attacks.

Galiso Inc.





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