



Welcome to Galiso, Incorporated
Montrose Colorado USA

Dear Customer, Thank you for considering Galiso 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 customer service.

Address: 22 Ponderosa Court
Montrose Colorado 81401
Email: sales@galiso.com

1-800-854-3789

1-970-249-0233

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Welcome

We here at Galiso are excited that you are considering us for your gas cylinder equipment needs. We look forward to providing you any assistance we can to help make your company a great success. From startup to finish we can provide you with the best equipment, training and support in the Industry. Whether you are looking for off the shelf solutions or have a custom situation that we can be of assistance with we look forward to the opportunity to work with you.

Galiso has been in business since 1962 providing excellent equipment and support through out the industry. We have been fortunate to be able to grow and adapt as the industry needs have changed, leveraging newer technologies and design to increase production and reduce maintenance downtime and costs. We are dedicated to assisting all of our customers to provide safe, efficient equipment to better serve the overall safety standards in the gas cylinder industry.

So please enjoy the products that we have put together in this catalog and if you are ever in the Montrose Colorado area come by we would really enjoy meeting with you personally.

Again I want to personally thank you for your interest in our product and our company and look forward to assisting you in any way that we can.

Thanks again

Richard Wright

President Galiso Incorporated



Becoming a Professional Hydrostatic Tester

Here is the information you need for each phase of the process of complying with regulations and becoming a professionally-trained and well-equipped test facility:

- **Select your equipment:** Your Galiso representative works closely with you to identify your projected daily volume of testing, cylinder types and sizes, air and electrical requirements, plant layout, test pit considerations and other pertinent details to assure your system is designed to meet your needs. Please contact the Galiso Sales Department for a quote.
- **Schedule Installation and Training:** After Galiso has received your order, your ship date is scheduled and installation and training details are mutually coordinated with you by our technical staff to ensure trouble-free start up and operation.
- **Contact the Pipeline and Hazardous Materials Safety Administration (PHMSA)** To start the registration and certification process. Information is found on the PHMSA website under [***“Procedures for Application for Approval to Requalify DOT Cylinders”***](#)

The cylinder re-tester must contact one of the approved Independent Inspection Agencies to arrange for an inspection of their facility.

[**List of Independent Inspection Agencies -- DOT Cylinder Requalification Program**](#)

After the inspection, the Independent Inspection Agency must complete a report and forward the report to the cylinder re-testers.

It is the responsibility of the applicant to submit: (1) a complete application (can be in any format as long as it contains all of the required information set forth in [**Section 107.805**](#); and, (2) the Independent Inspector's report.

The applicant should have at the time of inspection:

A copy of Title 49, Code of Federal Regulations, Parts 100-199 or reprint. Copies of this document may be obtained from:

Superintendent of Documents
U.S. Government Printing Office
Washington, D.C. 20402
(202) 783-3238

[**Click here for Electronic Code of Federal Regulations \(e-CFR\)**](#)

- **Order required documentation:** The following publications are essential to comply with regulatory standards and must be present at all times for reference. Compressed Gas Association (CGA) required cylinder testing and inspection pamphlets C-1, C-5, C-6, C-6.1, C-6.2, C-6.3 and C-8 are available for purchase from Galiso or directly from the CGA by contacting them at (703) 788-2700.
- **Enroll for Hazmat Training:** Re-testers are required to have training designed to fulfill the initial and the three-year recurrent training requirement of 49 CFR 172.704(a)(1)&(2) General Awareness and Function Specific Training for Cylinder Retest Operators. Galiso recommends hazmat training available from [**CTC Seminars**](#). [**GALISO also provides Online Training – Hydrostatic Re-Qualification Slide Courses, Exams & more at the Galiso website.**](#)

SOE -Test Pit completed -Air, Water, Electrical in place -On-Site System Installation /Training -3rd Party Inspection Complete -Receive RIN

Questions? Call us toll free at 800-854-3789 or Call(970) 249-0233.

You may also e-mail our customer service department at: [**custsvc@galiso.com**](mailto:custsvc@galiso.com) or our sales department at: [**sales@galiso.com**](mailto:sales@galiso.com).

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 Reject Elastic Expansion), 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 for purchase from Galiso or purchase 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.

Testing Regulations and Guides

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. 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 Galiso's (DOT) 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 www.cganet.com :

Compressed Gas Association
4221 Walney Road, 5th Floor
Chantilly, VA 20151-2923
Phone: 703-788-2700



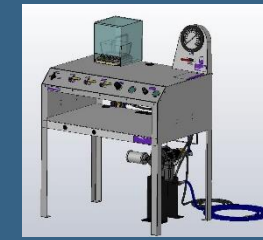
Water Jacket Tester



REC4



R40



GTC

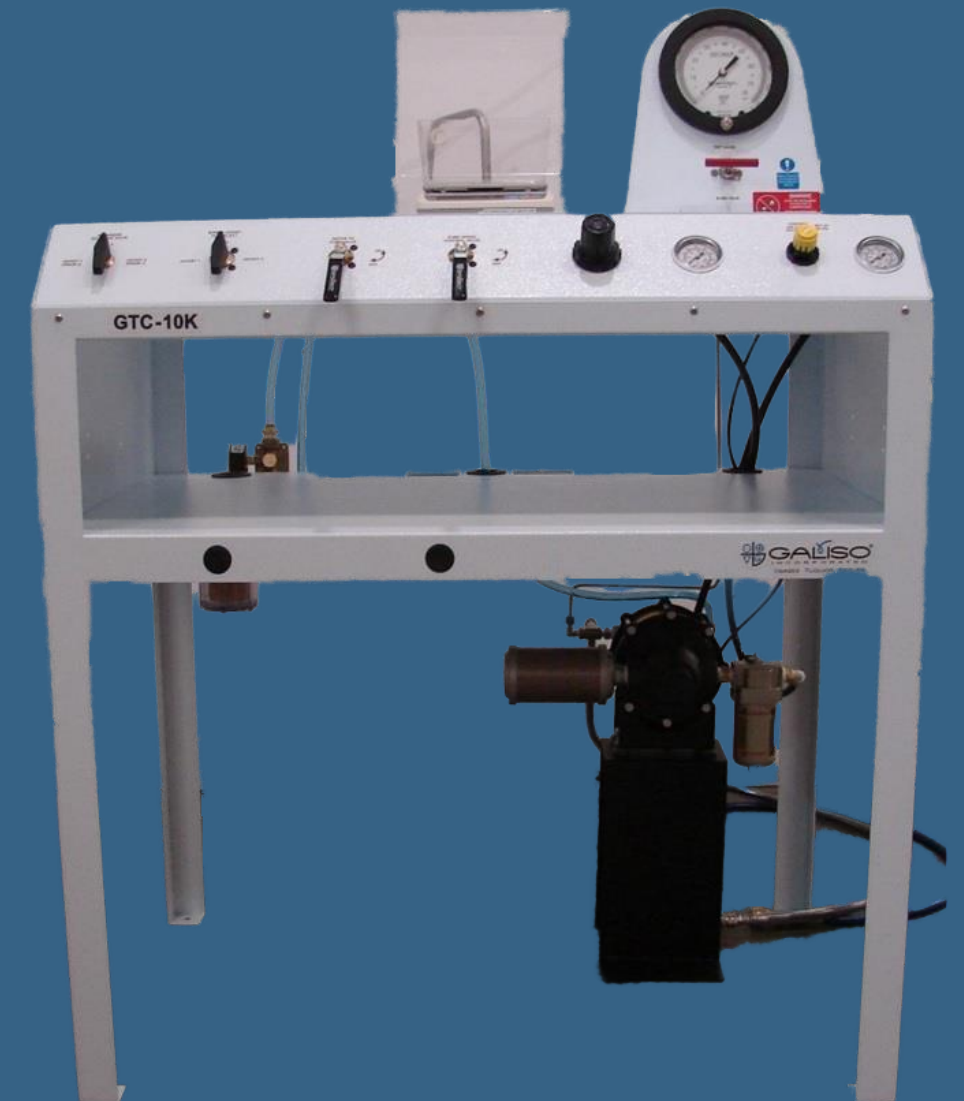
High Volume Enclosed
Computerized Test Console



Computerized Test Console



Manual Test Console

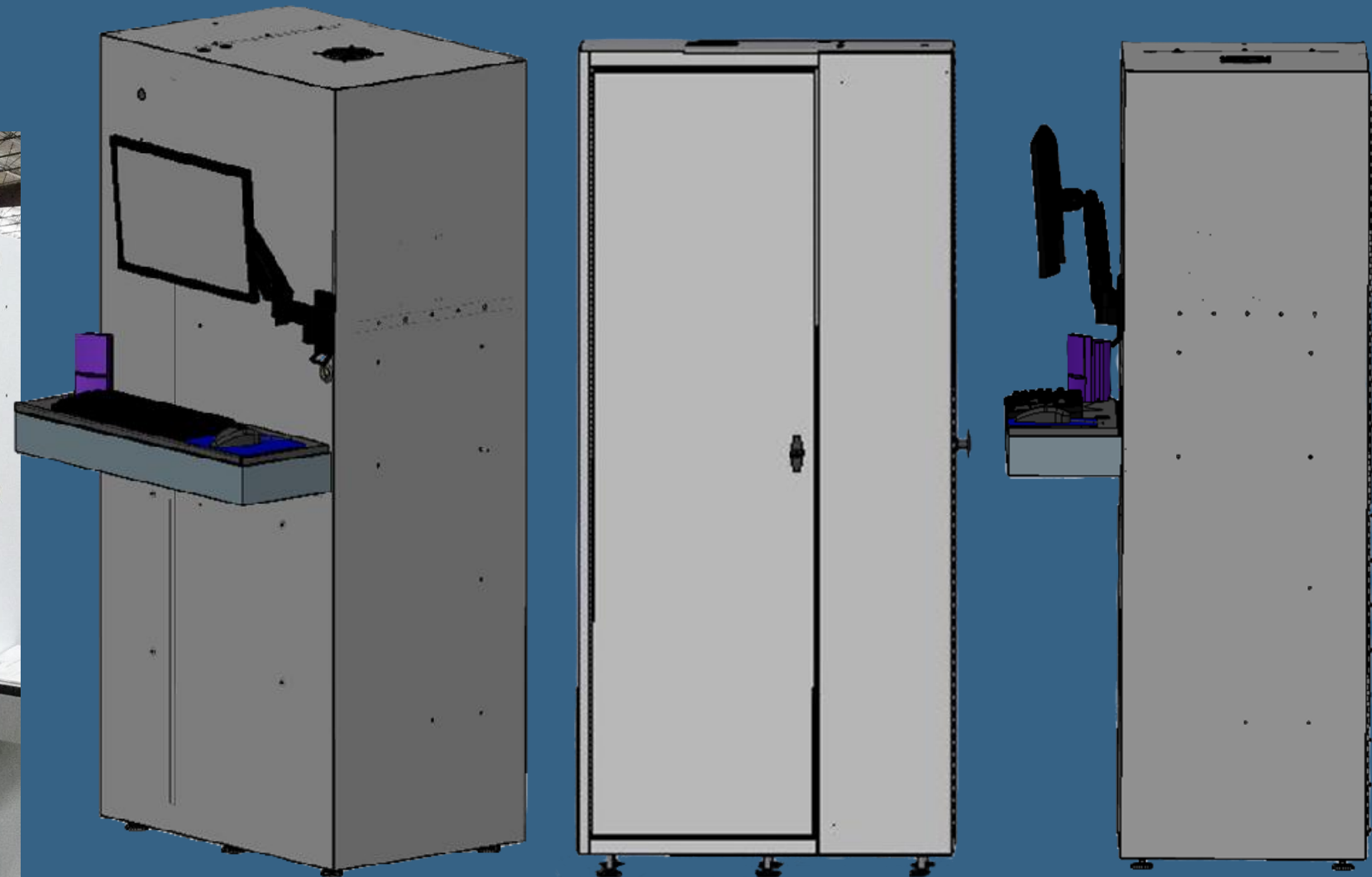


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 **GALISO**[®]
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REC4

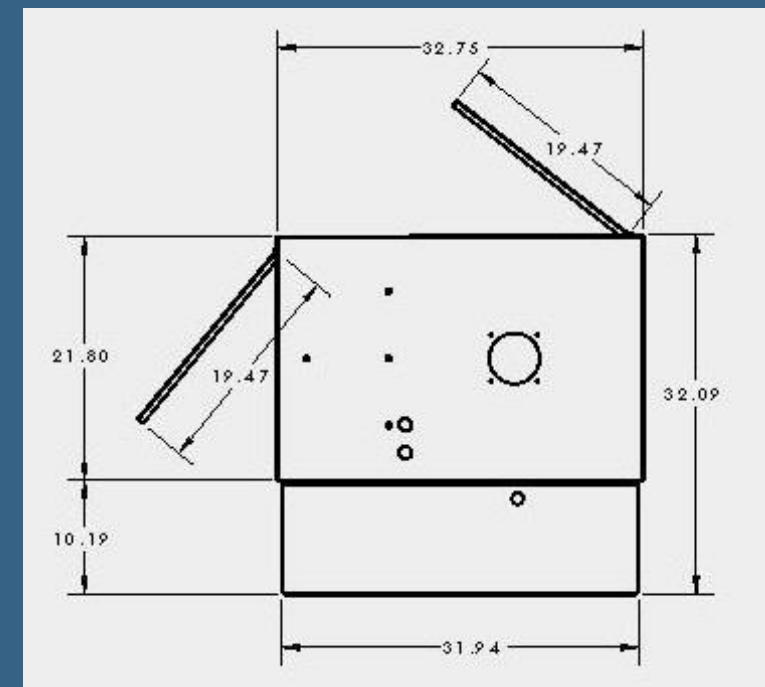


Utility Support Package (RSP) Required with Recortest 4

REC4 Comes with our largest PLC , the most valves, and the most options of any of our standard test systems. Fully contained powder-coated test console with Windows based Operating system. Allows serial # entry while a cylinder is testing. The console can be configured for the testing of cylinders alternatively or simultaneously. Networking capabilities for cylinder database that can be maintained separate from the console and used to pre-enter cylinder data.

The Test System components designed for the REC4 platform are centered on over 50 years experience in the industry and include components which have proven themselves to be the most reliable and repeatable over time.

Internet connectivity enhances Galiso's ability to communicate with and properly service our customer's system. It gives our customer the opportunity to upgrade their software and system over the internet.

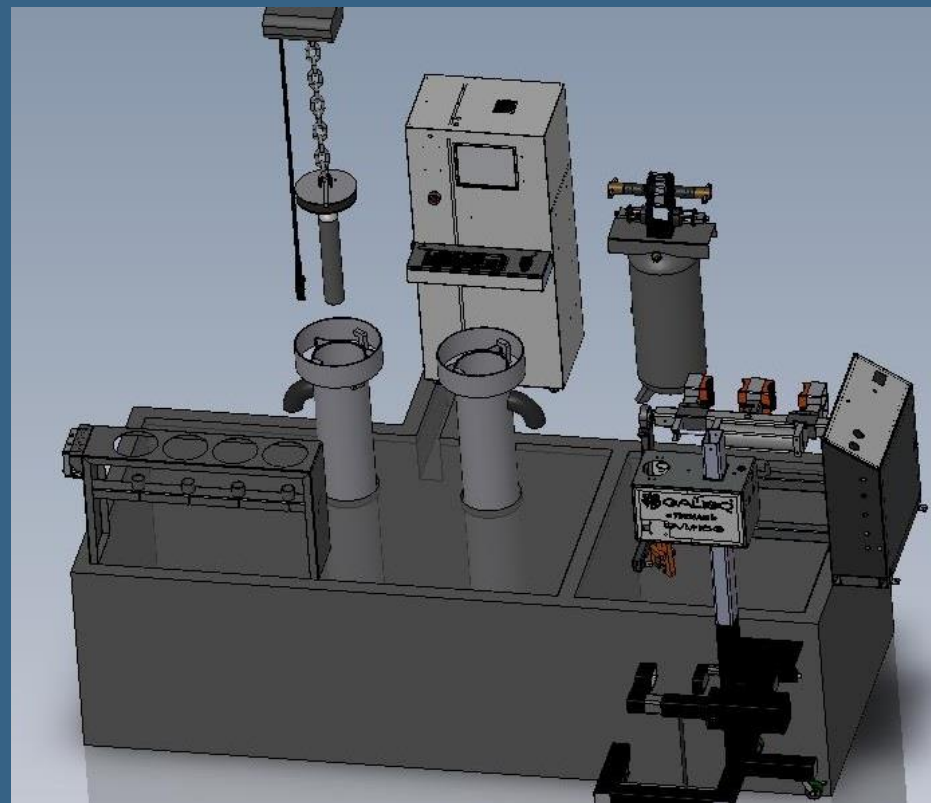
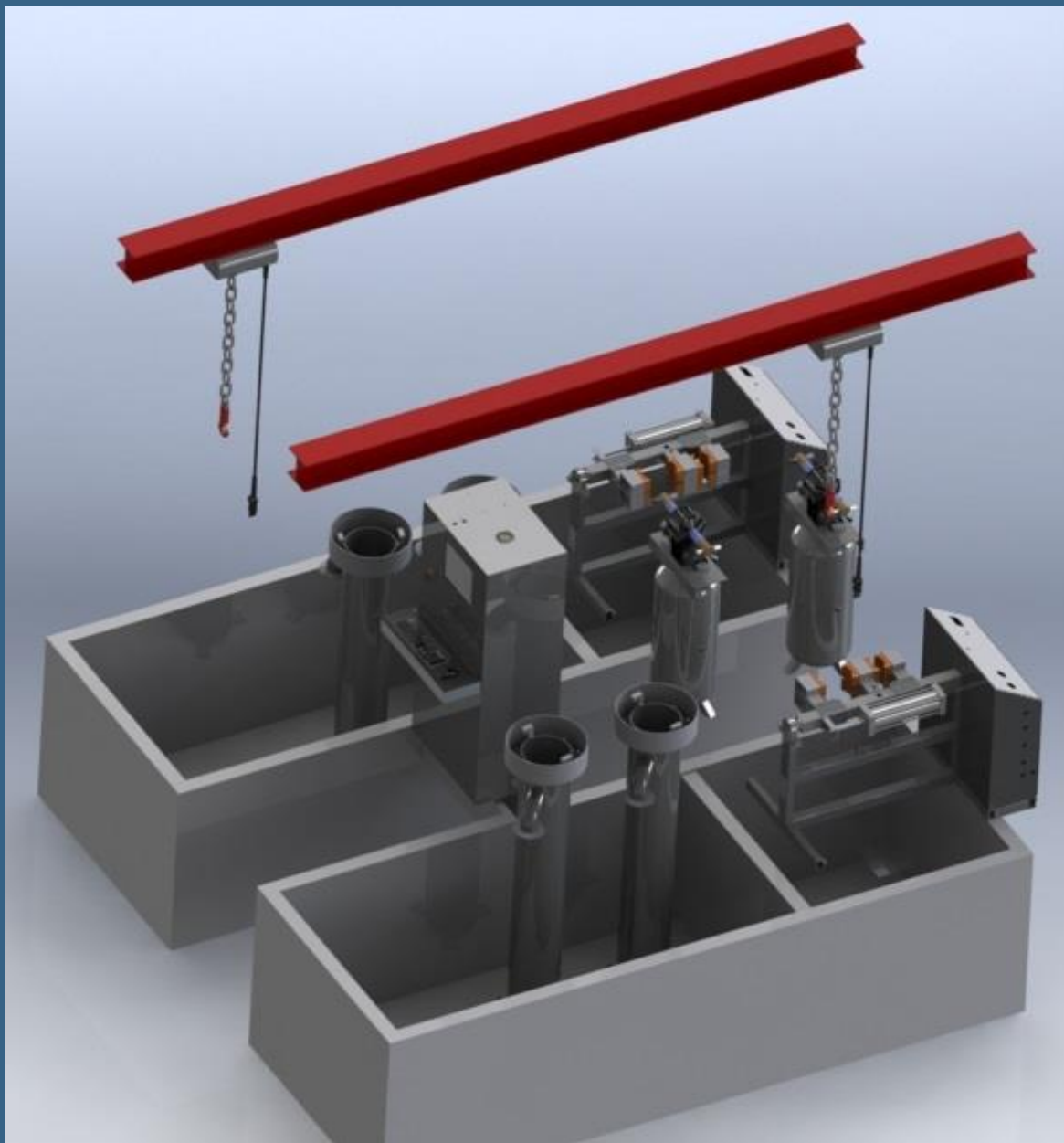


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www.galiso.com (800)854-3789

Electrical 5 Amps @ 110v or 220v 50/60HZ
 Water..... City Water Pressure
 Air..... 90psi Control Air



Configurations:
 Water Jacket 1 – 4+ Jackets
 Recirculation Automated with Gantry
 Direct Expansion
 Water Jacket w/ Direct Expansion

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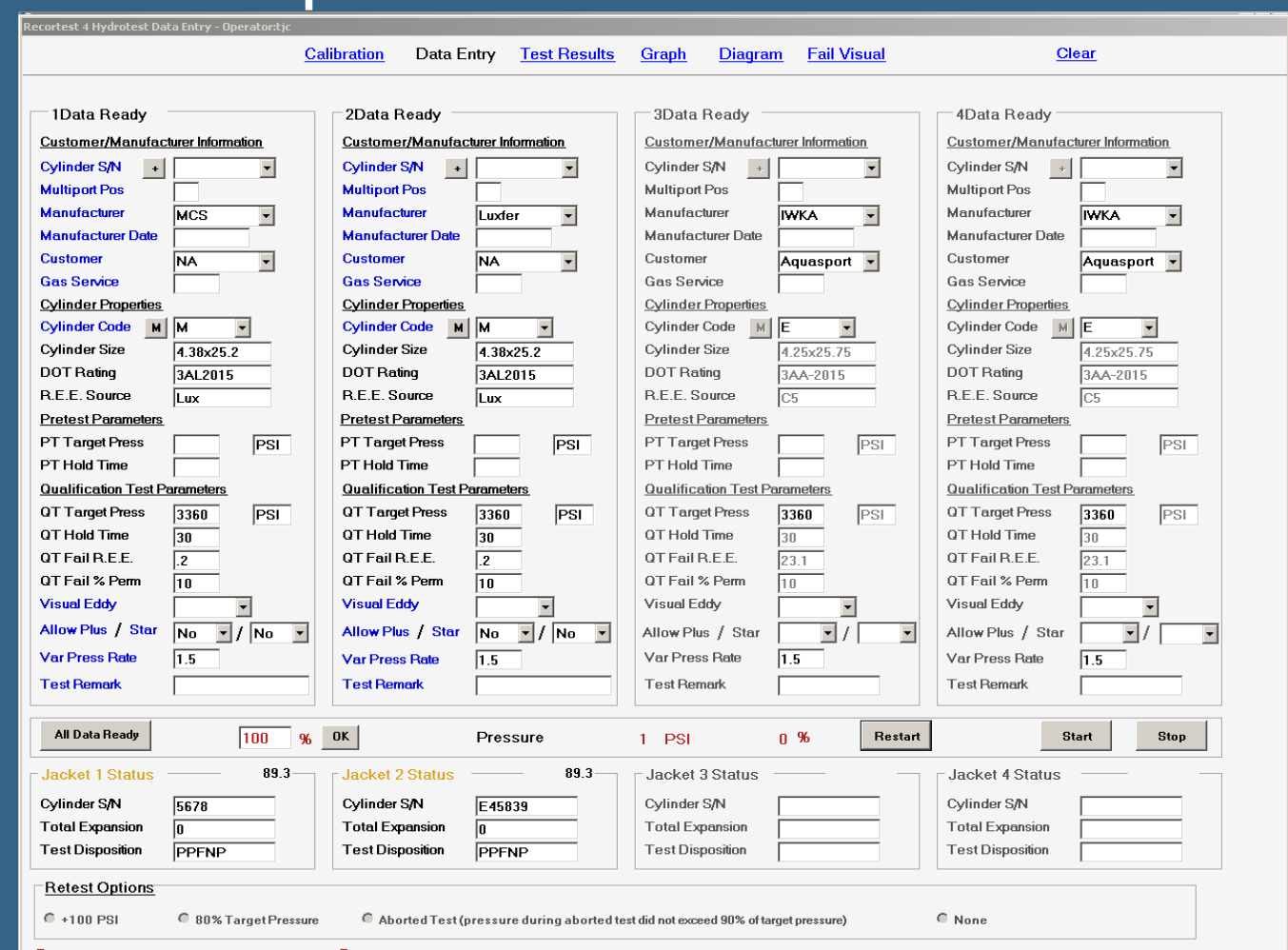
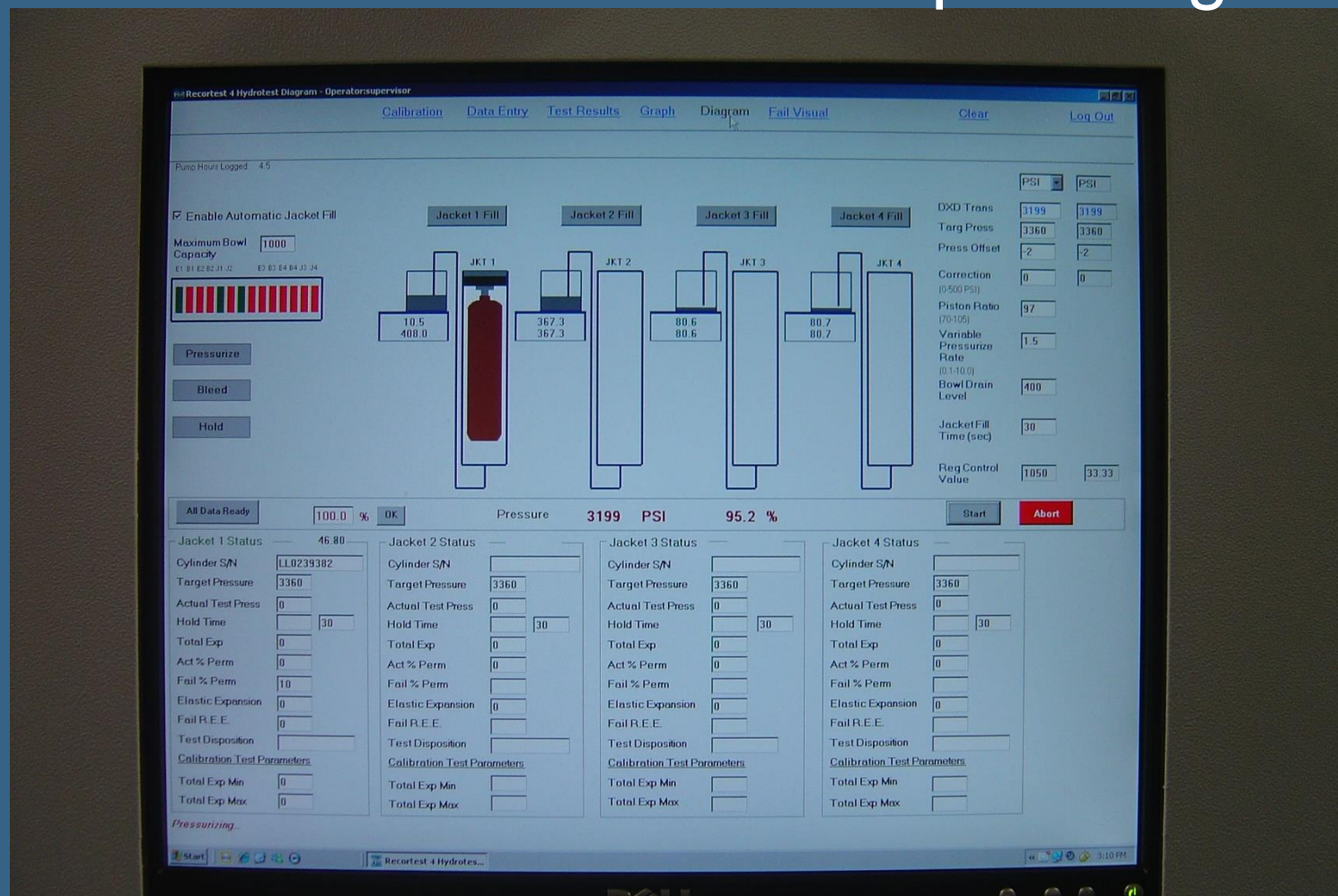


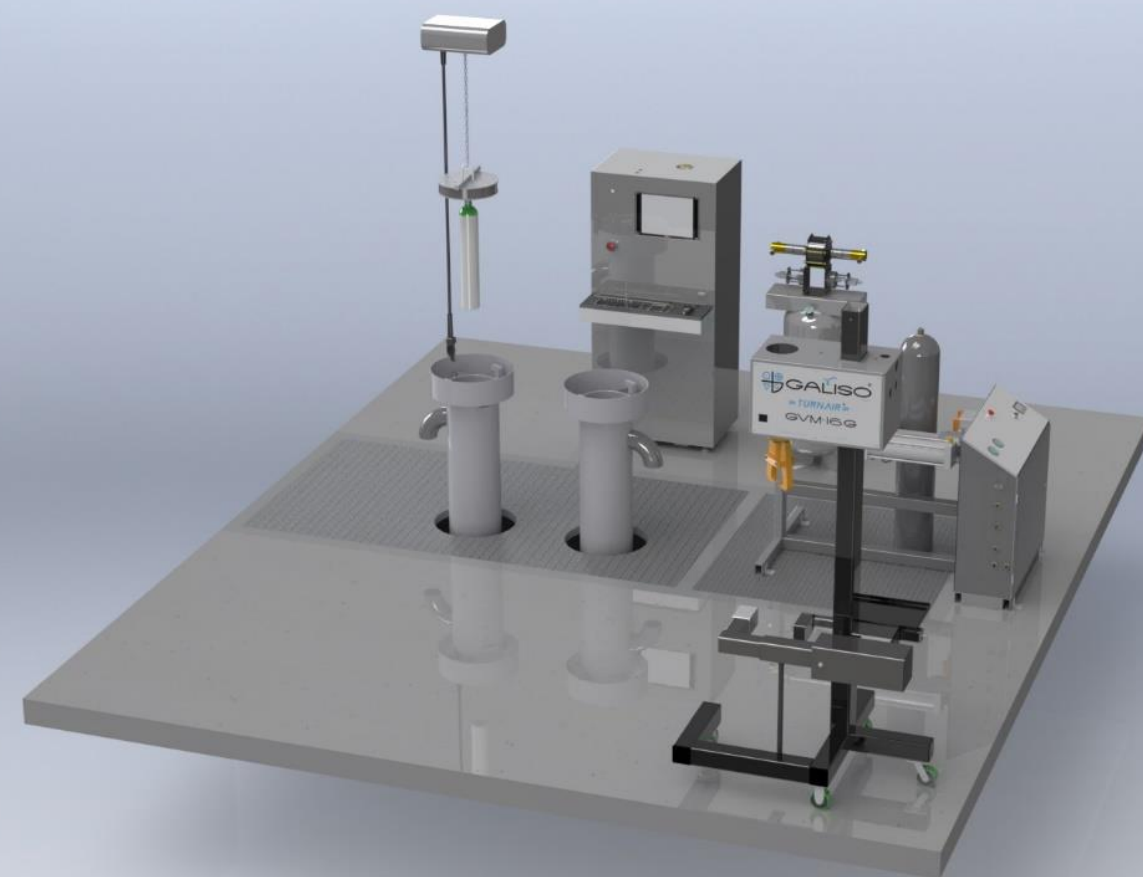
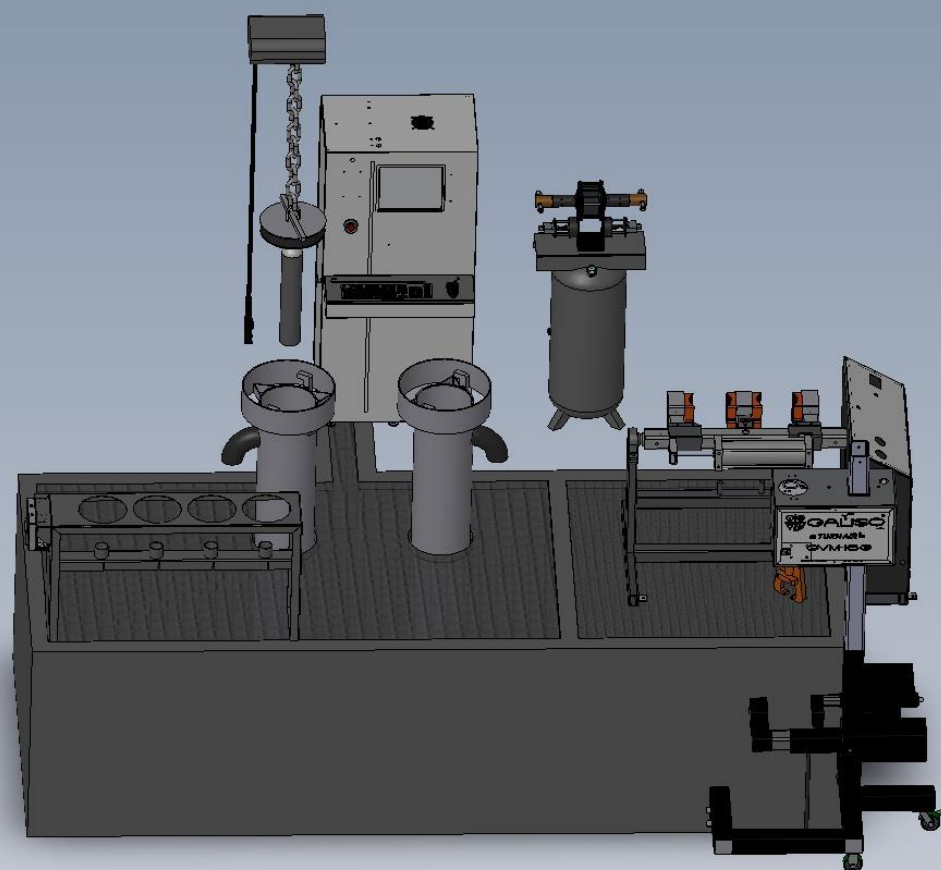
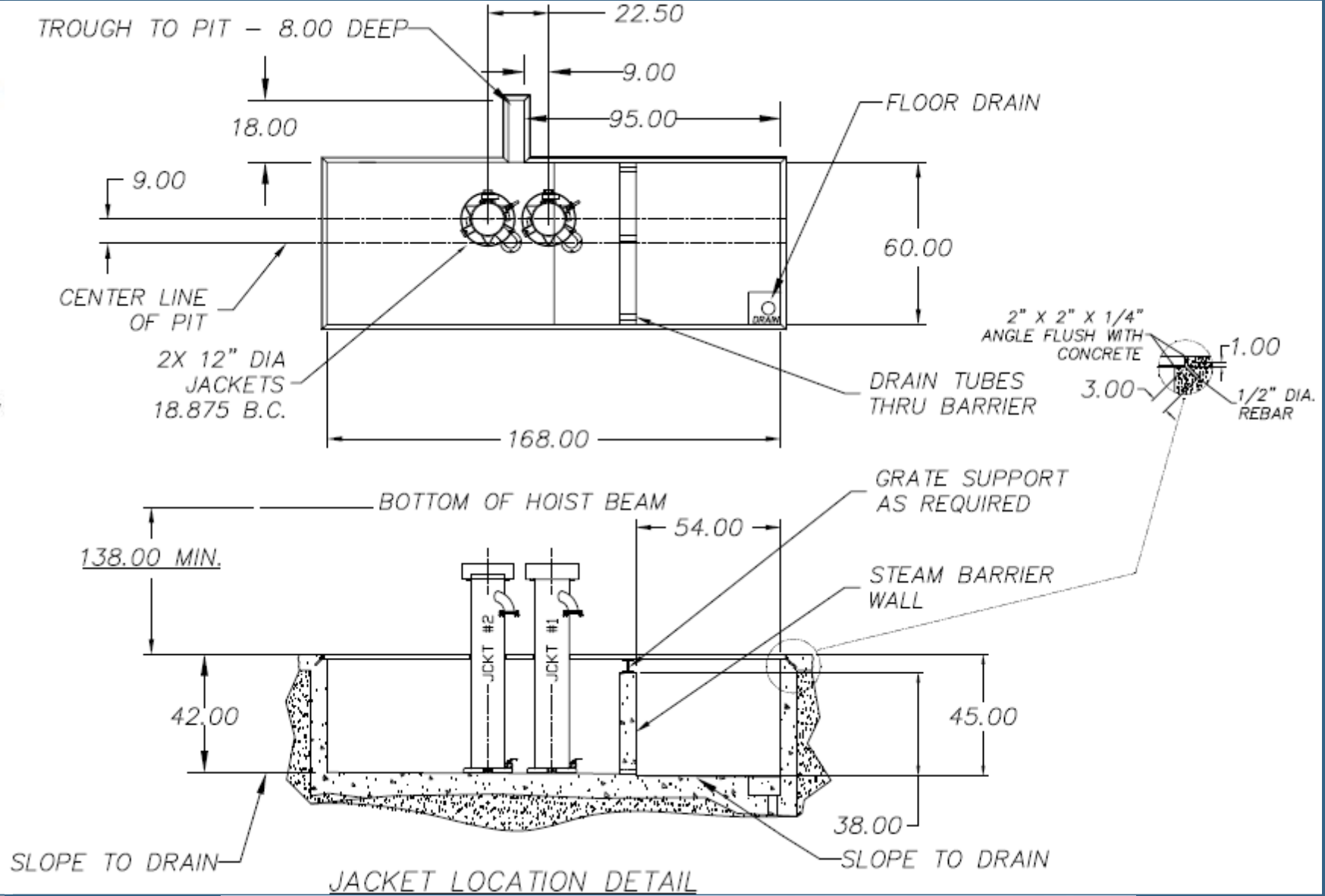
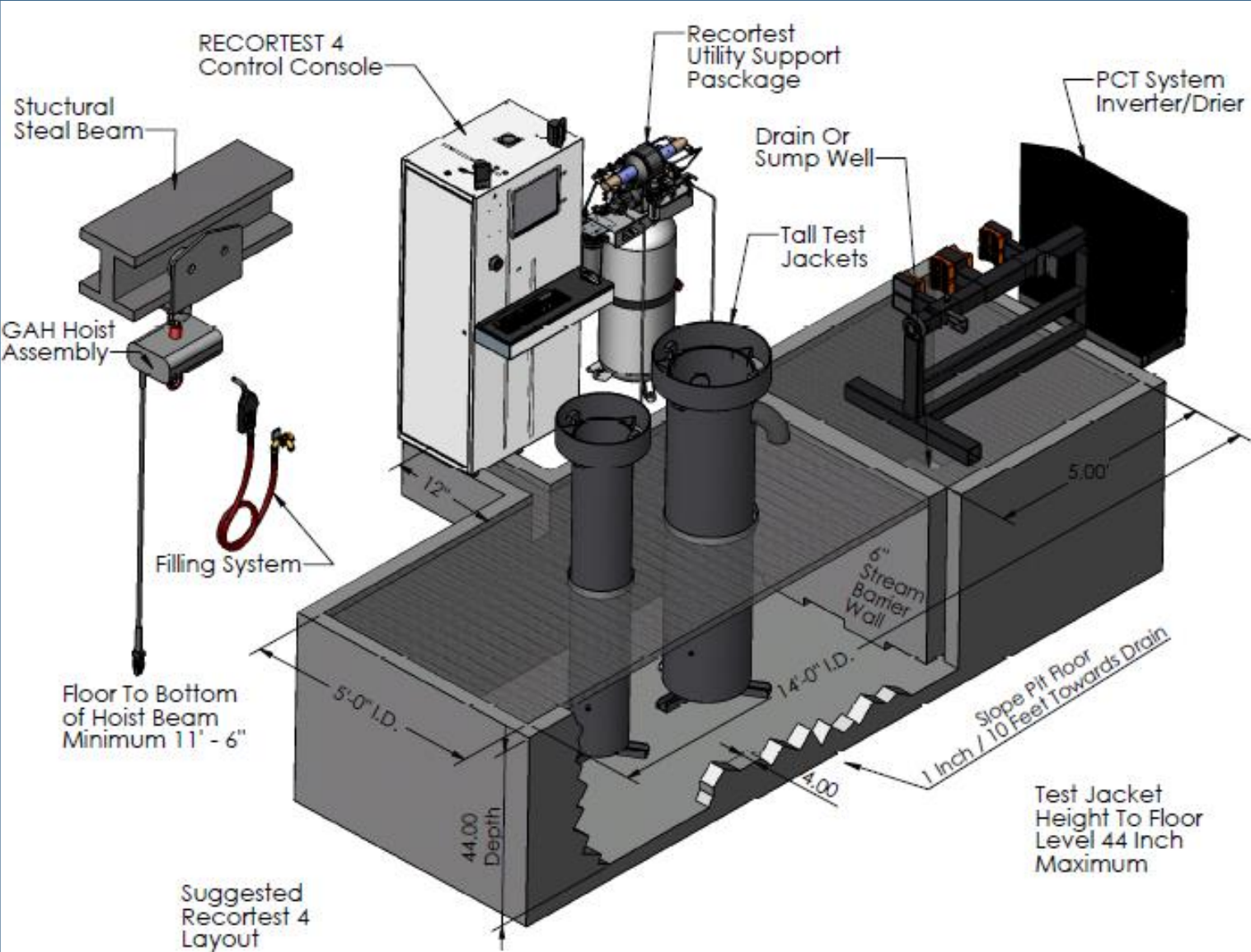
REC4 VIDEO





Multiple Weigh Bowl and Valve Options





RSP

High Pressure Water Pump Support Package provides rapid pressurization of 2 cylinders alternately or simultaneously at same test pressure.



E/P Regulator provides Computerized Pump Air adjustment (DAP systems only)

Double Acting Pump provides flow by pressurizing on the forward and back stroke which almost doubles pump output capacity

Clean Air Package Cleans Compressor Air to ISO8573 Class 1 Air Extending Life of the pump – Auxiliary Air Port for providing clean dry air to your PCT Inverter

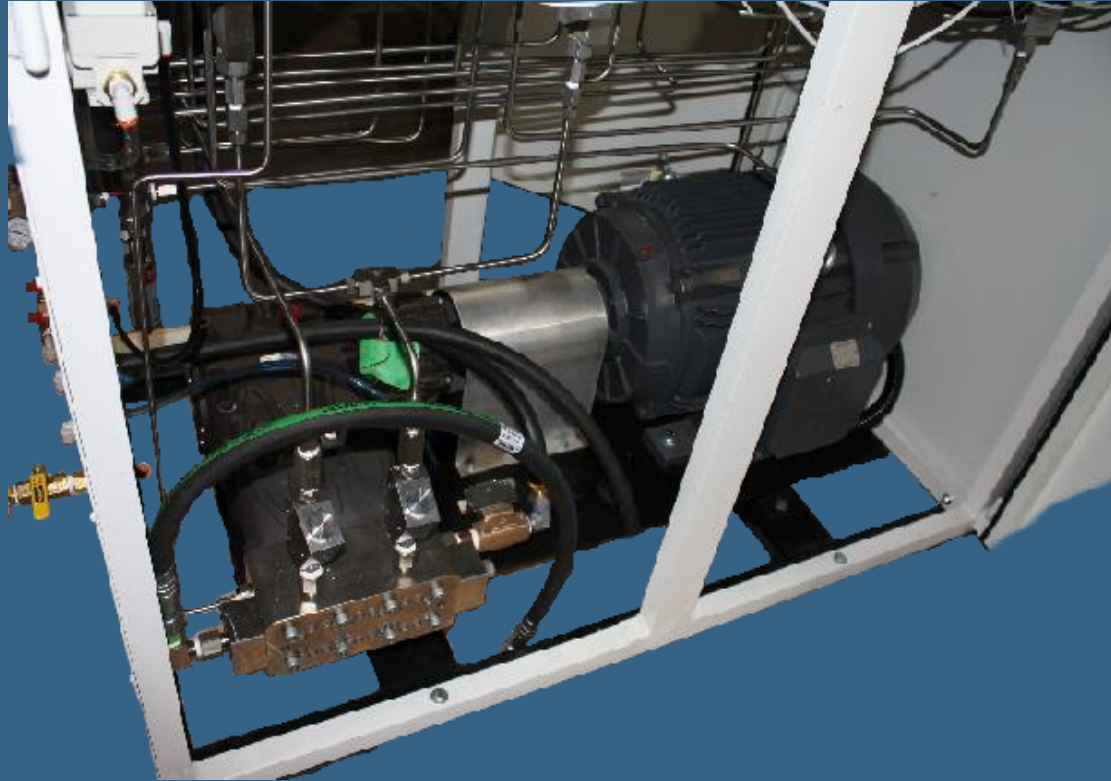


High Flow Electric Motor Driven triplex pumps
12.4gpm@5,800psi
4gpm@16,000psi

- Pressure's Available
 - RSP45 - 45,000psi
 - RSP35 - 35,000psi
 - RSP30 - 30,000psi
 - RSP25 - 25,000psi
 - RSP10 - 10,000psi
 - RSP6 - 6,000psi
 - RSP1 - 1,000psi
- | | flow@50% Capacity | flow@100% Capacity |
|-------------|-------------------|--------------------|
| (22,500psi) | .21gpm | (45,000psi) .03gpm |
| (17,500psi) | .29gpm | (35,000psi) .05gpm |
| (15,000psi) | .32gpm | (30,000psi) .1gpm |
| (12,500psi) | .37gpm | (25,000psi) .2gpm |
| (5,000psi) | 1gpm | (10,000psi) .5gpm |
| (3,000psi) | 1.8gpm | (6,000psi) 1gpm |
| (500psi) | 7gpm | (1,000psi) 5gpm |
- Dimensions.....79cm/31" L x 71cm/28" W x 142.2cm/56" H
 - Water..... City Water Pressure
 - Air Req..... 90-110 PSI/ 6.2 – 7.6 bar @ / 56CFM / 1.58 Cubic Meters per minute
 - Air Reservoir..... 30 gallon/ 113.6 liters @ 175 PSI maximum / 12 bar
 - Air Filtration.....5 micron

EPO

Electric Pump Option Package



Triplex pump technology has been in use by Galiso for over 15 years. These pumps offer high flows and long life capability. Pump packages for these pumps are now standard and offer a 4x increase to pressurization volume over double acting pumps with similar pressure.

- 1) 20HP Electric Pump up to 75hp Electric pump
- 2) Triplex Pump 7,200psi 16.2lpm/4.3gpm standard
Current Design Pressures up to 20k
- 3) E/P Regulator pressure control pressure bypass valve

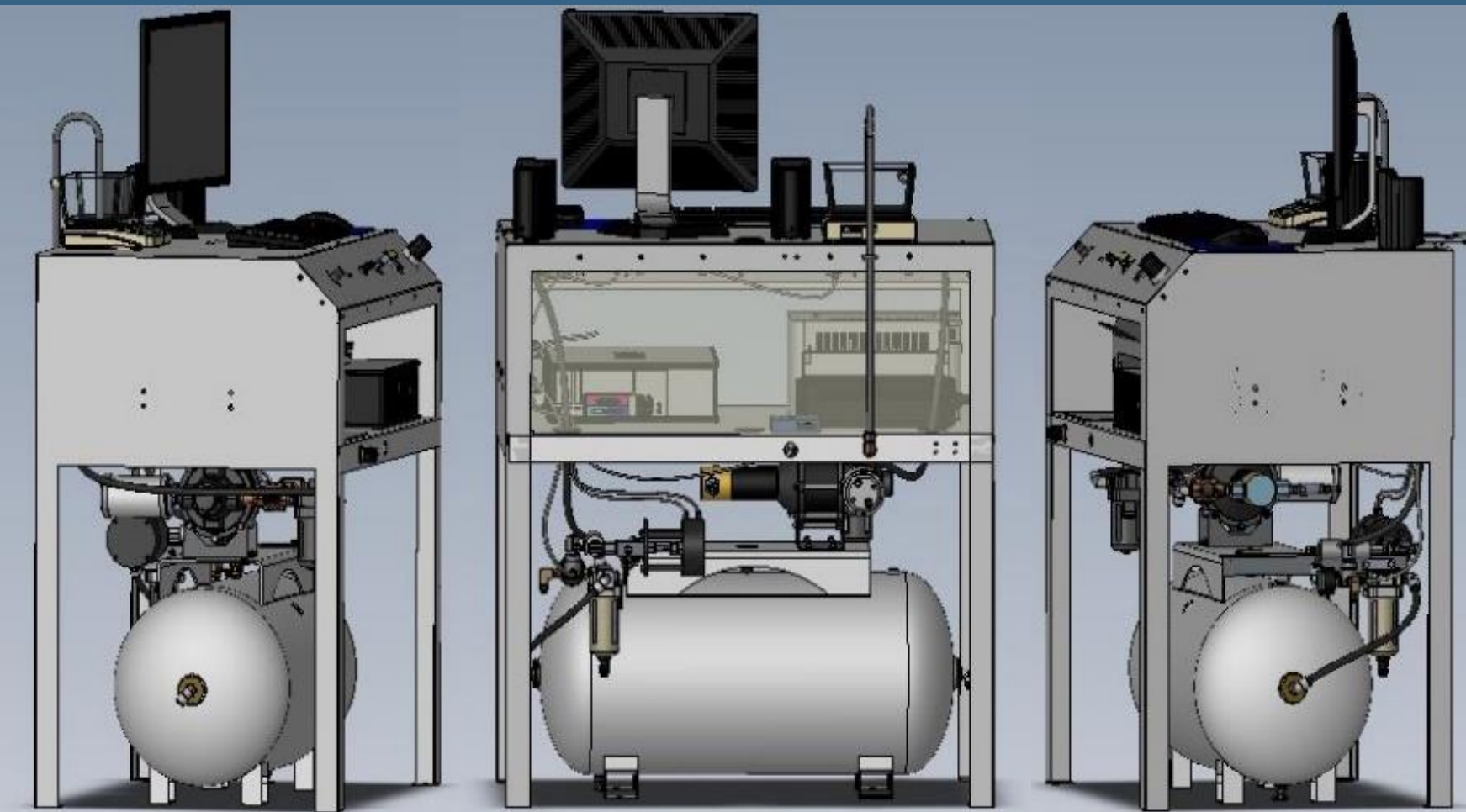
Optional with Enclosure



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R40 Cylinder Test Console

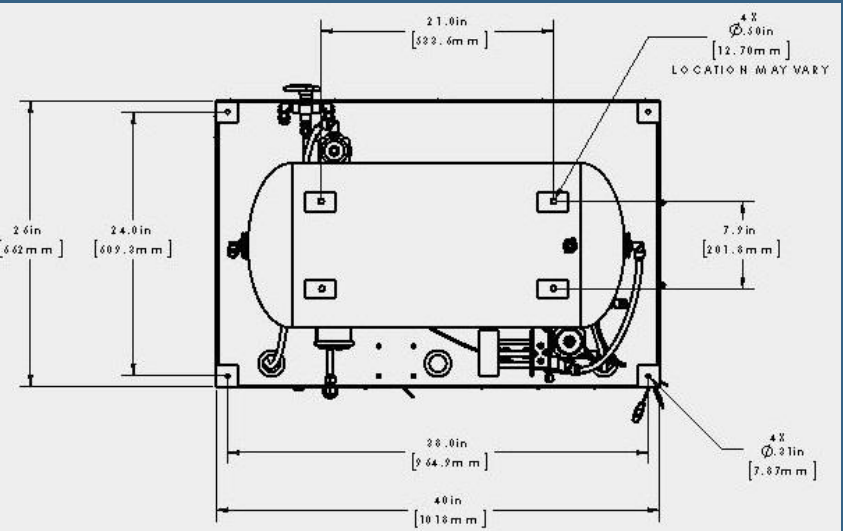


- The RECORTEST 4 OPEN (R4O) will test up to 20 cylinders per hour when manned by an experienced operator with 2 Test jackets
- Operator is free to perform other tasks or prepare another cylinder for the next test while automated tests are being performed
- Test system, Calibrated Cylinder, and Master Gauge pressures values in BAR/PSI
- High reliability digital instruments for pressure and expansion measurements provide superior accuracy.
- Remote - capability to operate, service and support networked R4O systems worldwide from office in USA
- Visual and/or audible system notifications of errors, alerts, cylinder pass/fail and safety issues. Automatic e-mail notification of the above.
- Network capable – System can be set to export data remotely to workgroup or central database.
- 19" flat panel monitor, Dell computer, and laser printer
- Windows 11 based software

- Options:**
- Dual Jacket**
 - Direct Expansion**
 - Double Acting Pump**
 - Slow Pump**
 - CE Marking**

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GASES LIQUIDS SOLIDS
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www.galiso.com (800)854-3789

- Dimensions Console 26" L x 40" W x 56" H
- Electrical Requirements110v or 220Volts, 50/60 Hz
- Water.....City Water Pressure
- Air 120 PSI, 10 CFM
- Cylinder Expansion Measurement..... Standard 800cc Available to 30,000cc +
- Pump.....Standard 10,000psi Available in 1,000 - 50,000psi

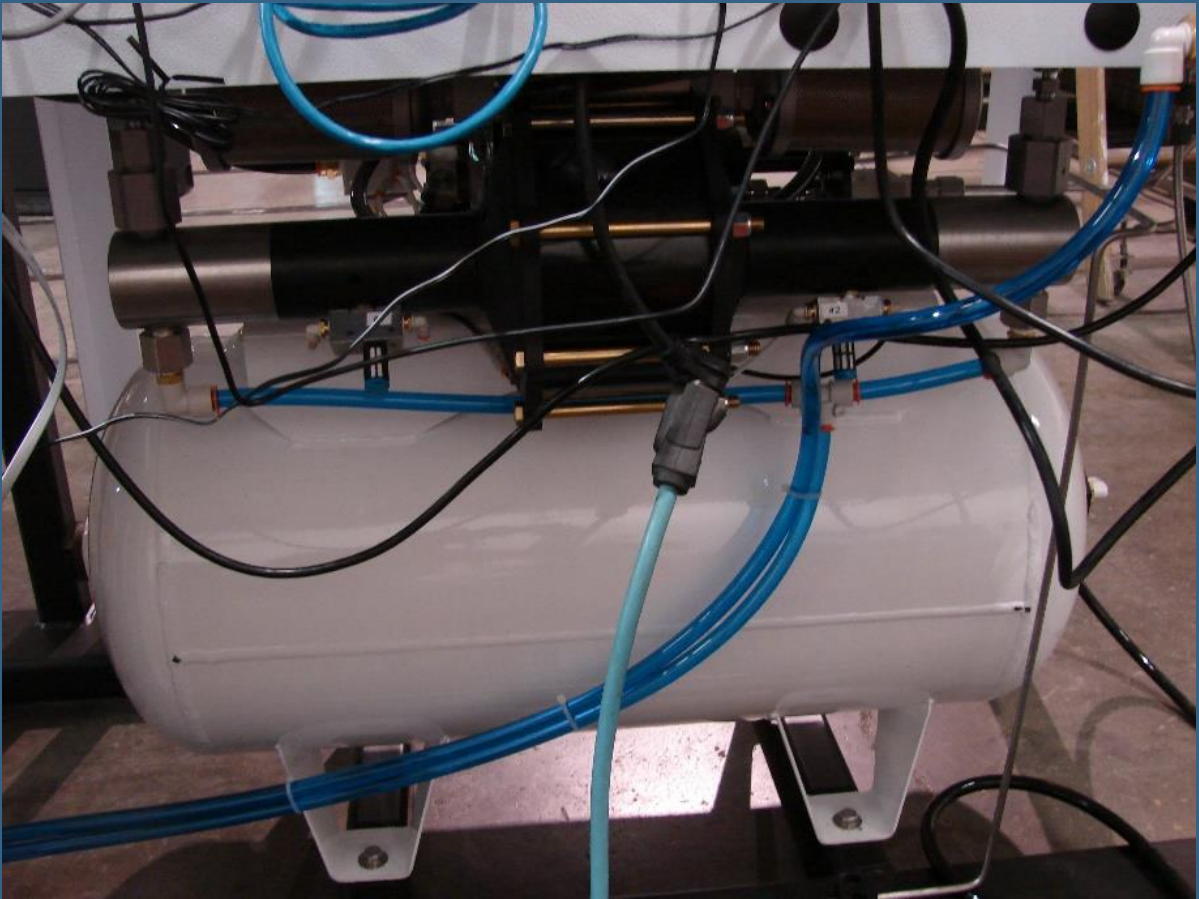


R40 Options



R40 With RSP

Dual Jacket Option



Double Acting Pump

Software Recording Capability:

The Software of the REC4 and REC4 Open systems is built to address all criteria required for recording the hydrostatic test.

Data Entry

The Data Entry Screen allows testing of the cylinder with as little as 3 inputs (S/N , Manufacture Date, and Gas Service) The cylinder codes can be used to fill in other data. The cylinder codes are editable so you can add your own codes or revise the ones in the system. The Customer and Manufacturer can default from the previous test. Cylinder serial #'s and information can be pre-entered so the operator can start typing the cylinder and a list will come up of cylinders with those s/n's. Once the cylinder is picked the rest of the data is applied automatically..

Recortest 4 Hydrotest Data Entry - Operator:tc

[Calibration](#)[Data Entry](#)[Test Results](#)[Graph](#)[Diagram](#)[Fail Visual](#)[Clear](#)

1Data Ready

Customer/Manufacturer Information

Cylinder S/N

Multiport Pos

Manufacturer

Manufacturer Date

Customer

Gas Service

Cylinder Properties

Cylinder Code

Cylinder Size

DOT Rating

R.E.E. Source

Pretest Parameters

PT Target Press

PT Hold Time

Qualification Test Parameters

QT Target Press

QT Hold Time

QT Fail R.E.E.

QT Fail % Perm

Visual Eddy

Allow Plus / Star

Var Press Rate

Test Remark

2Data Ready

Customer/Manufacturer Information

Cylinder S/N

Multiport Pos

Manufacturer

Manufacturer Date

Customer

Gas Service

Cylinder Properties

Cylinder Code

Cylinder Size

DOT Rating

R.E.E. Source

Pretest Parameters

PT Target Press

PT Hold Time

Qualification Test Parameters

QT Target Press

QT Hold Time

QT Fail R.E.E.

QT Fail % Perm

Visual Eddy

Allow Plus / Star

Var Press Rate

Test Remark

3Data Ready

Customer/Manufacturer Information

Cylinder S/N

Multiport Pos

Manufacturer

Manufacturer Date

Customer

Gas Service

Cylinder Properties

Cylinder Code

Cylinder Size

DOT Rating

R.E.E. Source

Pretest Parameters

PT Target Press

PT Hold Time

Qualification Test Parameters

QT Target Press

QT Hold Time

QT Fail R.E.E.

QT Fail % Perm

Visual Eddy

Allow Plus / Star

Var Press Rate

Test Remark

4Data Ready

Customer/Manufacturer Information

Cylinder S/N

Multiport Pos

Manufacturer

Manufacturer Date

Customer

Gas Service

Cylinder Properties

Cylinder Code

Cylinder Size

DOT Rating

R.E.E. Source

Pretest Parameters

PT Target Press

PT Hold Time

Qualification Test Parameters

QT Target Press

QT Hold Time

QT Fail R.E.E.

QT Fail % Perm

Visual Eddy

Allow Plus / Star

Var Press Rate

Test Remark

All Data Ready

100 %

OK

Pressure

1 PSI

0 %

Restart

Start

Stop

Jacket 1 Status

89.3

Cylinder S/N

5678

Total Expansion

0

Test Disposition

PPFNP

Jacket 2 Status

89.3

Cylinder S/N

E45039

Total Expansion

0

Test Disposition

PPFNP

Jacket 3 Status

Cylinder S/N

Total Expansion

Test Disposition

Jacket 4 Status

Cylinder S/N

Total Expansion

Test Disposition

Retest Options

☒ +100 PSI

☐ 80% Target Pressure

☐ Aborted Test (pressure during aborted test did not exceed 90% of target pressure)

☐ None

Done

Cylinder Regualification Report

Galiso, Inc

DOT/TC Registration #

22 Ponderosa Ct.

Montrose , CO

81401

Code Has Three Letters: 1st Letter: Visual Test, 2nd Letter: % Perm Exp Test, 3rd Letter: REE Test

Letter Code: P=Passed, F=Failed, N=Not Applicable, A=Aborted

Example: PPP-Passed Visual, Passed % Prm, Passed REE

Operator Signature:

Date Signed:

Supervisor Signature:

Date Signed:

I hereby certify that all the following tests were made under my supervision and in accordance with DOT/CTC regulations.

#	Test Date	Operator	Serial Number	Size	Cyl MFG.	REE	Rating	Specified	Test	Total	Perm	+	VE	Disposition
	Test Time		Cyl Owner	Service	MFG. Date	Source	Unit	Actual	Time	Elastic	Percen	VE	Ref Ring	Remark
1	10/13/2010 13:22	Dennis	GHH01011347E CHE1	HEAD H2O	GALISO 10/10	0	NA PSI	10000 4685	30	9620.9 0.0	0.0 0.0			PAA GHH6G12
2	10/13/2010 13:28	Dennis	GHH01011347E CHE1	HEAD H2O	GALISO 10/10	0	NA PSI	10000 10026	30	132.3 132.3	0.0 0.0			PPN GHH6G12
3	10/13/2010 13:29	Dennis	GHH01011347E CHE1	HEAD H2O	GALISO 10/10	0	NA PSI	10000 10044	30	132.3 132.3	0.0 0.0			PPN GHH6G12
4	10/13/2010 13:31	Dennis	GHH01011347E CHE1	HEAD H2O	GALISO 10/10	0	NA PSI	10000 10099	30	132.9 132.9	0.0 0.0			PPN GHH6G12
5	10/13/2010 13:32	Dennis	GHH01011347E CHE1	HEAD H2O	GALISO 10/10	0	NA PSI	10000 10114	30	133.0 133.0	0.0 0.0			PPN GHH6G12
12	10/14/2010 13:06	Dennis	GHH00021198D FIR77	HEAD H2O	GALISO 10/10	0	NA PSI	10000 10120	30	133.6 133.6	0.0 0.0			PPN GHH6G12
13	10/14/2010 13:07	Dennis	GHH00021198D FIR77	HEAD H2O	GALISO 10/10	0	NA PSI	10000 10157	30	133.9 133.9	0.0 0.0			PPN GHH6G12
14	10/14/2010 13:09	Dennis	GHH00021198D FIR77	HEAD H2O	GALISO 10/10	0	NA PSI	10000 10077	30	132.7 132.7	0.0 0.0			PPN GHH6G12
15	10/14/2010 13:10	Dennis	GHH00021198D FIR77	HEAD H2O	GALISO 10/10	0	NA PSI	10000 10053	30	132.3 132.3	0.0 0.0			PPN GHH6G12
16	10/14/2010 13:11	Dennis	GHH00021198D FIR77	HEAD H2O	GALISO 10/10	0	NA PSI	10000 10060	30	132.4 132.4	0.0 0.0			PPN GHH6G12

Test Date(s):

10/13/2010 - 10/14/2010

10/14/2010 3:20:39PM

Page 1 of 1

Test Report lists all of the cylinder information and test results. These results can be sorted by Date, Customer, Pass/Fail, Operator. The reports can be exported to multiple locations if part of an intranet.

Visual Inspection

Cylinder failure is most often determined by visual inspection. The visual inspection screen allows you to record the reason for failing the cylinder and any notes the operator may have on the cylinder.



Recortest 4 Failed Visual Data Form - Operator:tc

[Calibration](#)[Data Entry](#)[Test Results](#)[Graph](#)[Diagram](#)[Fail Visual](#)[Clear](#)

Customer/Manufacturer Information

Cylinder S/N

Multiport Pos

Manufacturer

Manufacturer Date

Customer

Gas Service

Cylinder Properties

Cylinder Code

Cylinder Size

DOT Rating

R.E.E. Source

Pretest Parameters

PT Target Press

PT Hold Time

Qualification Test Parameters

QT Target Press

QT Hold Time

QT Fail R.E.E.

QT Fail % Perm

Reasons for Failed Visual

Visual Eddy

☐ Will Not Hold Pressure

☐ Altered Ser #

☐ Int Corrosion

☐ Internal Pitting

☐ Arc Burn

☐ % Perm Exp

☐ Neck Crack

☐ Ext Corrosion

☐ External Pitting

☐ Bad Threads

☐ Altered Pressure

☐ Dent/Gouge

☐ Fire Damage

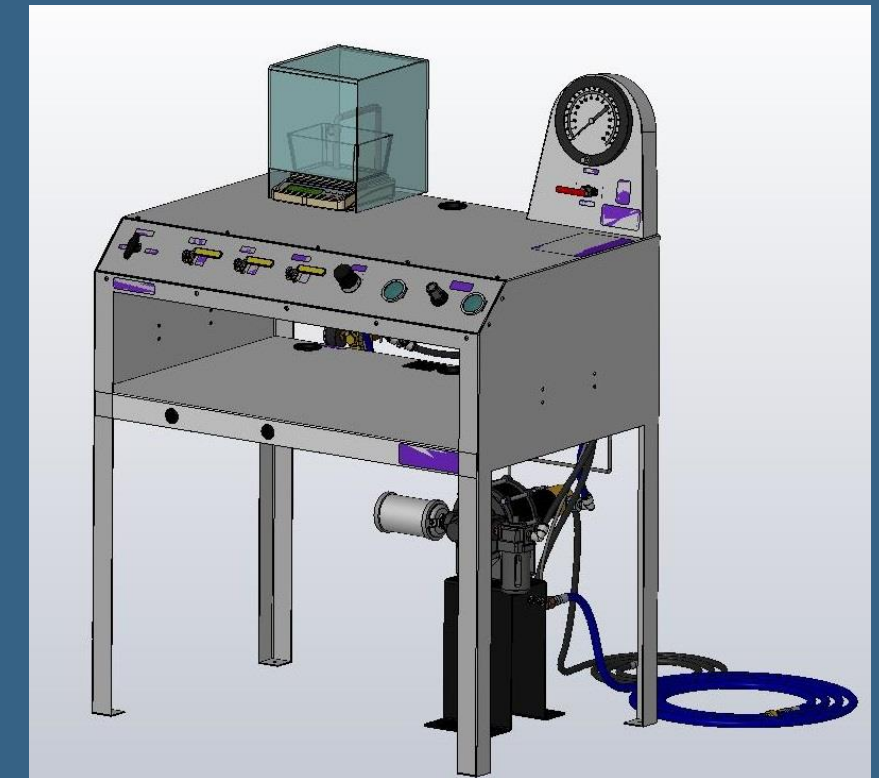
☐ Sidewall Stamp

☐ Other/Specify

Test Remark (255 char. max)

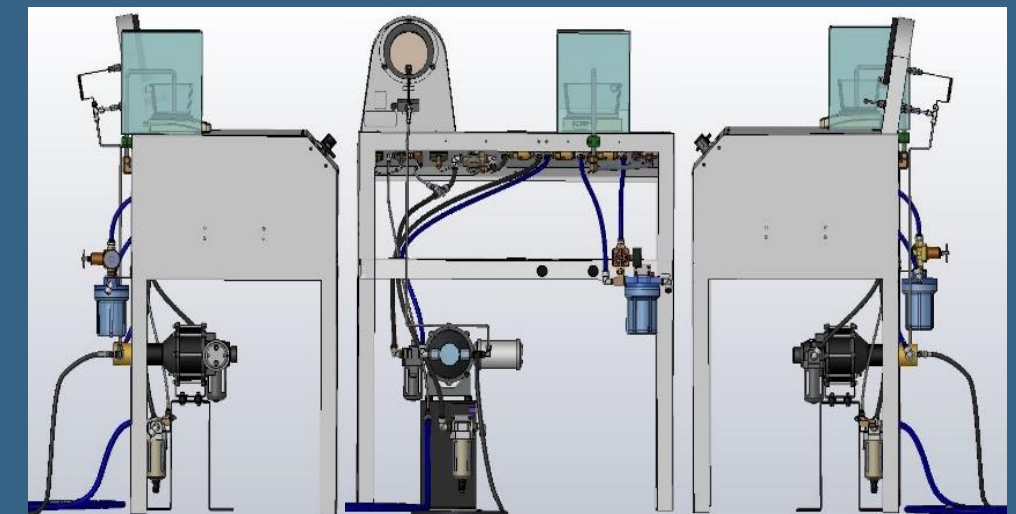
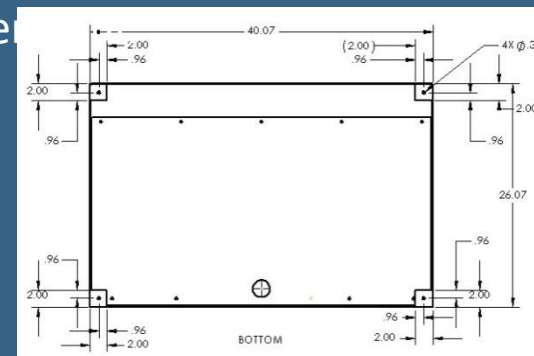
Write Data

GTC Test Console



- Manually tests up to 10-12 high or low pressure cylinders of all types per
- Expansion measured with electronic accuracy to 1/10 CC by the EEMS (Electronic Expansion Measuring System) system by LCD display.
- Can be configured to a 1 or 2 test jacket system
- 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
- When used in high/low pressure combinations, an additional pressure gauge is required.

Installation: [GTC INSTALL VIDEO](#)
 Training: [GTC OPERATION VIDEO](#)



- Dimensions Console 40" L x 26" W x 56" H
- Electrical Requirements220 or 110Volts, 50/60 Hz
- Air 120 PSI, 10 CFM
- Water.....City Water Pressure
- Cylinder Expansion Measurement.....800cc Standard up to 30,000+
- Pump.....10,000psi Standard Up to 50,000psi
- Pump Pressurization rate..... ¼ gpm@5500psi (10k pump)


A yellow gas cylinder is connected to a complex industrial machine. The machine features a large black vertical tank, various pipes (black, white, blue), and valves. A green hose is connected to the top of the yellow cylinder. The setup is located in a laboratory or industrial setting with a metal grate floor.




Hydrolog Software

Main Screen

File View Report Type Create Report Tables Help





Hydrolog Software

Company	Contact Name	Phone Number	Extension	Fax Number
White's	Rebecca Parker	156 815 6315	6	156 815 1726

Customer ID#

11191

Last Date

Test Date\Test Time

8/16/2006 1:03:44 PM

Serial Number

0

Service

CO2

Account

Cylinder Code

1

☒ Failed Visual

Cylinder Manufacturer

COYNE

MFG Date

01/01

DOT/Rating

Size

Source

☐ Allow Plus

Actual\Specified Pressure

555

Total Expansion

100

Perm Expansion

6

Test Length

Disposition

FAA

☐ Allow Star

Units

% Perm Expansion

% Perm Expansion

30

% Fail Perm

Elastic Expansion

34

REE

Plus/Star

Remarks

*Required fields are: EmployeeID, CustomerID, TestDate, TestTime, Serial #, Service, Manufacturer, Manufacture Date, and Size.

Record 1 of 9

Click the "Enter" Button to go to a Record.

☒ Will Not Hold Pressure

☒ % Perm Exp

☒ Altered Pressure

☒ Altered Ser #

☒ Neck Crack

☒ Dent/Gouge

☒ Int Corrosion

☒ Ext Corrosion

☒ Fire Damage

☒ Internal Pitting

☒ External Pitting

☒ Sidewall Stamp

☒ Arc Burn

☒ Bad Threads

☒ Test

This cylinder is condemned and may not be filled with hazardous material and offered for transportation in commerce where use of a specification packaging is required.

Day Report

File

10/6/2005

8/16/2006

Main Report

10/6/2005

My Company

City, ??

Operator Tst Time	Cyl Owner Account Serial	Rating Size Service	Cyl MFG. MFG. Date	Unit Specified Actual	Duration Total Perm	Elastic Percent REE	Source Disposition PlusStar
Remark							
DH		3AA-6000	3	PSI	30	0.5	C5
9:28 am		9.75x51	September 2000	10000	0.7	28.6	PFA
	601-80	2		10111	0.2	226	
GHH6H18 SERV							
DH		3AA-6000	3	PSI	30	0.3	C5
9:30 am		9.75x51	September 2000	10000	0.3	0	PPP
	601-80	2		10066	0	226	
GHH6H18 SERV							
DH		3AA-6000	3	PSI	30	0	C5
9:32 am		9.75x51	September 2000	10000	0	0	PAA
	601-80	2		10073	0	226	
GHH6H18 SERV							
DH		3AA-6000	3	PSI	30	0.5	C5
9:33 am		9.75x51	September 2000	10174	0.5	0	PPP
	601-80	2		10240	0	226	

Current Page No.: 1

Total Page No.: 1+

Zoom Factor: 100%



Backup the Current Database

Save in: Backups

My Recent Documents

Desktop

My Documents

My Computer

My Network Places

File name: Archive File

Save as type: Archive File (*.arch)

Save Cancel

- * Test Time
- * Date
- * Week
- * Month
- * Year
- * Serial Number
- * Customer
- * Size
- * Unit of Pressure
- * DOT Rating
- * Date of Manufacture
- * Disposition
- * Manufacturer
- * Plus Rating
- * Star Rating

Reports are very useful to find the data you need. Your company information is displayed on the top right hand corner. Clicking the "E - Mail" Button will open your default mail program, allowing you to email a report. You can change the file to a: Adobe(pdf), Excel(xls), Word(doc), or a Rich Text(rtf) Format by clicking the drop down arrow next to the file type text box shown below.

GWJ-SAL Galiso Water Jacket Small Aluminum Test Console



GWJ-SAL VIDEO

Features of Control Console with Pump

- Cylinders are loaded empty and come off empty
- Windows Professional PC Operator Interface
- 24" Flat panel display monitor
- Software allows for auto-sequencing so information does not have to be re-entered
- Test data is stored locally and in one additional network database location.
- Double Acting Pump w/High Flow Booster Pump
- Use with Small Aluminum straight thread cylinders

Automatic fill and drain of cylinders

12 Heat Treated Stainless Steel Adapters x 12 Tubes for each cylinder size (3 sets)

8 scales for manufacturing system

4 scales requalification system

4 individual Test Jackets and Test Heads

Lift Air Cylinder for automatic jacket loading

Specifications

Console dimensions 29" L x 40" W x 56" H.

Tank Dimensions.....29" L x 40" W x 78"H.

Electrical110v 60 Hz

Pump.....6,000psi max pressure

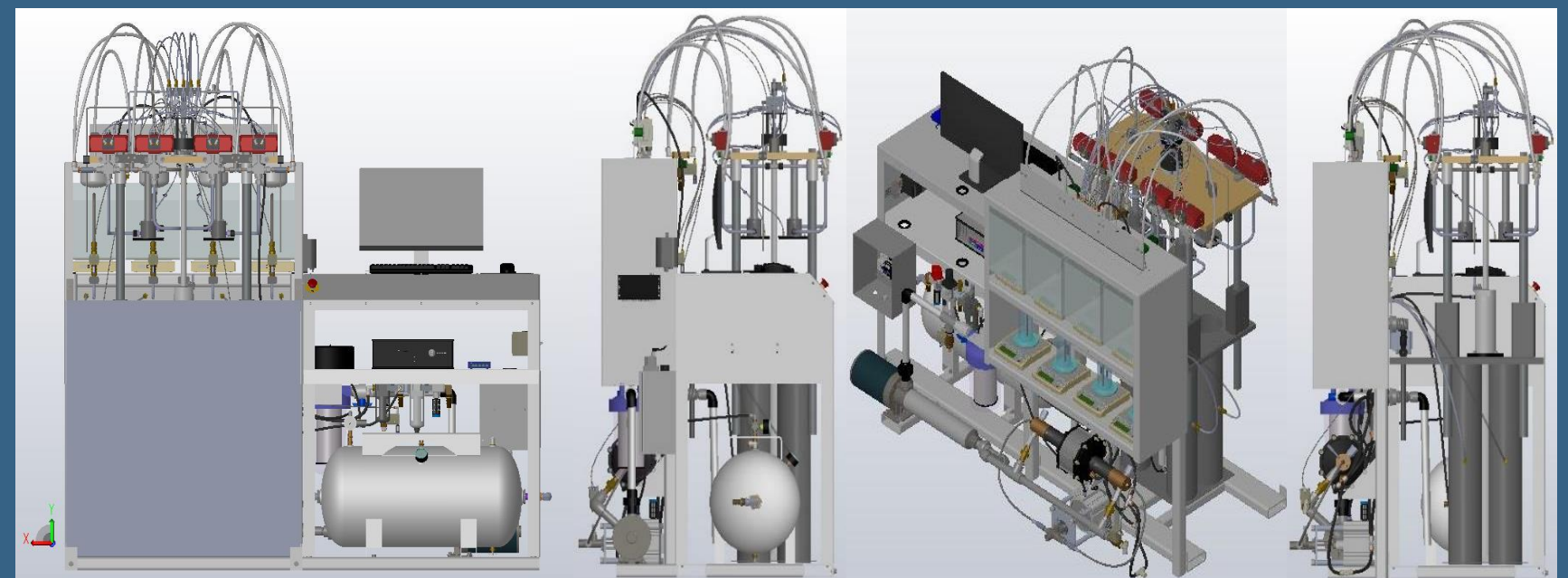
Pneumatic.....,.....,.....100psi

Pump Displacement..... 4L/Min@4500psi

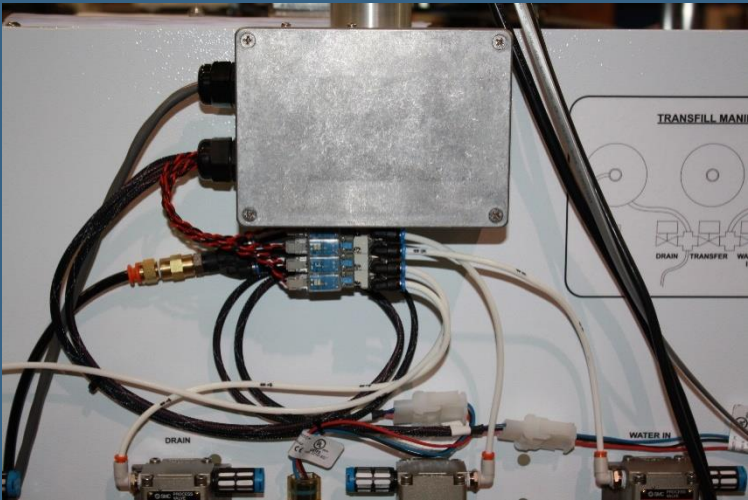
Cylinder Throughput.....88 per hour

based on Medical E cylinder

Max Cylinder Dimension.....28"L x 4.75" Diameter



GDE Console Triplex pump Direct Expansion



Transfill



Used for Large Volume Large Expansion typically Composite Type III and Type IV Cylinders
GDE20-5.8K Pressure Test Station, 4.3 GPM @ 5,800psi
GDE20-5.8K-2 8.6GPM @ 5,800psi
GDE20-7.2K Pressure Test Station, 3.6 GPM @ 7,200psi
GDE20-7.2K-2 7.2 GPM @ 7,200psi



R4 Open control software Results Database screen

Recent 4 Hydrotest Results - Operator Install

Create Report Calibration Data Entry Test Results Graph Diagram Fail Visual Weigh Clear

Hydrotest Results

Test Number	Test Time	Test Date	Serial Number	Cylinder Size	Cylinder	Manufacturer	Rating	PT Target	PT Start	PT End	PT Hold %
1	7:06	6/15/2007	1234	4.25x25.75	02	WKA	30A-2015				
2	7:06	6/15/2007	2345	NA	02	WKA	30A-2015				
3	7:11	6/15/2007	1234	NA	02	WKA	30A-2015				
4	7:11	6/15/2007	2345	NA	02	WKA	30A-2015				
1	15:11	6/15/2007	1234	3.2x2.2	02	WKA	30A-2015				
2	15:11	6/15/2007	2345	3.2x2.2	02	WKA	30A-2015				
3	15:11	6/15/2007	3456	3.2x2.2	02	WKA	30A-2015				
4	15:11	6/15/2007	4567	3.2x2.2	02	WKA	30A-2015				
5	15:15	6/15/2007	1234	3.2x2.2	02	WKA	30A-2015				

Individual Test Data

Test Number (By day) 1 Test Date 6/15/2007 12:00 Test Time 7:06 Operator galiso

Customer/Manufacturer Information

Cylinder SN 1234 Manufacturer WKA Manufacturer Date 09/200 Customer Galiso

Gas Source OT

Cylinder Code 6 Cylinder Size 4.25x25.75 DOT Rating 30A-2015 R.E.E. Source CS

Capacity 6

Qualification Test Parameters

PT Target Pressure 3360 PT Actual Pressure 3360 PT Hold Time 30 PT Hold % Perm 10 PT % Perm Exp 0

PT Fail R.E.E. 23.1 OT Fail R.E.E. 23.1 OT Fail % Perm 10 OT % Perm Exp 0

PT Total Disposition P/F N/A Plus Size Visual Eddy

Test Remark (5 characters maximum)

Save Cancel



R4 Open control software Data Entry screen

Recent 4 Hydrotest Data Entry - Operator Install

Calibration Data Entry Test Results Graph Diagram Fail Visual Weigh Clear Log Out

1 Data Ready

Customer/Manufacturer Information

Cylinder SN 1234

Cylinder Code 6

Cylinder Size 4.25x25.75

DOT Rating 30A-2015

R.E.E. Source CS

Qualification Test Parameters

PT Target Pressure 3360 PT Actual Pressure 3360 PT Hold Time 30 PT Hold % Perm 10 PT % Perm Exp 0

PT Fail R.E.E. 23.1 OT Fail R.E.E. 23.1 OT Fail % Perm 10 OT % Perm Exp 0

PT Total Disposition P/F N/A Plus Size Visual Eddy

Test Remark (5 characters maximum)

Save Cancel



R4 Open control software Weigh screen

Recent 4 Weigh Data - Operator Install

Calibration Data Entry Test Results Graph Diagram Fail Visual Weigh Burst Clear

1 Data Ready

Customer/Manufacturer Information

Cylinder SN 1234

Cylinder Code 6

Cylinder Size 4.25x25.75

DOT Rating 30A-2015

R.E.E. Source CS

Qualification Test Parameters

PT Target Pressure 3360 PT Actual Pressure 3360 PT Hold Time 30 PT Hold % Perm 10 PT % Perm Exp 0

PT Fail R.E.E. 23.1 OT Fail R.E.E. 23.1 OT Fail % Perm 10 OT % Perm Exp 0

PT Total Disposition P/F N/A Plus Size Visual Eddy

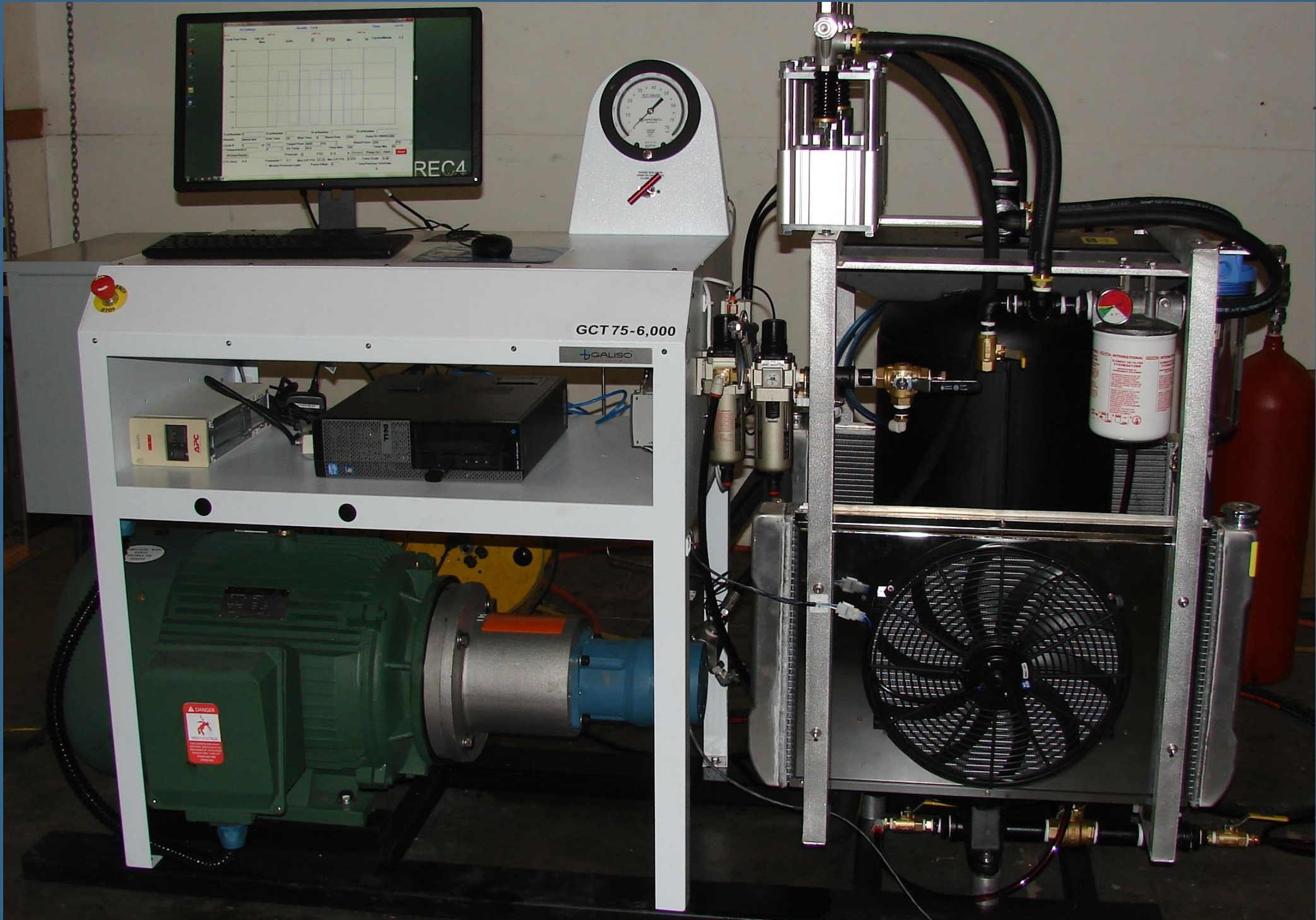
Test Remark (5 characters maximum)

Save Cancel

Galiso Cycle Testing System

The Galiso Cycle Testing System is used for cycling cylinders to meet the cycle test requirements of most international standards (ISO, NGV, NZS,ANSI).

The Cycle Rates and Pressures are controllable during pressurization and de-pressurization. The Number of Cycles are programmable to 1,000,000+. Cycle data is saved per cycle allowing stopping and starting of cycles within the same cycle test. Cycles can be viewed in graph format.



- Windows 10 professional PC operator interface and data collection computer networked to PLC control and customer network
- 21” Flat panel display monitor
- Optional Barcode test operation control and cylinder serial number entry
- Test information is easily imported into Excel spreadsheet.
- Test data is stored locally and can be stored on additional network database location.
- .25% Accuracy or better Transducer and Analog Gauge (can be isolated during testing)

Specifications

Console w/ Skid dimensions ... 80" L x 30" W x 56" H.
Electrical Components 110v / 60hz or 220v 50/60hz
Motor 440-480v 3 phase 50/60hz
(Optional in other voltages)



22 Ponderosa Ct

Montrose, CO 81401

www.galiso.com (800)854-3789

Model	Motor Size	Pressure	GPM/LPM
GCT75-6,000	75HP	6,000psi/414Bar	17.2 / 65.1

This Cycle Test System is configured to control maximum 1 Cycle test station with 2 pumps for added volume. Cycle frequency is controllable up to 15 cycles per minute within system pressure. Cycle results are documented in chart form showing pressure verses time by cycle number. The Cycle Test System incorporates PLC and computer technology to provide fast, accurate, reliable cylinder cycle testing. The flexible platform with PLC controls accommodates a variety of system component options.

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- Windows 10 professional PC operator interface and data collection computer networked to PLC control and customer network
- 21” Flat panel display monitor
- Optional Barcode test operation control and cylinder serial number entry
- Test information is easily imported into Excel spreadsheet.
- Test data is stored locally and can be stored on additional network database location.
- 25% Accuracy or better Transducer and Analog Gauge (can be isolated during testing)

Specifications

Console w/ Skid dimensions ... 80" L x 30" W x 56" H.
Electrical Components 110v or 220v 50/60hz
Motor 3 phase 50/60hz
(Optional in other voltages)



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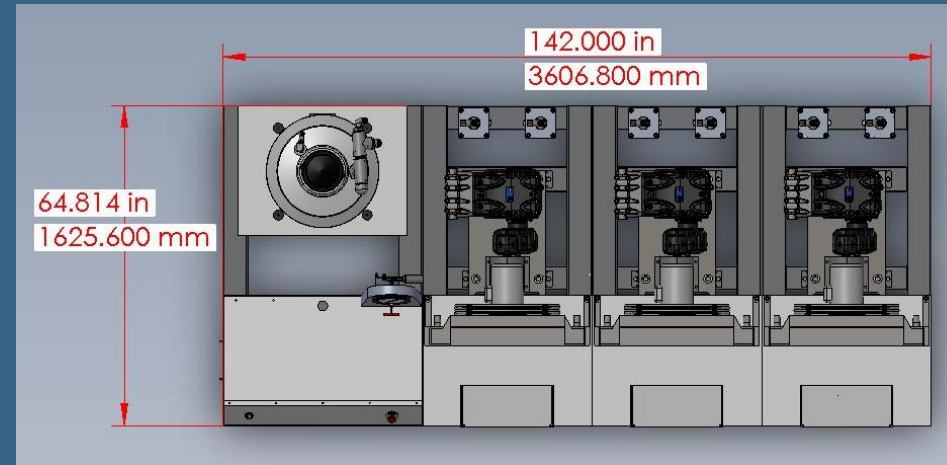
Model	Motor Size	Pressure	GPM/LPM
GCT5-.5	5HP	500psi / 35Bar	4.2 / 15.9



Cycle frequency is controllable up to 15 cycles per minute within system pressure. Cycle results are documented in chart form showing pressure verses time by cycle number. The Cycle Test System incorporates PLC and computer technology to provide fast, accurate, reliable cylinder cycle testing. The flexible platform with PLC controls accommodates a variety of system component options.

Galiso Cycle Tester

- Windows 11 professional PC operator interface and data collection computer networked to PLC control and customer network
- 21" Flat panel display monitor
- Optional Barcode test operation control and cylinder serial number entry
- Test information is easily imported into Excel spreadsheet.
- Test data is stored locally and can be stored on additional network database location.
- .25% Accuracy or better Transducer and Analog Gauge (can be isolated during testing)



Specifications

Console w/ Skid dimensions ... 142" L x 64.8" W x 56" H.
 Electrical Components 110v or 220v 50/60hz
 Motor 460v 3 phase 50/60hz 60Amps x 3
 Air ... 7-10cfm @ 90psi
 Water Supply ... 2.75 – 3 Bar

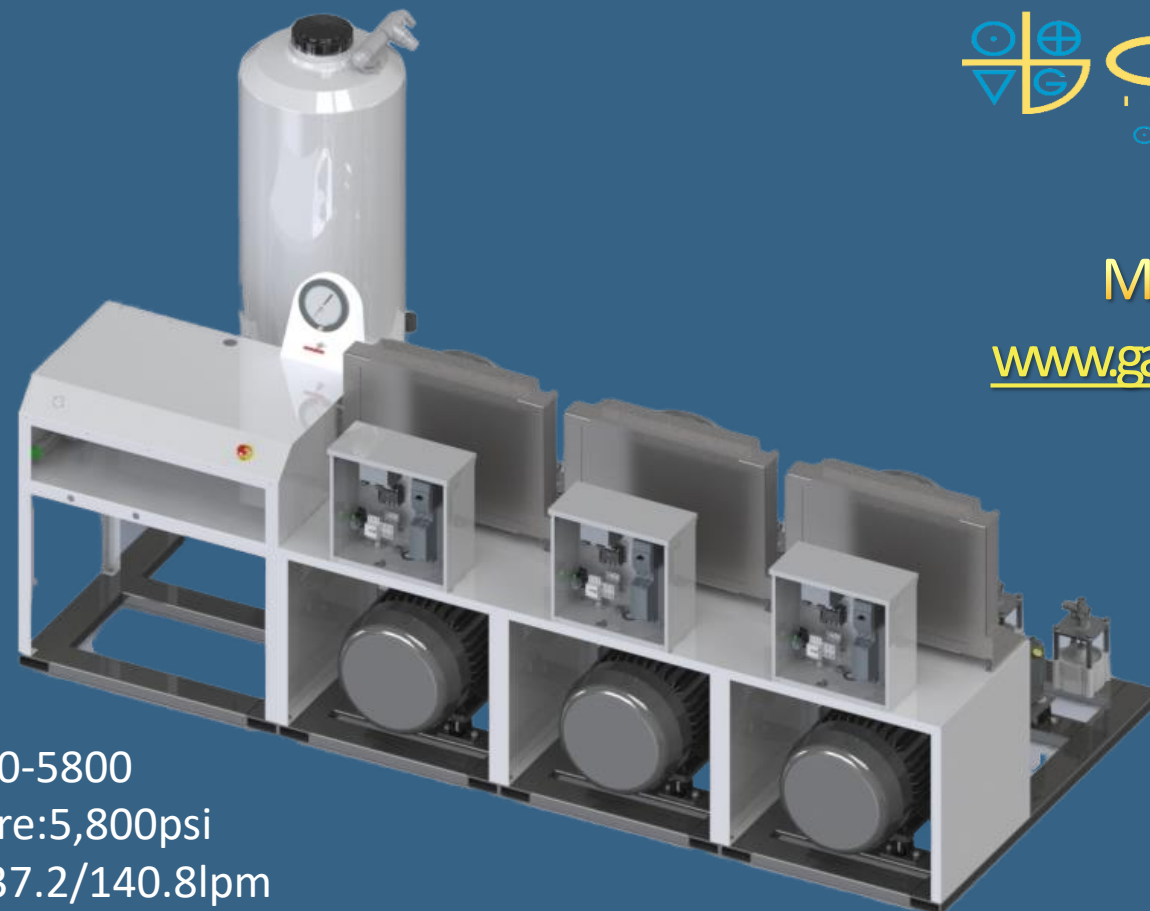
Reservoir 280L
 (Larger Available)



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GCT150-5800
 Pressure:5,800psi
 Flow: 37.2/140.8lpm
 Medium: Water



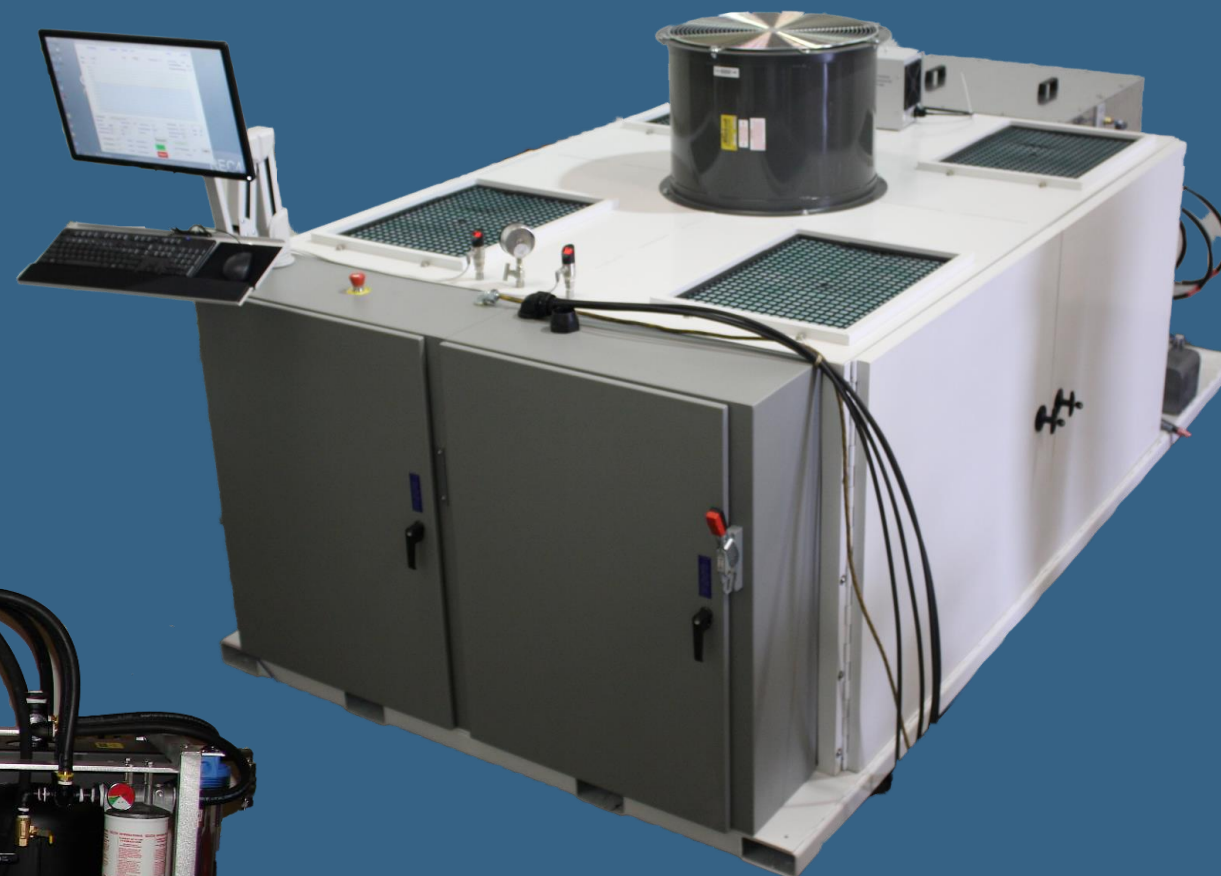
GCT50-5800
 Pressure:5,800psi
 Flow: 12.4gpm
 Medium: Water

Cycle frequency is controllable up to 15 cycles per minute within system pressure. Cycle results are documented in chart form showing pressure verses time by cycle number. The Cycle Test System incorporates PLC and computer technology to provide fast, accurate, reliable cylinder cycle testing. The flexible platform with PLC controls accommodates a variety of system component options.



GCT50-16K
Pressure:16,000psi
Flow: 4gpm
Medium: Water

GCT150-7,500
Pressure:7,500psi
Flow: 30gpm
Medium: Water



GCT225-15,000
Pressure:15,000psi
Flow: 22.2gpm
Medium: Water

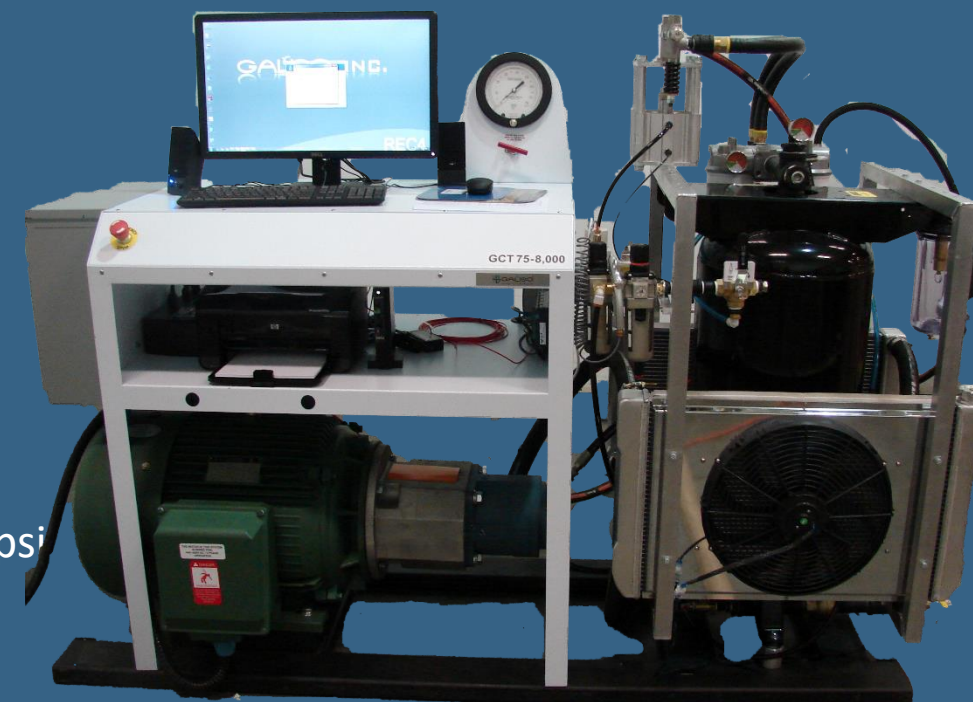


GCT Cycle Testers



GCT75-6k
Pressure:6,000psi
Flow: 17.2gpm
Medium: Oil

GCT75-8k
Pressure:8,000psi
Flow: 13.7gpm
Medium: Oil



Software Screen gives you the following information:

Cycle Test Time – Overall Time the cylinder has been cycling

Pressure – Actual And Graphed

Cycles per minute – Avg Cycles per minute

Cylinder Identification / Lot Number

Test Remarks

Hold Time – Time cylinder is held at Test Pressure

Wait Time – Time to wait before pressurizing next cycle

Bleed Rate – Adjustable pressure drop (psi/sec)

Rate – Adjustable Pressure Increase (psi/sec)

Cycle # - Shows how many cycles out of total cycles

Target Press – Cycle Target Pressure (Psi/bar/any pressure unit)

Bleed Press – Cycle low end Pressure

Temp – Temperature thermocouple normally attached to cylinder

Oil Temp – Oil Temp at reservoir

Temp Max – Maximum Temperature before pump shutdown (user input)

Temp Min – Minimum Temperature before pump shutdown (user input)

All Data Ready – This is information verification before test can start.

missing information will not allow test to be initiated. (Verbal and visual alert)

Pressure – Actual Target Pressure Based on allowable percentage over target.

Restart – Used to restart when a test has been stopped before # of cycles have been reached

Pump On – Software control of Pump

Start – Is in Bold and used to start the cycle when All Data is Ready and Pump is on

Stop – Stops cycling of the cylinder

ETC – Estimated time to completion

Pressurize – Time to reach pressure

E/P PSI – Electro pneumatic Regulator PSI

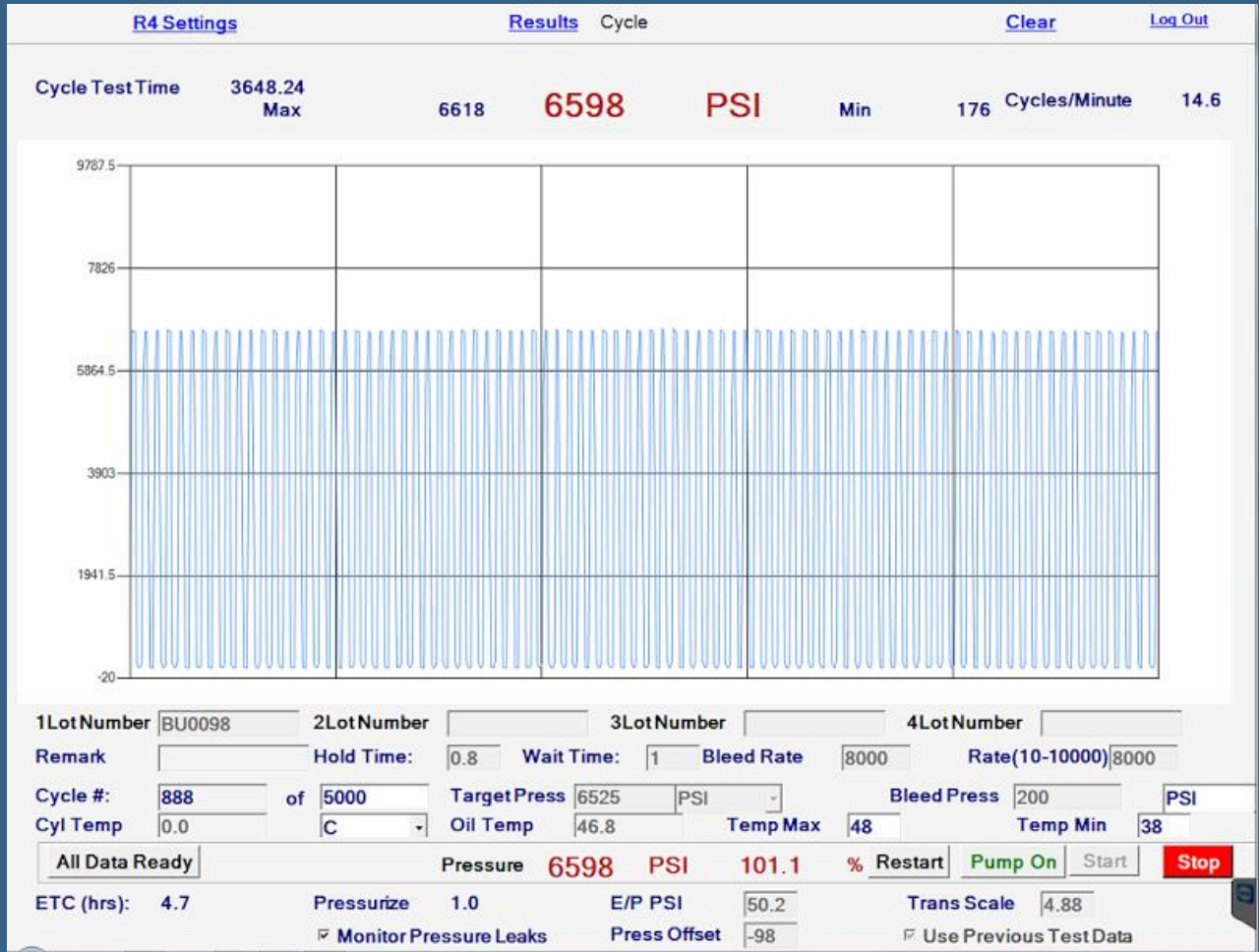
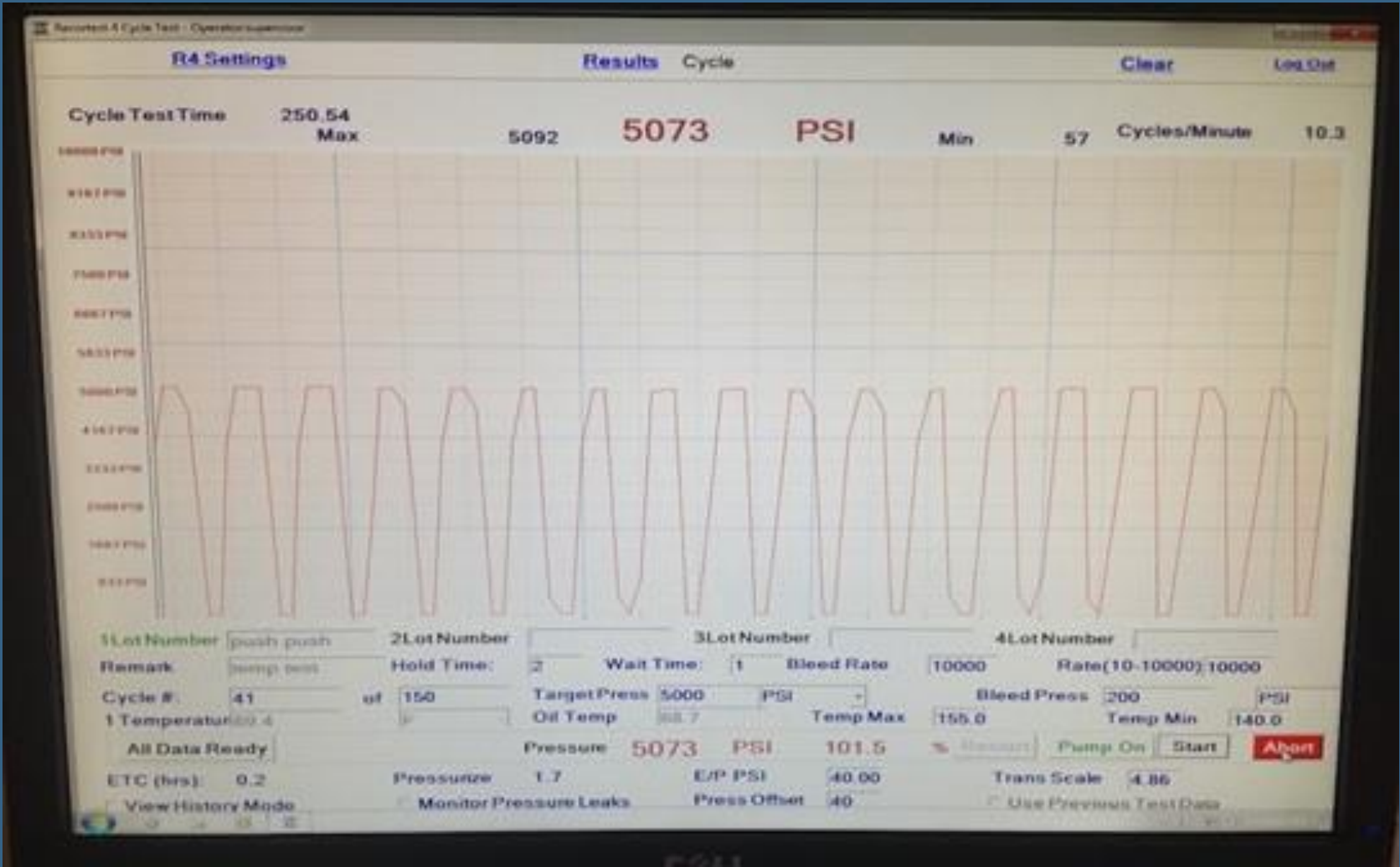
Trans Scale – Allows for scaling of transducer. Supervisor control only.

Monitor Pressure Leaks – Looks for predescribed amount of pressure drop at test pressure

Press Offset – Span offset of transducer

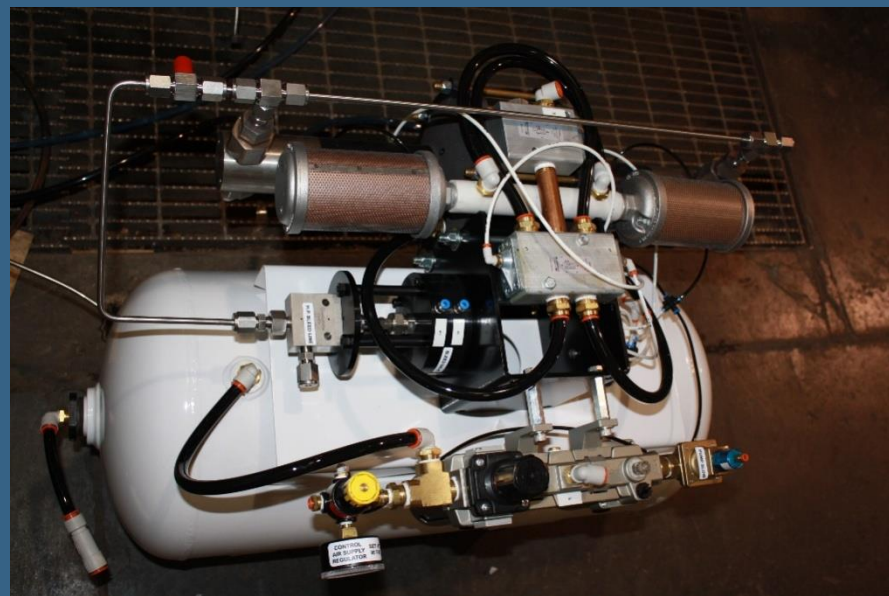
Use Previous Test Data – Allows for data from previous test to be used

(Screen captures from testing of systems)



GBT Galiso Burst Console With Expansion Measurement

The Burst Test systems are configured for manual operation or computerized operation. Optional Double Acting Pump for higher flow. Optional Expansion Measurement Computerized allows you to save test data and graph burst curve. All consoles feature Analog gauge with Max pointer, Bleed Valve, and Air Receiver Tank.



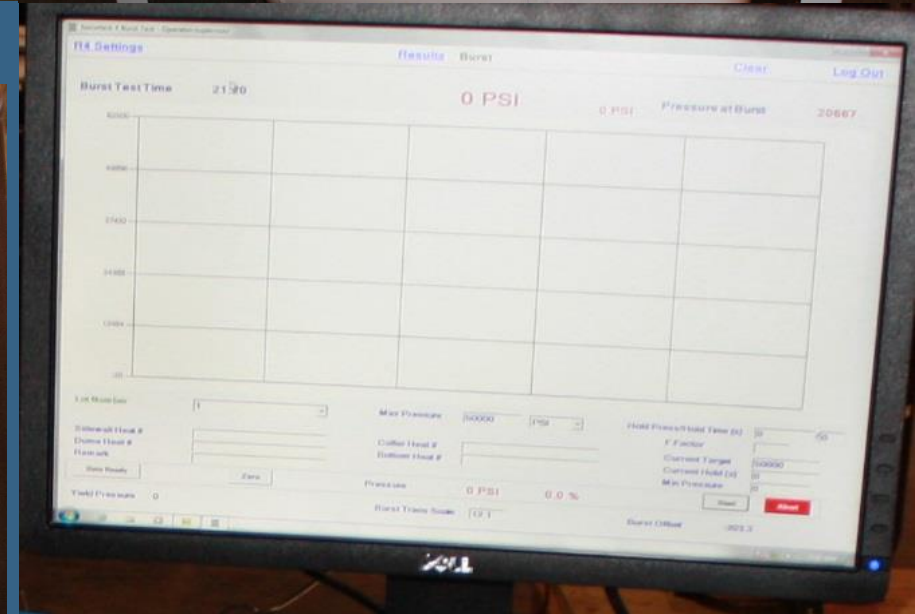
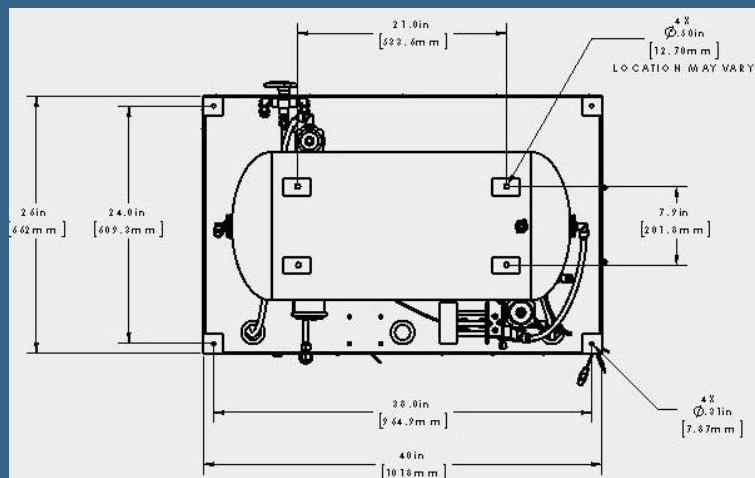
Specifications

Console w/ Skid dimensions 40" L x 26" W x 40" H.

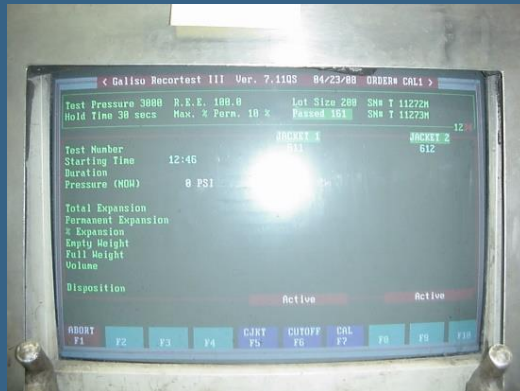
ElectricalComponents 110v / 60hz or 220v 50/60hz

Air Requirements..... 6.2 - 7.6 bar (90-110 psi) @ 56 SCFM

Test Pressures Available ... Up to 60,000psi



REC4 Upgrade



GALISO
INCORPORATED
GASES LIQUIDS SOLIDS

22 Ponderosa Ct

Montrose, CO 81401

www.galiso.com (800)854-3789

- Galiso will replace the computer w/cards, monitor, DOS software, transducer, and load cell with: Windows Software, Weight Scale(s), Serial Transducer and a PLC. Quotation includes cost of installation at Customer Facility. (additional charges apply for foreign Customers)
- No longer requires use of A/D Card and Keyboard card, utilizes serial components
- The customer now will have the ability to network and take advantage of new software created for the Windows platform.
- The customer will be enabled to receive updates electronically and export test results to single or multiple locations.
- Test results data can be automatically recorded to local and remote file locations and can easily be imported into Excel
- Cylinder information: Serial number, manufacturer, manufacture date, lot number, liner type, and all cylinder specific data pertinent to the test can be entered as the cylinders come in the door and stored in a database or while a cylinder is being hydro-tested

Recortest 4 Open Upgrade



- Galiso will send a technician to perform the REC 4 Open Upgrade. Replaces the Transducer, Load Cell, Computer w/Cards, and Monitor.
- You will receive a new Dell Windows Computer, 21" Flat Screen Monitor, PLC, Printer, Serial Transducer (rated for 50 million cycles and accurate to 0.1%) and Serial Weigh Scale that communicate without need of an A/D Card.
- The REC 4 Open is built on a Windows 10 platform and will test up to 20 medium sized cylinders per hour when manned by one experienced operator.
- Network capable - connecting to your local Domain or Workgroup network, test results can be stored on any system or multiple systems or even e-mailed to the Customer.
- Cylinder Database: Cylinders can be pre-entered by data entry personnel or while the other cylinder is testing by the operator.
- Drop down menus allow for quick data entry of cylinder manufacturers, cylinder codes, gas service and cylinder batches.
- 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
- Operator is free to perform other tasks or prepare another cylinder for the next test while tests are being performed.
- 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



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Montrose, CO 81401

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Testing Water Jacket by Cylinder Type



Galiso Pressure Indicating Device is .25% Accurate

Regulations Require Accurate within $\pm 1\%$ of prescribed test pressure (3000psi Test pressure needs to be accurate within 30psi) of any cylinder tested that day. Accuracy of pressure indicating device can be demonstrated at any point within 500psi of actual test pressure above 3,000psi, Or 10% of the actual test pressure for pressures below 3,000psi.



Expansion Measuring Device

Needs to allow for readability within 1% of total expansion of cylinder or .1cc Whichever is greater

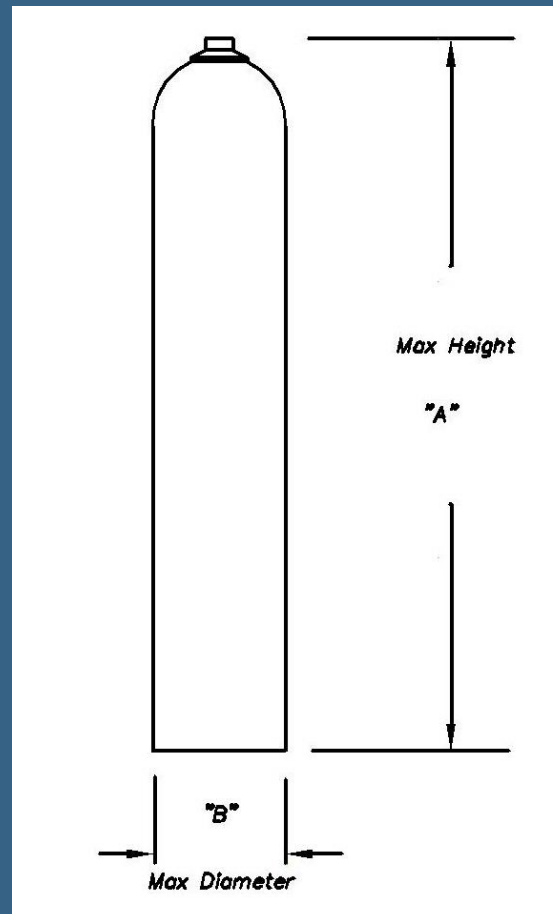
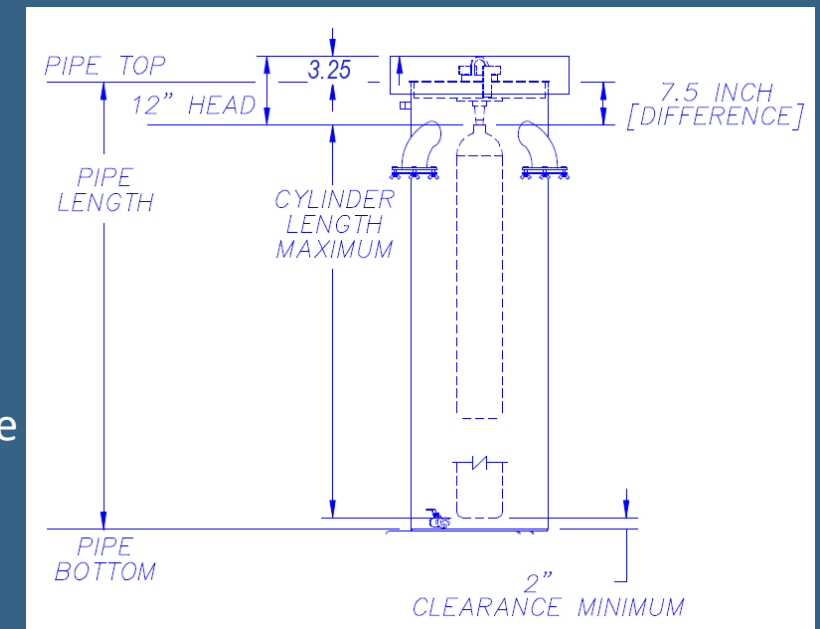
Scale capacity should account for total cylinder Expansion volume plus $\frac{1}{4}$ of the weigh bowl volume

Cylinder Length should be no more than the pipe length of the jacket minus 10"

Standard Tall Jacket Pipe Length 78"

Standard Short Jacket Pipe Length 42"

(pipe length is measurable distance inside test jacket from bottom to rim that the test head sets on)



Test pressure of cylinder:

DOT 3 = 3000psi

DOT 3A, 3AA, 3AL, 3AX, 3AAX, 3HT, 3T = 5/3 Service Pressure

DOT 4AA480, 4B, 4BA, 4BW, 4B-240ET, 4D, 4DA, 4DS, 4E = 2x Service pressure

Note: Water jacket not always required and exceptions apply see CFR49 180.209 Table 1

Cylinder diameter should allow for $\frac{1}{2}$ "-1" clearance inside of jacket. Please reference following I.D.'s on our test jackets:

12" = 12" ID

14" = 13.25" ID

18" = 17.25" ID

24" = 23.25" ID

30" = 29.25" ID

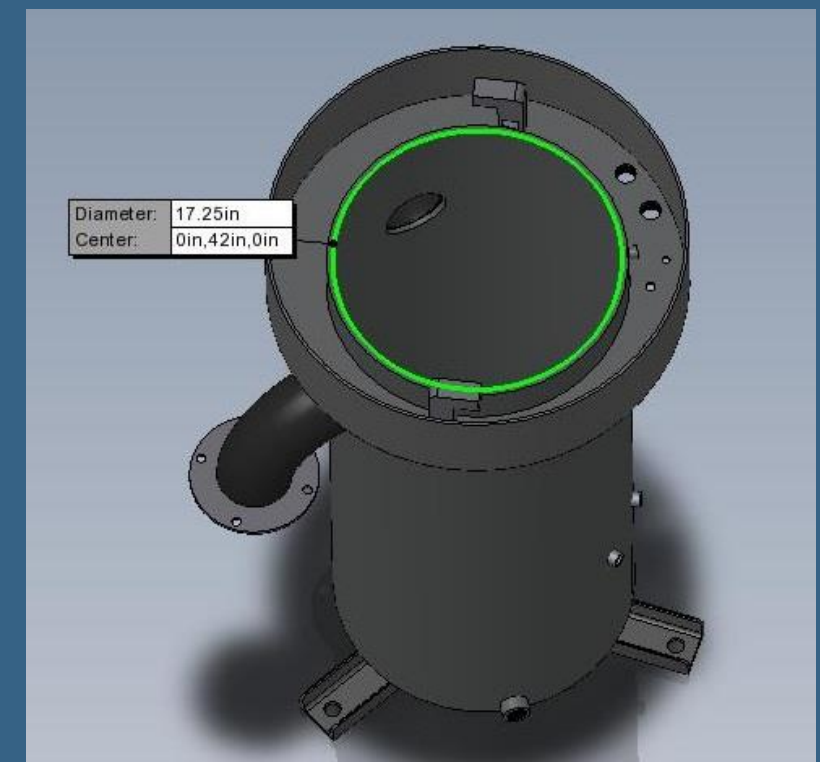
36" = 35.25" ID



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Test systems can be configured for all cylinder types

List of Cylinder Trade Names and Sizes



SCBA and Life Support cylinders

Common Neck Thread Sizes: .875-14, M18 x 1.5 , .750-16(2216psi)

Trade Name	Dia	Length	spec	Service Pressure
5min/7cf	4.4″/112mm	9.3″/236mm	3AL	2216psi/153Bar
5min/8cf	3.3″/89mm	13.4″/340mm	HW	3000psi/207Bar
5min/9cf	4.4″/112mm	9.8″/249mm	3AL	3000psi/207Bar
10min/13cf	4.4″/112mm	13.1″/333mm	3AL	3000psi/207Bar
10min/15cf	4.5″/113mm	13.1″/333mm	HW	3000psi/207Bar
10min/17cf	3.8″/95mm	15.3″/388mm	HW	4500psi/310Bar
15min/23cf	4.6″/117mm	14.1″/358mm	FW	4500psi/310Bar
15min/24cf	5.4″/136mm	14.1″/358mm	HW	3000psi/207Bar
30min/45cf	6.8″/172mm	20.9″/530mm	3AL	2216psi/153Bar
30min/45cf	5.4″/137mm	19.8″/502mm	HW	4500psi/310Bar
45min/65cf	6.8″/172mm	18″/457mm	FW	4500psi/310Bar
60min/87cf	7″/178mm	21.7″550mm	FW	4500psi/310Bar
45cf	6.8″/172mm	19.5″/494mm	3AL	2215psi/153Bar
51cf	5.6″/142mm	18.2″/464mm	FW	4500psi/310Bar
71cf	6.3″/160mm	19.8″/503mm	FW	4350psi/300Bar
74cf	6.3″/160mm	20.7″/526mm	FW	4500psi/310Bar
98cf	7″/177mm	20.9″/538mm	FW	4500psi/310Bar

SCUBA cylinders

Common Neck Thread Sizes: ¾″NPSM

Trade Name	Dia	Length	spec	Service Pressure
			3AL	
4cf	3.2″/81.5mm	7.8″/198mm		3000psi/207Bar
6cf	3.2″/81.5mm	10.8″/274mm		3000psi/207Bar
13cf	4.4″/111mm	12.8″/325mm		3000psi/207Bar
19cf	4.4″/111mm	17.7″/450mm		3000psi/207Bar
30cf	5.3″/134mm	19.9″/505mm		3000psi/207Bar
40cf	5.3″/134mm	25.4″/645mm		3000psi/207Bar
45cf	6.9″/175mm	17.7″/450mm		3000psi/207Bar
50cf	6.9″/175mm	19.4″/493mm		3000psi/207Bar
53cf	7.3″/185mm	19.2″/488mm		3000psi/207Bar
60cf	7.3″/185mm	19.9″/506mm		3300psi/228Bar
63cf	7.3″/185mm	21.7″/551mm		3000psi/207Bar
80cf	7.3″/185mm	25.9″/658mm		3000psi/207Bar
80cf	7.3″/185mm	25.5″/648mm		3300psi/228Bar
100cf	8″/203mm	26.5″/648mm		3300psi/228Bar



High Pressure / ISO cylinders

Common Neck Thread Size: ¾″ Taper, 25E

Trade Name	Dia	Length	Spec	Service Pressure
			3A 3AA	
20cf	5.3″/134mm	13.8″/350mm		2015psi/139bar
40cf	7″/178mm	18″/457mm		2015psi/139bar
55cf	7″/178mm	22.9″/582mm		2015psi/139bar
80cf	6.9″/176mm	32.4″/823mm		2015psi/139bar
110cf	6.9″/176mm	43″/1092mm		2015psi/139bar
150cf	7.3″/184mm	46.5″/1181mm		2015psi/139bar
200cf	8.8″/222mm	51″/1295mm		2015psi/139bar
220cf	9.3″/236mm	51″/1295mm		2015psi/139bar
125cf	6.9″/176mm	43″/1092mm		2265psi/156bar
250cf	9.3″/236mm	51″/1295mm		2265psi/156bar
300cf	9.3″/236mm	55.5″/1410mm		2400psi/165bar
400cf	10.7″/272mm	56″/1422mm		2400psi/165bar
295cf	9″/229mm	50.5″/1283mm		2900psi/200bar
370cf	9″/229mm	61″/1550mm		2900psi/200bar
550cf	11.3″/286mm	64″/1626mm		3000psi/207bar
340cf	9.2″/233mm	51″/1295mm		3500psi/241bar
345cf	9.3″/236mm	51″/1295mm		3600psi/248bar
320cf	9″/229mm	38″/1422mm		4351psi/300bar
425cf	9″/229mm	50″/1270mm		4351psi/300bar
490cf	9″/229mm	56″/ 1422mm		4351psi/300bar
530cf	9″/229mm	60″/1520mm		4351psi/300bar
540cf	9″/229mm	60″/1520mm		4495psi/310bar
450cf	9″/229mm	51″/1295mm		4496psi/310bar
530cf	9.4″/239mm	53″/1340mm		5000psi/345bar
670cf	9.4″/239mm	57.5″/1461mm		5000psi/345bar
500cf	9.4″/239mm	51″/1295mm		6000psi/414bar
580cf	9.4″/239mm	52″/1321mm		6000psi/414bar
675cf	9.4″/239mm	59.3″/1510mm		6000psi/414bar



Paintball cylinders

Common Neck Thread Sizes: 5/8-18

Trade Name	Dia	Length	Service Pressure
9cf	4.3″/110mm	7.4″/188mm	4500psi/310Bar
12cf	4.3″/110mm	9.1″/231mm	4500psi/310Bar



Inflation Aerospace Cylinders

Trade Name	Dia	Length	Spec	Service Pressure
			3AA/3HT Composite	
14cf	4″/102mm	14.6″/371mm		3000psi/207Bar
23cf	5.1″/130mm	14.6″/371mm		3000psi/207Bar
41cf	6.1″/155mm	18.5″/470mm		3000psi/207Bar
50cf	5.4″/137mm	18.4″/467mm		4945psi/341Bar
59cf	6.8″/172mm	20.7″/526mm		3050psi/210Bar
65cf	6.9″/175mm	20.7″/526mm		3295psi/227Bar
73cf	6.9″/175mm	18.3″/465mm		4945psi/341Bar
88cf	5.9″/150mm	31.9″/810mm		4500psi/310Bar
96cf	5.9″/150mm	31.9″/810mm		4945psi/341Bar
139cf	7.7″/196mm	33″/838mm		3400psi/234Bar
178cf	8.1″/206mm	31.3″/795mm		4500psi/310Bar
307cf	9.4″/239mm	51″/1295mm		3100psi/214Bar
341cf	9.4″/239mm	51″/1295mm		3500psi/241Bar
956cf	14″/356mm	56.7″/1440mm		5000psi/345Bar



Extinguishing Agent cylinders

Common Neck Thread Sizes: 3″-12UNJ

Trade Name	Dia	Length	Service Pressure
	16″/410mm	61.25″/1556mm	500psi/34Bar
600lb	22″/559mm	58″/1478mm	500psi/34Bar
900lb	24″/610mm	70″/1789mm	500psi/34Bar



Aviation Cylinders

Trade Name	Dia	Length	Spec	Service Pressure
			3AA/3HT	
4CF	3.6″/91mm	9.3″/235mm		1800psi/124Bar
7CF	3.6″/91mm	13.4″/340mm		1800psi/124Bar
11CF	3.6″/91mm	18.8″/477mm		1800psi/124Bar
22CF	5.3″/135mm	18.3″/464mm		1800psi/124Bar
38CF	6.8″/172mm	19.3″/489mm		1800psi/124Bar
39CF	6.8″/172mm	19.1″/486mm		1850psi/128Bar
48CF	6.8″/172mm	23.5″/597mm		1800psi/124Bar
49CF	6.8″/172mm	23.4″/594mm		1850psi/128Bar
63CF	7.3″/184mm	26.8″/680mm		1800psi/124Bar
66CF	7.3″/184mm	36.6″/929mm		1850psi/128Bar
76CF	7.3″/184mm	29.8″/756mm		1850psi/128Bar
114CF	9″/229mm	29.6″/751mm		1850psi/128Bar



Airgun cylinders

Common Neck Thread Sizes: 3/4-16

Trade Name	Dia	Length	Service Pressure
3.88cf	2.4″/61mm	10.2″/259mm	3626psi/250Bar

Medical Cylinders

Common Neck Thread Size: .750-16,1.125-12(M60+)				
Trade Name	Dia	Length	Spec	Service Pressure
			3AL	
M2	2.5″/64mm	5.9″/149mm		2216
M4	3.2″/81mm	9″/229mm		2216
M6	3.2″/81mm	11.8″/300mm		2216
MB08 / M7.5	3.2″/81mm	11.8″/300mm		3000
M6A	4.4″/112mm	7.9″/201mm		2015
M7.8	4.4″/112mm	7.8″/198mm		3000
M7	4.4″/112mm	9.2″/234mm		2015
M9	4.4″/112mm	10.6″/269mm		2015
MC13 / M12	4.4″/112mm	10.6″/269mm		3000
MD15	4.4″/112mm	16.3″/414mm		2015
MD22	4.4″/112mm	16.3″/414mm		3000
M20	4.4″/112mm	16.8″/427mm		3000
Jumbo D	5.3″/135mm	17.1″/434mm		2216
ME24	4.4″/112mm	25.3″/643mm		2015
ME36 / M32	4.4″/112mm	25.3″/643mm		3000
M60	7.3″/185mm	23.5″/597mm		2216
M74	7.3″/185mm	23.8″/605mm		3000
M90	7.3″/185mm	32.9″/836mm		2216
MM / M122	8″/203mm	36.3″/922mm		2216
M150	8″/203mm	47.9″/1217mm		2015
M200	8.6″/218mm	41.7″/1059mm		3000
M265	9.8″/249mm	51.4″/1306mm		2216

Med B	3.3″/84mm	13.3″/337mm		2015
Med D	4.2″/106mm	16.8″/426mm		2015
Med E	4.2″/106mm	25.8″/654mm		2015
Med M	7″/178mm	43″/1092mm		2015

			Composite	
M06D	3.3″/84mm	9.9″/251mm		3000
M09B	3.3″/84mm	12.2″/310mm		3000
M15A	4″/102mm	14.7″/373mm		3000
M22A	4.5″/114mm	15.5″/394mm		3000
M24A	4.5″/114mm	17.4″/442mm		3000
M66A	6.8″/172mm	20.7″/526mm		3000

200Bar/2900psi Cylinders

Common Neck Thread Size: ¾″ Tapered, W27.8 DIN 477			
Trade Name	Dia	Length	Spec
Inergen			
20L	8″/204mm	36.9″/937mm	3AL
27L	8″/204mm	41.7″/1060mm	3AA
40L	8″/204mm	58.5″/1485mm	3AA
40L	9″/230mm	48″/1219mm	3AA
50L	9″/230mm	58″/1473mm	3AA
67L	10.5″/267mm	58.5″/1485mm	3AA
80L	10.5″/267mm	68.7″/1745mm	3AA

Chlorine Cylinders

Common Neck Thread Size: ¾″ Tapered			
Trade Name	Dia	Length	Service Pressure
			480psi
10CL100	10.5″/266mm	34″/864mm	
10CL150	10.5″/266mm	48″/1219mm	
1 ton	30.3″/770mm	82″/2082mm	

CO₂ /Beverage/Fire Extinguisher/Nitrous

1800psi / 124Bar Cylinders

Common Neck Thread Size: .625-18,.750-16,1.125-12, 1.625-12				
Trade Name	Dia	Length	Spec	
			3AL	
1.0lb	3.2″/81mm	7.8″/198mm		
1.3lb	3.2″/81mm	9.5″/241mm		
1.5lb	3.2″/81mm	11.1″/282mm		
1.6lb	3.2″/81mm	11.5″/292mm		
1.8lb	3.2″/81mm	12.5″/318mm		
2lb	4.4″/112mm	9″/229mm		
2.5lb	4.4″/112mm	10.4″/264mm		
5lb	5.3″/135mm	14.2″/361mm		
10lb	6.9″/175mm	16.6″/422mm		
15lb	6.9″/175mm	23.2″/589mm		
16.3lb	8.6″/218mm	17.9″/454mm		
20lb	8″/203mm	23.3″/592mm		
22lb	8″/203mm	25.1″/638mm		
35lb	8″/203mm	38″/965mm		
50lb	8.6″/218mm	46.5″/1181mm		

			3AA	
2.5lb	3.6″/91mm	14.7″/373.4mm		
5lb	5.6″/142mm	13.8″/351mm		
10lb	7″/178mm	18″/457mm		
15lb	7″/178mm	22.9″/582mm		
20lb	7.4″/188mm	25.5″/648mm		
50lb	9.3″/236mm	44.5″/1130mm		
75lb	9.3″/236mm	56.5″/1435mm		
100lb	10.7″/272mm	58″/1473mm		

Refrigerant / Halon Recovery Cylinders

Common Neck Thread Size: ¾″ Tapered

Trade Name	Dia	Length	Spec	Service Pressure
15lb	8″	12.3″	4BA400	400psi/28Bar
30lb	9.1″	19.8″	4BA400	400psi/28Bar
50lb	12.3″	18.8″	4BA400	400psi/28Bar
123lb	10″	54.8″	4BW400	400psi/28Bar
239lb	14.7″	48.7″	4BW260	260psi/18Bar
239lb	14.7″	48.7″	4BW400	400psi/28Bar
500lb	24″	42.3″	4BW400	400psi/28Bar
1,000lb	30″	57.3″	4BW260	260psi/18Bar
1,000lb	30″	57.3″	4BW400	400psi/28Bar

Compressed Natural Gas CNG and NGV Cylinders

Common Neck Thread Size: 1.125-12

Trade Name	Dia	Length		Service Pressure
61L	14.2″/360mm	32″/813mm	Type I	3600psi/250bar
100L	12.6″/320mm	60″/1524mm	Type I	3600psi/250bar
122L	12.6″/320mm	72″/1829mm	Type I	3600psi/250bar
70L	15.6″/397mm	32.7″/830mm	Type III	3000psi/207bar
106L	18.1″/460mm	36.2″/920mm	Type III	3000psi/207bar
130L	18.1″/460mm	41.7″/1060mm	Type III	3000psi/207bar
32L	10″/263mm	34″/864mm	Type IV	3600psi.250bar
69L	10.8″/274mm	60″/1524mm	Type IV	3600psi/250bar
81L	10″/263mm	80″/2032mm	Type IV	3600psi/250bar
90L	13″/329mm	60″/1524mm	Type IV	3600psi/250bar
142L	14″/348mm	82″/2086mm	Type IV	3600psi/250bar
199L	16″/410mm	78″/1981mm	Type IV	3600psi/250bar
247L	18″/460mm	78″/1981mm	Type IV	3600psi/250bar
251L	21″/538mm	60″/1530mm	Type IV	3600psi/250bar
287L	22″/564mm	60″/1530mm	Type IV	3600psi/250bar
376L	26.5″/673mm	60″/1530mm	Type IV	3600psi/250bar
539L	21″/538mm	120″/3048mm	Type IV	3600psi/250bar
560L	26″/658mm	90″/2286mm	Type IV	3600psi/250bar
780L	26″/658mm	120″/3048mm	Type IV	3600psi/250bar
900L	26.5″/673mm	120″/3048mm	Type IV	3600psi/250bar
		JUMBO		
1044L	22″/559mm	211″/5.36m	Type II	3600psi/250bar
2230L	22″/559mm	431″/10.95m	Type II	3600psi/250bar
2340L	22″/559mm	452″/11.48m	Type II	3600psi/250bar

Propane / Forklift / Marine Cylinders

Common Neck Thread Size: ¾″ Tapered

Trade Name	Dia	Length	Spec	Service Pressure
			4B(A,W,E)240	240psi / 17Bar
5lb	8″	12″		
10lb	8.9″	17.4″		
11lb	12.2″	12.4″		
20lb	12.2″	18″		
30lb	12.2″	23.4″		
33.5lb	12.2″	27.3″		
40lb	12.2″	29.4″		
43.5lb	12.2″	33.3″		
50lb	15.1″	27.4″		
60lb	12.2″	43.1″		
100lb	15.1″	46.6″		
200lb	24″	41.9″		
420lb	30″	53.8″		

Hydrogen H2 Fuel Cell Cylinders

Common Neck Thread Size: 2.000-12		Spec Type III	
Trade Name	Dia	Length	Service Pressure 5076psi/350Bar
30L	11.7″/298mm	27.6″/700mm	
42L	13.4″/340mm	29.1″/740mm	
52L	13.4″/340mm	34.4″/875mm	
74L	15.7″/400mm	35.4″/900mm	
94L	13.4″/340mm	57.4″/1458mm	
202L	16.3″/415mm	83.1″/2110mm	
318L	16.3″/415mm	123.1″/3128mm	

Standard 12" High Pressure System



Diameter/Max Cylinder Diameter

Length/Max Cylinder Length

Tall Test Jacket Short Test Jacket (no pit)

12"/11.25" 78"/68.5" 42"/32"

Cylinder	Common Neck Thread	Quick Connect G Spud	Cylinder Diameter	Cylinder Length	Cylinder Length
Aluminum Medical, Industrial M2 - M90	.75-16 UNF(excM60,M90)	01-31-3162	7.25" or less	32.7" or less	32.7" or less
Aluminum Medical, Industrial M122-M265	1.125-12UNF	01-31-3165	9.8" - 7.4"	36.2-51.7"	36.2-51.7"
SCUBA	.75-14 NPSM/.875-14UNF (Comp)	01-31-3164	8" or less	26.5" or less	26.5" or less
SCBA 2216 -3000	.75-16 UNF	01-31-3162	8" or less	26.5" or less	
SCBA 4500	.875-14 UNF	01-31-3114	8" or less	26.5" or less	
SCBA 5500	M18 x 1.5	01-31-3186(Adapter)	8" or less	26.5" or less	26.5" or less
Paintball	.625-18	01-32-2445(Adapter)	7" or less	18" or less	18" or less
Aluminum Fire, CO2,N2 35-50lb	1.125-12 UNF	01-31-3165	8" to 8.6"	38 - 46.5"	38 - 46.5"
Aluminum Fire, CO2, N2 1-22lb	.75-16 UNF	01-31-3162	8" or less	25.1" or less	25.1" or less
Steel 3AA 20cf - 80cf	.75-14 NGT	01-32-2824	7" or less	32.375"	32.375"
Steel Industrial 300 (T)	.75-14 NGT	01-32-2824	9"	55"	55"
Steel Industrial 200 (K)	.75-14 NGT	01-32-2824	9"	51"	51"
Steel CO2, 50lb- 100lb	.75-14 NGT	01-32-2824	10.75" or less	58" or less	58" or less
Steel Co2, 5lb-20lb	.75-14 NGT	01-32-2824	7.4" or less	25.5" or less	25.5" or less
Steel Medical B - E	.500-14 NGT	01-32-2846	4.2" or less	25.75" or less	25.75" or less
Steel Medical M	.75-14 NGT	01-32-2824	7" OD	43"	43"
Aircraft 3HT Cylinders 3AA	.75-14 NGT	01-32-2824	9" or less	30" or less	30" or less
High Pressure Composite	.875-14,1.125-12,.75-16 UNF	Various Straight Thread	10.15" or less	32.46" or less	32.46" or less
Inergen 27,40,50,67 liter	1.00-11 NGT	01-32-2845	10.6" or less	58.5" or less	58.5" or less
Inergen 80 liter	1.00-11 NGT	01-32-2845	10.6" or less	68.7"	68.7"

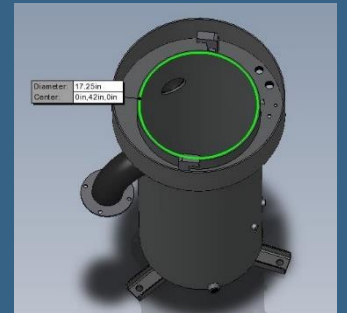
List of popular cylinders that can be tested with the standard 12” Jacket test system. Adapters or spuds may be required for neck threads ** List is not all inclusive **



Medical Cylinders

Medical Aluminum D,E,M4,M6, etc.

Demonstrable cylinders tested per hour – throughput varies by site – Variable Speed Hoist



12" = 12" ID



12" Single Jacket		Dual Jacket	
G Head / MP Head		G Head / MP Head	
6-8	12-16	8-10	12-16
8-10	16-20	18-24	24-40
8-12	18-22	24-30	30-45
n/a	n/a		60
n/a	n/a	n/a	88-120

GTC System



R40 System



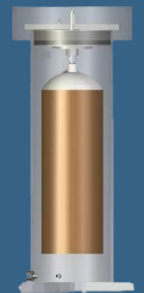
Rec4 System



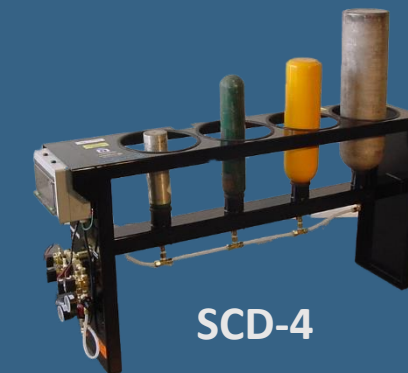
Multi-Test System



GWJ-SAL System



01-51-3805 SCC 2350-3350



SCD-4



Belt vise



GCD-4

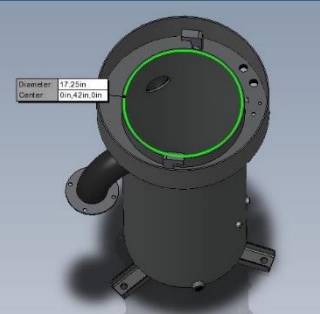


MA-4



Scuba Cylinders

Demonstrable cylinders tested per hour – throughput varies by site – Variable Speed Hoist



12" = 12" ID



GTC System



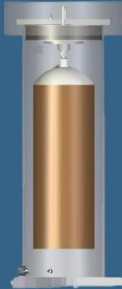
R40 System



Rec4 System



Single Jacket	Dual Jacket
G Head	G Head
6-8	8-10
10-12	18-24
12-14	24-30



01-51-2346 SCC 3k to 5.5k



Belt vise



GCD-4

22 Ponderosa Ct

Montrose, CO 81401

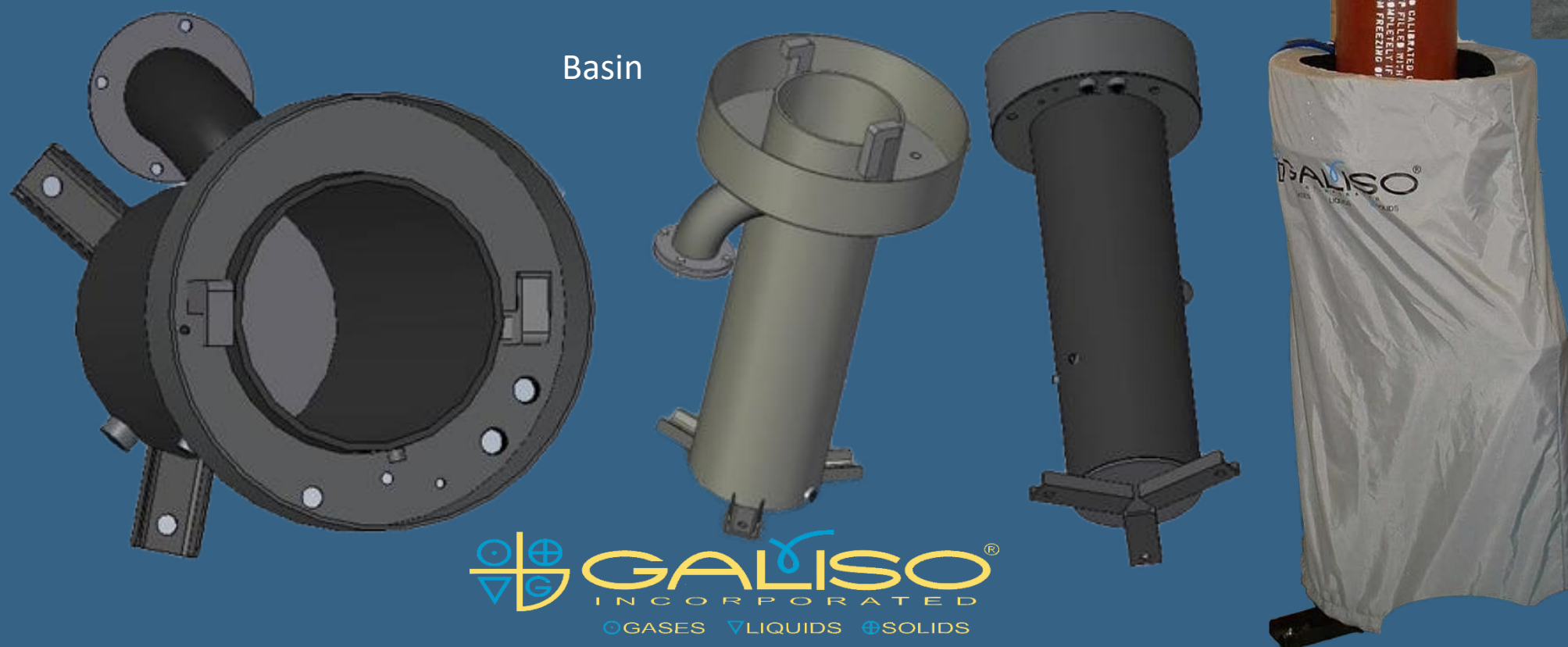
www.galiso.com (800)854-3789

GTJ Hydraclose Test Jackets

The GTJ, Galiso Hydraclose Test Jacket is an integral component of most Galiso test systems. The GTJ water jacket is specially designed to accommodate the Hydraclose Test Head which seals the jacket pneumatically. This design will give you many years of service without worry of a leaking head seal to ruin your test.

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 is available in 12", 14", 18", 24", 30" & 36" nominal diameters.



The Standard test jacket has a drain valve, a basin splash shield and connection hoses that attach to the Test Head. A standard tall is 83 1/4" overall height for testing cylinders 68 1/2" in height. A standard short is 47 1/4" overall height for testing cylinders 32 1/2" in height.

The test jacket can be custom made to fit any size cylinder requiring a water jacket test.

Options:

- POR15 coating is an option on steel jackets which will help against corrosion



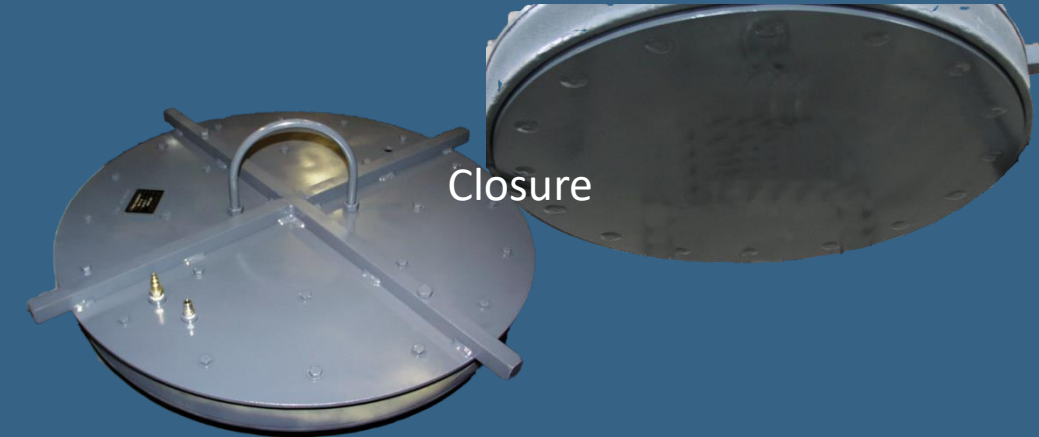
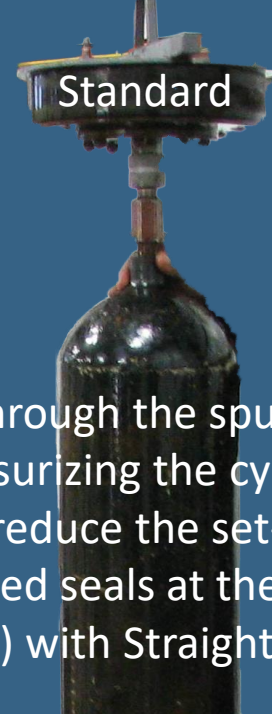
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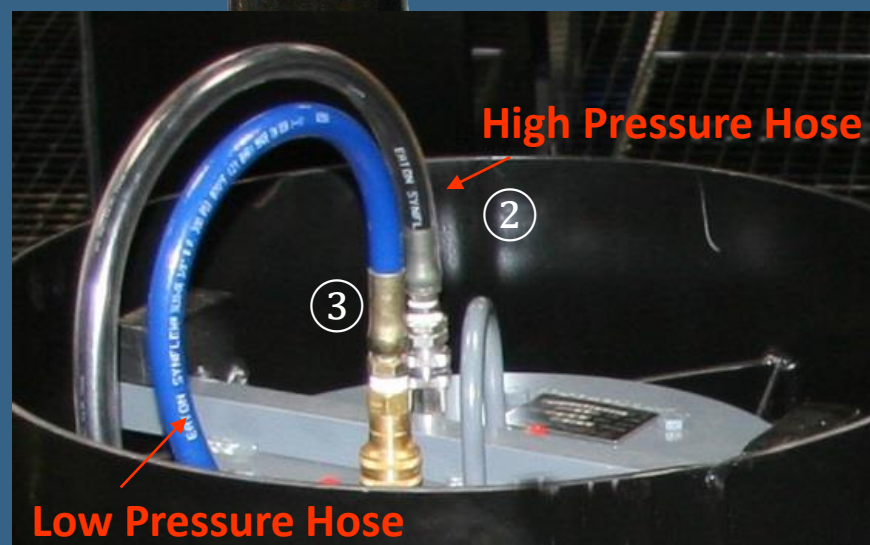
Stainless



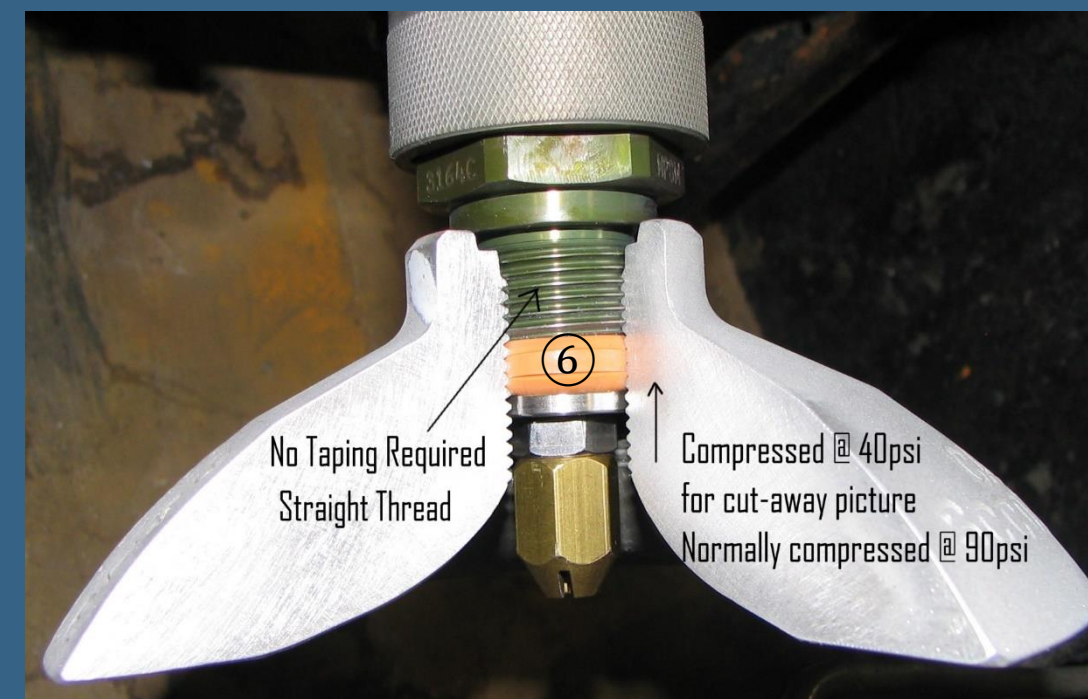
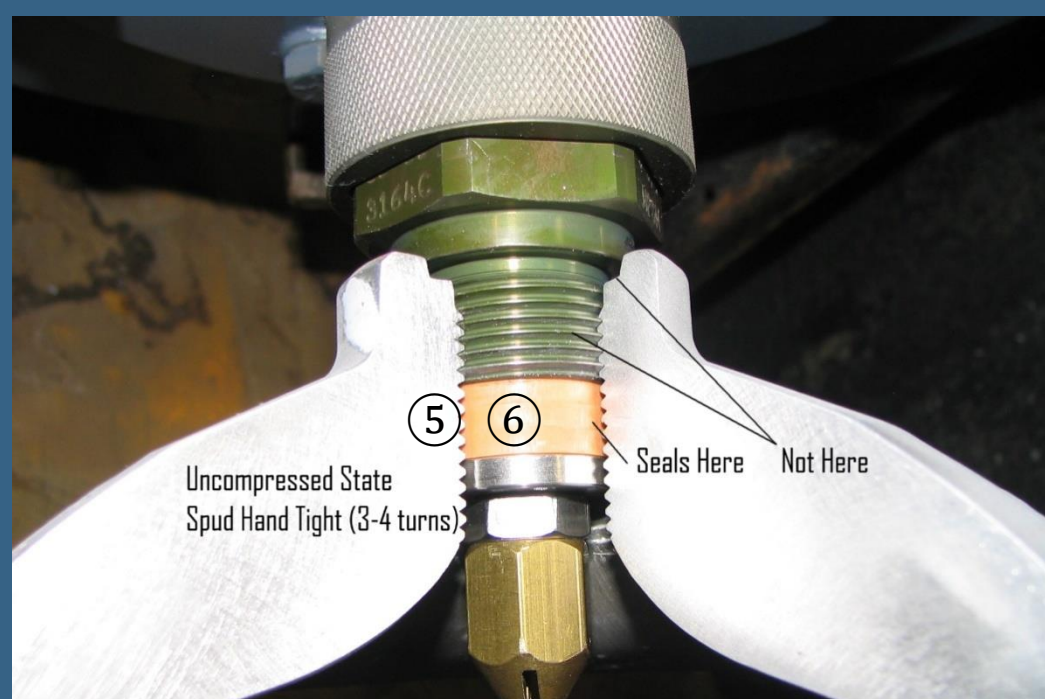
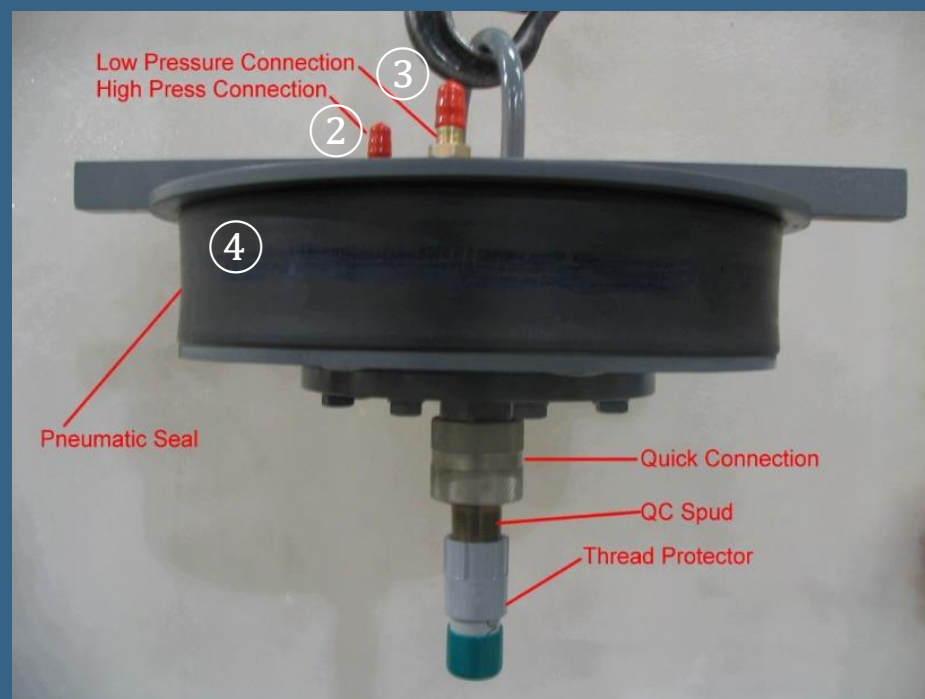
Maximum Test Pressure of cylinder: 11,000psi, higher pressure test jackets available by special order.



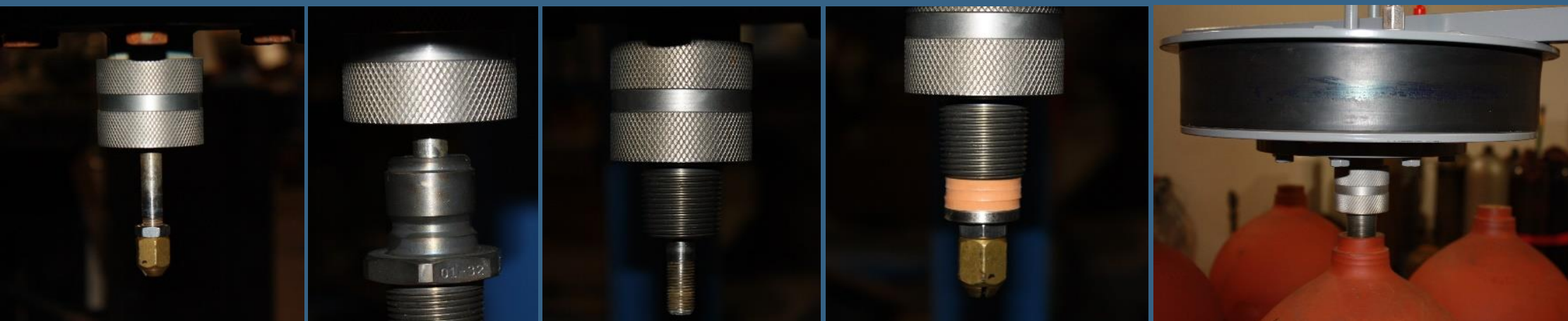
- ① The Test Head connects to the cylinder through the spud.
- ② High pressure connection allows for pressurizing the cylinder to required PSI (up to 11,000psi).
- ③ Low Pressure connection is designed to reduce the set-up time for testing by pneumatically sealing the head to the test jacket at the pneumatic boot ④, and sealing the cylinder test connection with speed seals at the cylinder threads ⑤. This eliminates the need to Teflon tape each connection to the cylinder. The spud turns in 3-4 turns (enough to lift the cylinder) with Straight or Tapered threads, then seals automatically⑥.



Test heads come as the original "H" (threaded) ⑦ spud configuration or "G" style configuration ⑧. "G" Style allows you to swap thread sizes quickly.



Seals the cylinder test connection with speed seals at the cylinder threads when Low Pressure Hose is applied



This "G" style uses a quick-connect spud that allows you to change the cylinder side thread in as little as 20 seconds. With the "G" style you have a direct connection to the cylinder rather than using an adapter. This minimizes leak points and wear you would normally see when adapting a spud to fit different cylinder neck threads.

Test Head Connection



H-Style



G-Style

Spud Uses
Speed Seal

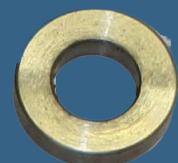


Air Requirements...90PSI (Head Seal)
Test Pressure..... Up To 10,000 PSI

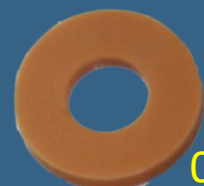


.75"

01-32-3159

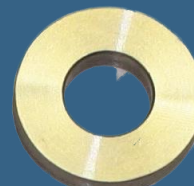


01-32-3158



.89"

01-32-2534

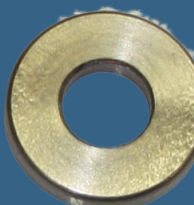


01-32-2535



1.01"

01-32-2549

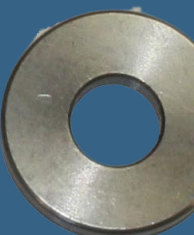


01-32-2547



1.09"

01-32-2537



01-32-2538

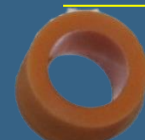


1.46"

01-32-2550



01-32-2548A



.56"

01-32-2382



01-32-2379



.600"

01-32-2400



01-32-2401A



.656"

01-32-2531A



01-32-2532



Adapter

No Speed Seal

Test Spuds

G-style

01-41-3163 Straight Thread Spud kit

Galiso Test Head comes with standard 3/4" NPT cylinder connection with Galiso patented "Speed Seal". This kit is for 3/4"NPSM, 1 1/8"-12, 7/8"-14 and 3/4"-16 Straight Thread cylinder connection with properly sized Speed Seal and Spud Washer.



01-41-4652A Tapered Thread Spud Kit
This kit is for 1/2"NPT and 1"NPT cylinder connection with properly sized Speed Seal and Spud Washer.

G-style Spud sizes and seals (partial list)

H-style



This H-Style Spud kit is for 1/2"NPT and 1"NPT cylinder connection with properly sized Speed Seal and Spud Washer.

H-style Spud sizes and seals (partial list)



GALISO
INCORPORATED
GASES LIQUIDS SOLIDS

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Part Number	Cylinder Side Thread =>	Seal	Spud Washer	Part Number	Cylinder Side Thread =>	Seal	Spud Washer
01-32-2846	.50" NPT	01-32-2531A	01-32-2532	01-31-2349	PZ27.8	01-32-2534	01-32-2535
01-31-2455C	.715 Whitworth BS 341	01-32-2400A	01-32-2401A	01-31-2350C	W28.8" X 1/14" Taper DIN 477	01-32-2534	01-32-2535
01-31-2369	.75" - 14 NGT	01-32-2549	01-32-2547	01-31-2364B	.75" - 14 NGT 24Thds Oversize	01-32-2549	01-32-2547
01-31-2367B	JIS B 8241 - V1	01-32-2400a	01-32-2401A	01-32-2530	1/2" NGT	01-32-2532	01-32-2531
01-31-2368B	JIS B 8241 -V2	01-32-2534	01-32-2535	01-32-2533HT	3/4" NGT	01-32-2534	01-32-2535
01-32-2499C	.75" NPT (1 Turn Oversize)	01-32-2534	01-32-2535	01-32-2536	1" NGT	01-32-2537	01-32-2538
01-32-2530E	.50" NPT (I - 2 Turns Under Basic)	01-32-2531A	01-32-2532	01-31-3114	.875-14 UNF	01-32-3159	01-32-3158
01-32-2533F	.75" - 14 SGIT (1.500"Ft. Taper)	01-32-2534	01-32-2535				
01-32-2536G	1.00" NPT (I - Turns Under Basic)	01-32-2537	01-32-2538				
01-32-2837E	.715" - 14 TPI Whitworth BS 341	01-32-2400A	01-32-2401A				

Adapters: We stock adapters for most cylinder neck threads.
Custom Adapters can be made upon request

GTHK Galiso Test Head Tool Kit

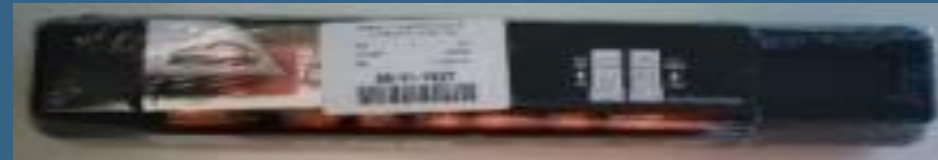
The THTK, Galiso Test Head Tool Kit includes everything you'll need to maintain and repair your test head. Galiso Part Number **68-54-1925**

Includes:

01-51-2700 Open Face, Head Test Kit - Allows you to check internal lines and stem for leak prior to assembly of diaphragm



68-11-1927 Wrench, Torque, 3/8" Drive



68-11-1928 Wrench, Check Nut, 1-1/2" Fractional, SAE to hold Pressurization Adapter



68-11-1929 2ea, Wrench, Jam Nut, 9/16", Ultra thin, Black Oxide



68-11-1930 Socket, Shallow, Test Head Bolt, 6-Point



68-31-1899 HBIT, Head Boot Install Tool



68-31-1926 Socket for Head Stem Installation 3/8" Drive x 6"



68-41-1860 Assembly, Wrench, Spanner, 2-1/4, w/Extension



******See Repair Video******

Test band (Not included in tool Kit)



01-61-2676, 12"

01-61-2675, 14"

01-61-2617, 18"

01-61-2961, 24"



Calibrated Cylinders

Galiso supplies calibrated cylinders in two size groups, the SCC (Short Calibrated Cylinder) and the 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 system. 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.

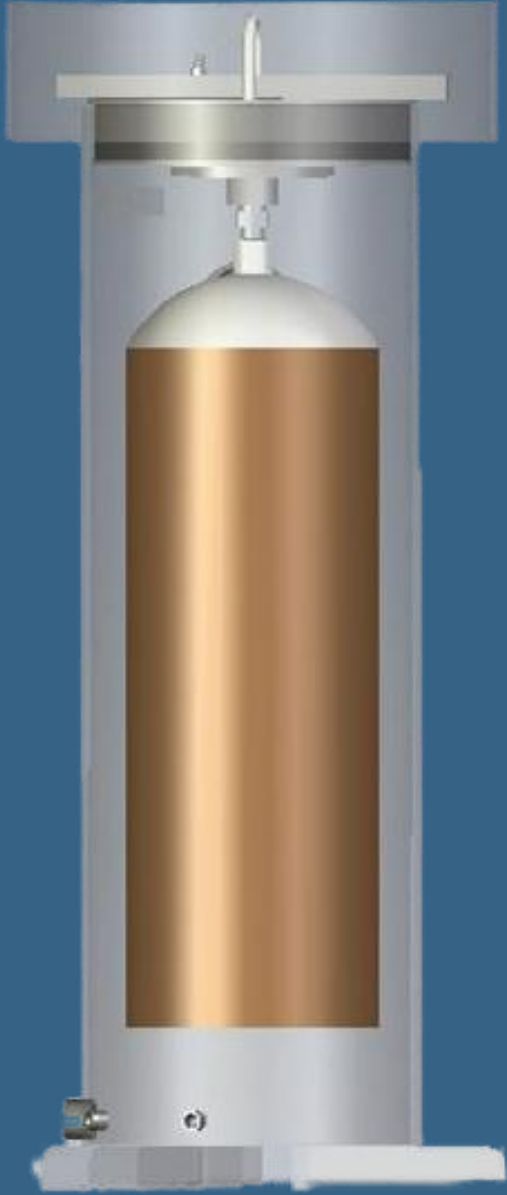
Low-Med Pressure Cylinder	Size(Dia×L)	Adapter *	Nom		400	450	500	600	700	750	800	850	1000	1200	1400	1600	1800	2000	2350	2500	2700	2850	3000	3350	4000
			Expansion	High Point																					
01-51-3800 SCC 400-750	10"×32.6"	3/4"(01-32-2635D)	65cc		X	X	X	X	X	X															
01-51-3803 LCC500 400-800	24" x 50"	3/4"(01-32-2635D)	600cc		X	X	X	X	X	X	X														
01-51-3806 LCC500DE 400-800	24" x 50"	3/4"(01-32-2635D)	1520cc		X	X	X	X	X	X	X														
01-51-3804 LCC100 400-800	12.2"x30.7"	3/4"(01-32-2635D)	102cc		X	X	X	X	X		X														
01-51-3802 LCC250 400-800	16" x 43"	3/4"(01-32-2635D)	255cc		X	X	X	X	X			X													
01-51-2340 SCC 1k to 3k	7"×32.6"	3/4"(01-32-2635D)	67cc										X	X	X	X	X	X		X			X		
01-51-3805 SCC 2350-3350	4.2" x 25.6"	3/4-16unf (01-32-2798)	29cc																X			X		X	
01-51-2342 LCC 400 to 4000	9.25"×55"	3/4"(01-32-2635D)	225cc		X	X	X	X	X		X		X	X	X	X	X	X	X		X	X	X	X	X

High Pressure Cylinder	Size(Dia×L)	Adapter *	Nom		2700	3000	4000	5000	5500	6000	7000	8000	9000	10000
			Expansion	High Point										
01-51-2720 LCC 3k to 6k	9.3" x 51"	3/4"(01-32-2635D)	192cc			X	X	X		X				
01-51-2346 SCC 3k to 5.5k	8" x 26.2"	3/4NPSM (01-32-2540)	79cc			X	X	X	X					
01-51-2353 SCC 2.7k to 10k	9.3" x 32.6"	3/4"(01-32-2635D)	110cc		X	X	X	X		X	X	X	X	X
01-51-2378 LCC 2.7k to 10k	9.3" x 51"	3/4"(01-32-2635D)	160cc		X	X	X	X		X	X	X	X	X

*Adapter recommended to preserve threads on calibration cylinder



Hydrostatic test systems must be checked daily to ensure the accuracy of cylinder test results and to be in accordance with DOT regulations, . The calibrated cylinder is a special cylinder, which is used for daily test system expansion reading calibration verification.



Galiso Master Gauge Assembly

The Master Gauge Assemblies are used for verification and calibration. A Master Gauge Assembly is used to calibrate the process gauge. This allows you to keep the Process gauge on the system and send out the Master Gauge annually to maintain NIST traceability.

Galiso Master Gauge Assemblies are certified as having a quality rating (0.25%) of full-scale accuracy and include a Calibration Certificate.

*** Digital Master Gauge Available in .1% accuracy***

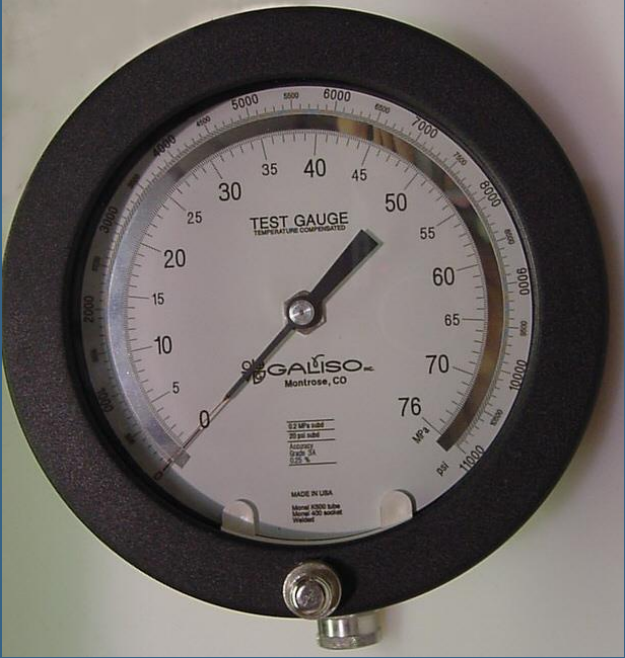
The Analog Master Gauge Assembly features a mirror dial face and a fine pointer needle for increased accuracy and legibility.

- | | | | |
|---------|---|---|-----------------|
| MGA-11 | - | 11,000psi Master Gauge Assembly | P/N 01-43-1113C |
| MGA-10 | - | 10,000psi Master Gauge Assembly, 3" Dig .1% | P/N 01-43-1125 |
| MGA-6.6 | - | 6,600psi Master Gauge Assembly | P/N 01-43-1112C |
| MGA-4 | - | 4,000psi Master Gauge Assembly | P/N 01-43-1111B |
| MGA-3 | - | 3,000psi Master Gauge Assembly | P/N 01-43-1110A |
| MGA-1.5 | - | 1,500psi Master Gauge Assembly | P/N 01-43-1108C |

Available in 3" and 4.5" Digital

Analog 6" Dial Face

4.5"



3"



Optical Plus Galiso P/N 85-11-0077



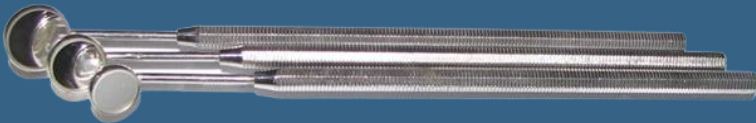
- Features:
- Adjustable Focus
 - Adjustable Light Intensity
 - 4x Magnification
 - Commonly used for inspection of SCUBA, Medical, SCBA, AFV, industrial Specialty Gases, and CO2
 - 360° rotation within the threads
 - Full vertical adjustment

Inspection Items

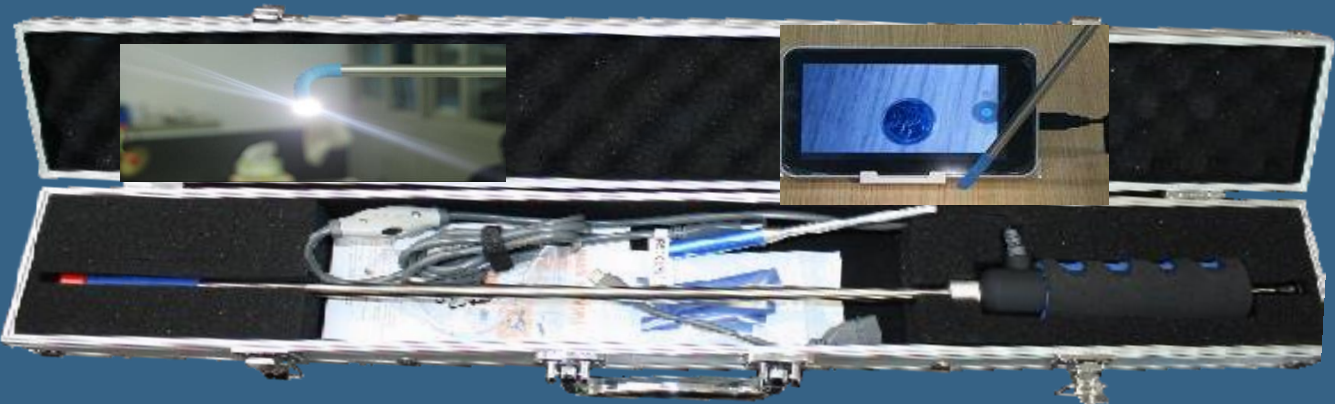


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Articulating USB Borescope 85-11-0013

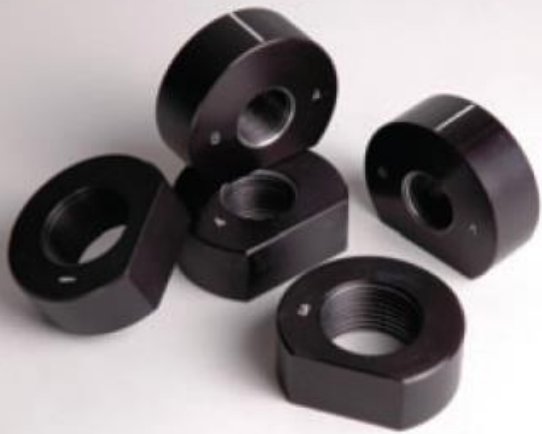


68-11-1750 1ea 7/16" , 9/16" , 5/8" OD 2x mirrors.



68-41-3103B
Reference Pit Gauge

Visual Plus Galiso P/N 84-11-1100



EDDY CURRENT

Eddy Current Integration
Galiso Test Software Video

ACETYLENE REQUALIFICATION KIT

- Contents
- CLEARANCE GAUGES
 - 0.041"
 - 0.060"
 - 0.080" (1)
 - 0.084"
 - 0.090"
 - 0.120"
 - 0.125"
 - 6" FLEXIBLE STAINLESS STEEL SCALE
 - MINI MAGNALITE AAA
 - CREVICE PIT GAUGE
 - ROCKER PIT GAUGE
 - DENTAL MIRROR – 3/4"
 - DENTAL MIRROR – 1/2"
 - 6" AWL (PROBE)
 - NEEDLE NOSE PLIERS
 - PI TAPE – LUFKIN
 - THORPE PIT GAUGE – IN LID OF KIT

(1) 0.084" GAUGE MAY BE USED IN LIEU OF 0.080"

ACETYLENE REQUALIFICATION KIT

- Purpose⁽¹⁾ Of Tool
- CLEARANCE GAUGES – MEASURE SPACE FILLER TO SHELL
 - 0.041" – BOTTOM FUSE PLUG GAUGE⁽²⁾
 - 0.060" – MC & B CYLINDERS, CENTER WELD WITH Ca/Si FILLER.
 - 0.080" – 24" LONG CYLINDERS, CENTER WELD WITH Ca/Si FILLER.
 - 0.084" – 30" TO 42" LONG CYLINDERS, CENTER WELD WITH Ca/Si FILLER.
 - 0.090" – B CYLINDERS OF ONE PIECE SHELL OR CHARCOAL FILLER.
 - 0.120" – 24" LONG CYLINDERS OF ONE PIECE SHELL OR CHARCOAL FILLER.
 - 0.125" – 30" TO 42" LONG CYLINDERS OF ONE PIECE SHELL OR CHARCOAL FILLER.
 - SCALE – TO MEASURE SIZE OF DAMAGE
 - FLASHLIGHT – TO VIEW INTO WELL
 - CREVICE PIT GAUGE – TO MEASURE CORROSION IN CREVICE
 - ROCKER PIT GAUGE – TO MEASURE DEPTH OF PIT
 - MIRROR – TO VIEW CLEARANCE IN WELDING SIZE
 - MIRROR – TO VIEW CLEARANCE IN B or MC
 - AWL – TO GENTLY PROBE FILLER FOR BREAKDOWN
 - PLIERS – TO REMOVE SCREEN & FELTS
 - PI TAPE – TO DETERMINE CYLINDER SIZE – DIAMETER x LENGTH
 - PIT GAUGE – TO MEASURE DEPTH – PITS, CUTS, DENTS, ETC.

(1) SEE C.G.A. PAMPHLET C-13 FOR DETAILS.
(2) C-13 PERMITS BOTTOM MEASUREMENT, CERTAIN CASES.

Acetylene Requalification Kit

68-11-1756



68-31-3106

Dial Pocket Pit Gauge,



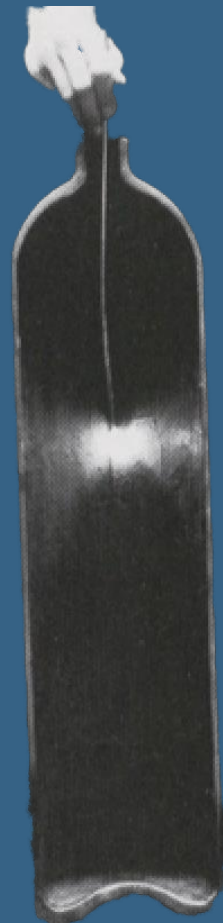
68-31-3105

Pit Gauge, Stainless
*Also available in Metric



Opti-lite

High Intensity 150W Light for viewing inside cylinders before and after hydrostatic test.



Drop Light



Optilite



Box

85-11-0023

Illuminator Box, 110V

85-11-0024

Illuminator Box, 220V

85-11-0055

Illuminator Box, 220v CE

Guides

85-11-0060

1/4" x 20'

85-11-0061

1/8" x 5'

85-11-0062

1/8" x 10'

85-11-0063

1/4" x 5'

85-11-0064

1/4" x 10'

85-11-0066

1/8" x 5' Hypo Tube

85-11-0088

1/8" x 10' Hypo Tube

85-11-0028

Halogen Bulb

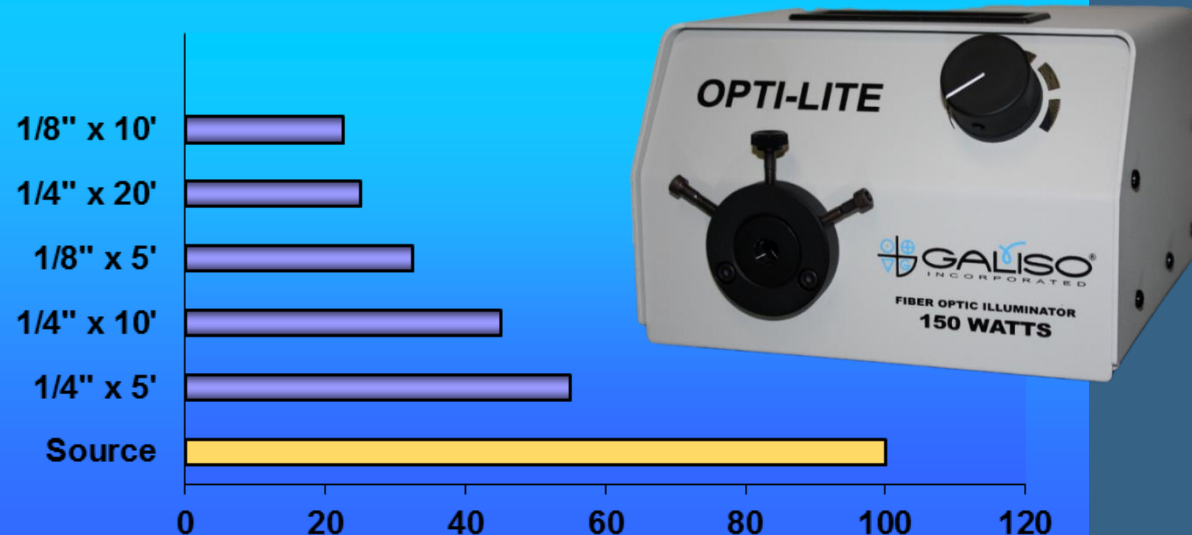


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% Light Transmission



1/4" SST Sheath



1/8" SST Sheath

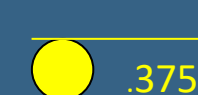


1/8" hypo tube Silicone Sheath

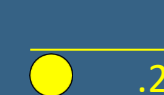
Largest Outside Diameter



.5"



.375"



.2"

Cylinder Filling Nozzle RCSG / CFS

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. 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.

The RCSG/CFS 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. The RCSG/CFS cylinder fill system is economical, simple to operate and easy to maintain. The fill system 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.

	Dimensions	Water Pressure	Flow	Nozzle diameter
RCSG	10' Hoses, 11 1/2' with fill gun	50 PSI Max	2GPM	.675"
CFS	12' Hoses, 13' with fill gun	80 PSI Max	12GPM	.8"

CFS Fill Systems



RCSG



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Cylinder Stamping



Features:

- Comes with Numbers 0-9 and + *
- 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.
- Low Stress gun stamps available
- 1/4" Character gun kit P/N 68-11-0231
- 3/8" Character gun kit P/N 68-11-0226
- Custom stamps can be ordered as well.

RIN stamp 68-11-0209



Gun Operation Video

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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47-11-1000
Belt Vise



68-11-0235 Stamp Holder
Holds Stamps up to 1"



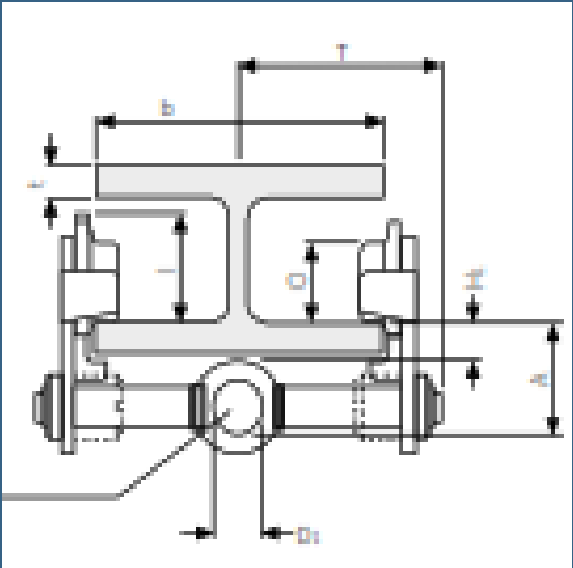
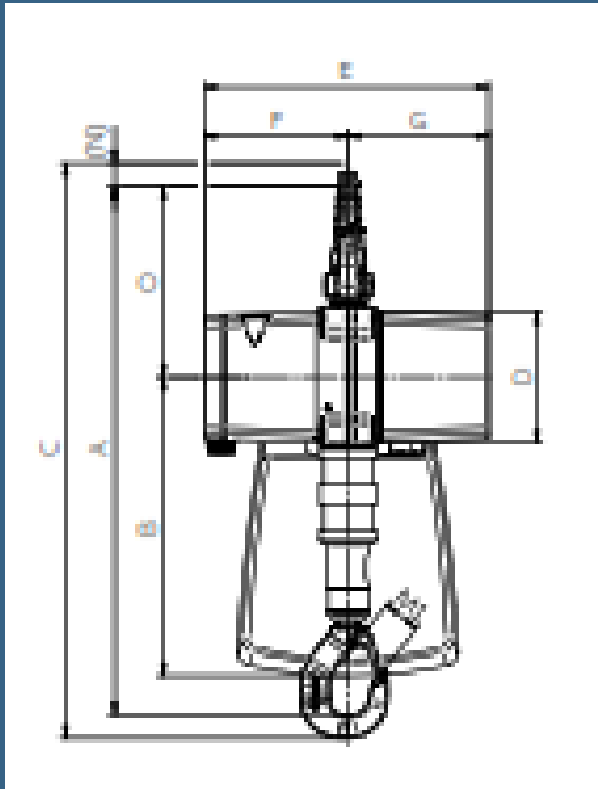
Air Hoist GAH

The GAH (Galiso Air Operated Hoist) is preferred by Hydrotesters for its fine variable speed control not found on low end electric hoists.

- The GAH comes with a standard 10 foot chain assembly.
- The GAH Hoist Assembly includes a chain container and pendant control
- Precise variable lifting and lowering speed

Dimension

		<u>1/4 ton</u>	<u>1/2 ton</u>	<u>1 ton</u>
A	In(mm)	15.6(396)	21.4(544)	21.4(544)
A1	In(mm)	3.1(78.8)	3.1(78.8)	3.1(78.8)
C	In(mm)	16.8(427)	23.3(592)	23.3(592)
B1	In(mm)	2-8.6(50-220)	2-8.6(50-220)	2.3-8.6(58-220)
E	In(mm)	8.7(221)	11.5(292)	11.5(292)



47-11-0039 FRL
(included with ¼ ton kit only)



<u>Type</u>		<u>1/4 ton</u>	<u>1/2 ton</u>	<u>1 ton</u>
Capacity	lbs	550	1100	2200
	kg	250	500	1000
Motor output	KW	0.45	1	1
Air Pressure	PSI/Bar	6/87	6/87	6/87
Lifting speed without load	ft/min	65	65	37
	m/min	20	20	11.5
Lifting speed at full load	ft/min	32	41	16
	m/min	10	12.5	6.3
Lowering speed at full load	ft/min	65	65	39
	m/min	20	20	12
Air consumption at full load	cfm	33.5	60	60
	m3/min	.95	1.7	1.7
Air connection	inch	G 3/8"	G 3/8"	G 3/8"
	lbs	22	45	46.2
Weight with 10 ft / 3m lift	kg	10	20.5	21
	mm	4.7 x 14.1	7.4 x 22	7.4 x 22
Chain dimension	mm			
	lbs/ft	.45	.67	.67
Weight of chain	kg/m	.48	1.1	1.1
Height of lifts	ft	10/16/26		
	m	3 / 5 / 8		
Length of control at standard lift	ft	6.5/13/23		
	m	2 / 4 / 7		
Sound level at full load2	dB(A)	80	80	80

GVM-16G Turnair Valving Machine

The GVM-16G Turnair Valving Machine removes and installs cylinder valves quickly and efficiently. The GVM continues to serve users with reliable performance. Practically every one of these machines that Galiso has supplied has been built by Chris Schmidt (far right).

- A powerful axial piston air motor ensures long life and maintenance free operation.
- Motor rotation is increased almost 3x over the older chain driven models
- The patented valve tong design automatically adjusts to grip valve flats from 7/8" to 1 7/8".
- The Valve tong assembly features a power multiplier to increase grip strength as torque increases to hold the valves securely for removal or insertion. This eliminates slippage and valve damage caused by unconventional methods.
- Can be configured for cylinder 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.
- Each machine is torque tested and comes with individual torque sheet.

The only safe way to de-valve a cylinder is to verify it is not under pressure. Instructions on this easy to perform operation are available by viewing our Cylinder Safety Verification Movie. [CYLINDER SAFETY VIDEO](#)



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- Dimensions 48" L x 36" W x 114" H
- Air 15 CFM at 120 PSI at maximum torque
- Max Torque 650-700 Ft. Lbs. fully adjusted
- Max Clamping Force 3,000 Lbs. fully adjusted
- Max Cylinder Size 3" to 16" Diameter, 62" Tall

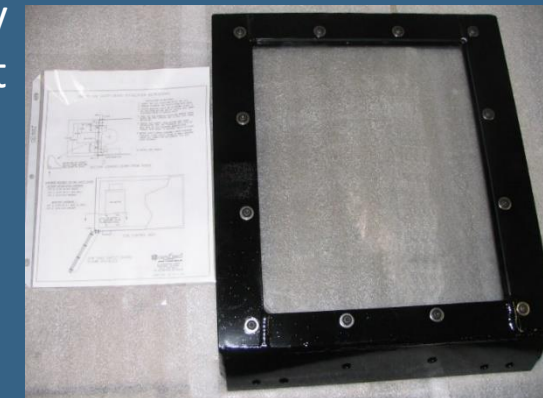
[CRT VIDEO](#)



The GTR-600 measures and provides a repeatable digital reading of the actual insertion torque of a valve into a cylinder. The GTR-600A (Auto Option) also shuts down the Valving Machine's motor when the desired torque is reached. Real time digital Readout Readings in Ft-lbs or N-m.

GVM Valving Machine Options

The GVM Safety Shield P/N 14-41-0660 is a bolt on accessory for the GVM-16 valving machine. Made from bullet resistant Lexgard Lexan, the safety shield's bullet resistant properties have been field tested by our Quality Assurance Team. The High Impact Safety Shield was able to contain a .44 Magnum projectile from the distance of 10 Feet.



[GVM SAFETY SHIELD TEST VIDEO](#)



Propane Valve Extractor
Available in standard
Clawfoot widths:
1.125", 1.25", 1.5",
Custom Widths can be quoted



- Readings in Ft-lbs or N-m
 - Range: 60-600 Ft-lbs or 81-813 N-m
 - RS-232 connection to send data to a computer or printer
- Accuracy: +-1% of indicated value
Digital LCD Readout

The GTV-600 is used as a daily verification device to confirm the insertion torque value on a valving machine. The GTV-600 is designed to fit into the clamp and jaw tong mechanism of the GVM and CIV valving machines. The GTV-600 is also used to confirm, on a daily basis, the accuracy of the GTR-600 Real Time Insertion Torque Reader system and to calibrate the GTR-600 if it needs adjustment

[TORQUE VERIFIER VIDEO](#)



Optional Small Cylinder Lift Assembly is available for loading cylinders into position for the valving operation. Max capacity for cylinder lift is 500lbs. Lifting distance up to 16".

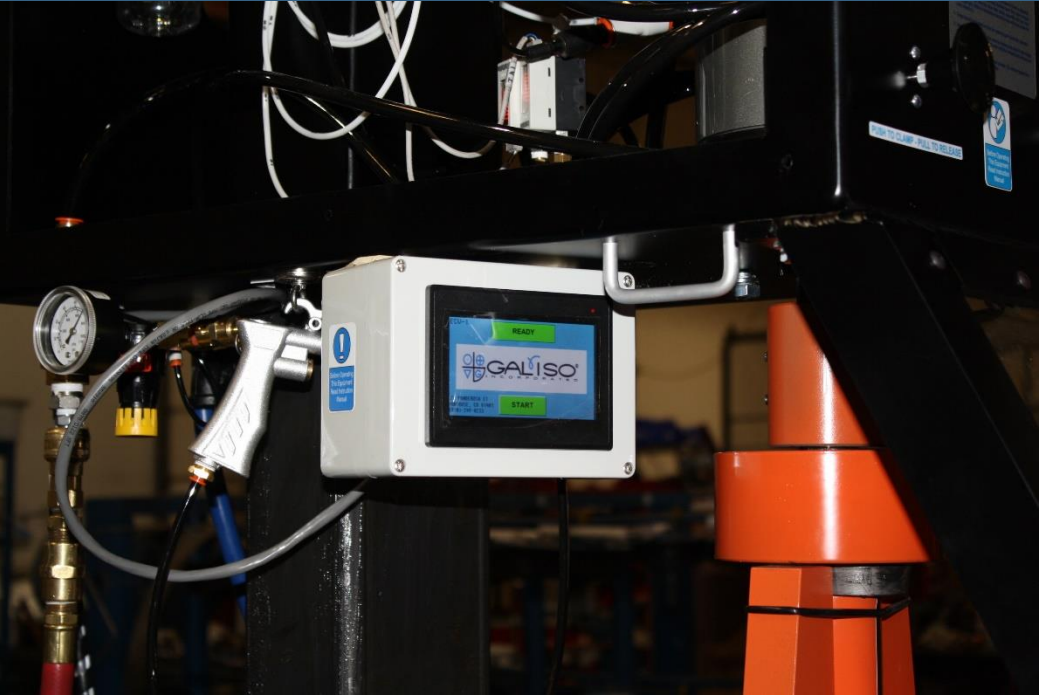
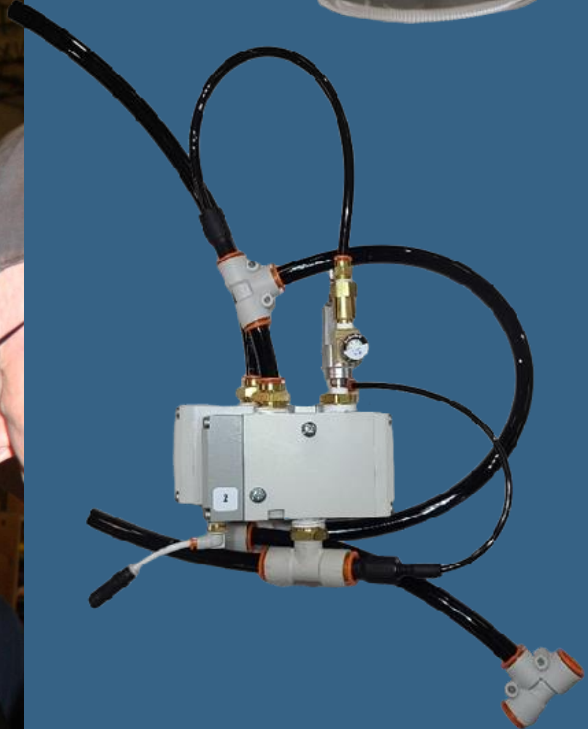
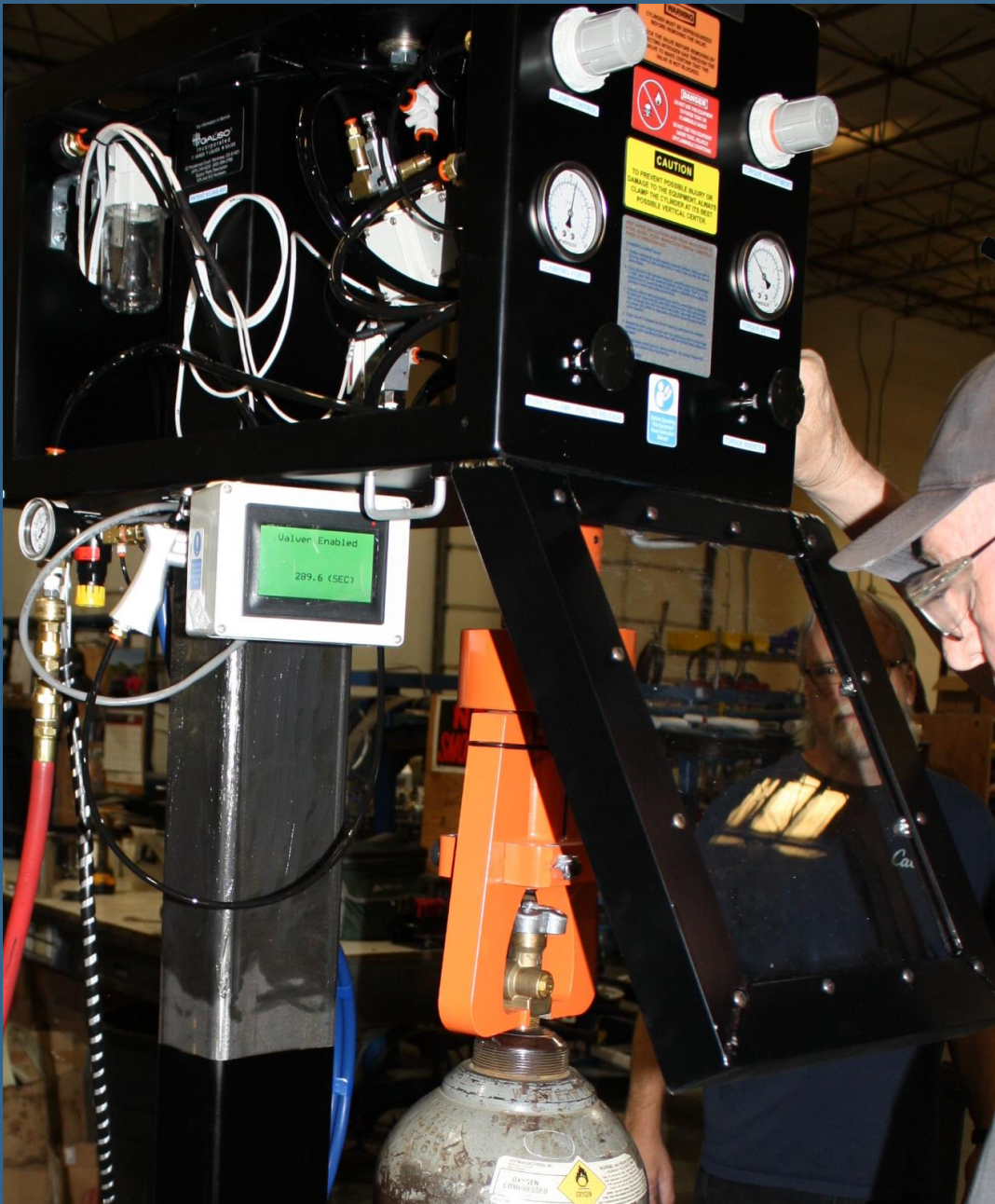
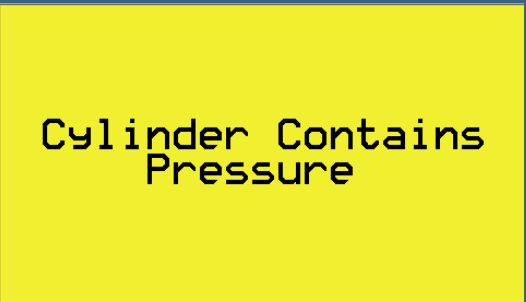
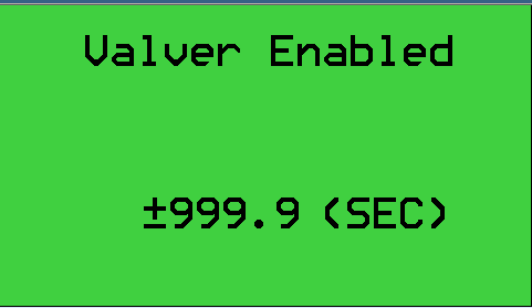
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INCORPORATED
GASES LIQUIDS SOLIDS

ECV Empty Cylinder Verifier

Features:

The Empty Cylinder Verifier is an add on utility that uses flow control sensing to verify if a cylinder is truly empty or not before de-valving. The verifier locks out the ability to de-valve until a cylinder has been tested for empty. Unclamping the arm of the valver resets the verifier. Full air flow is allowed only when cylinder is proven to be empty. Equipment can be used with all Galiso Valving machines and others. Display and Air gun are magnetic mount to allow for convenient placement.

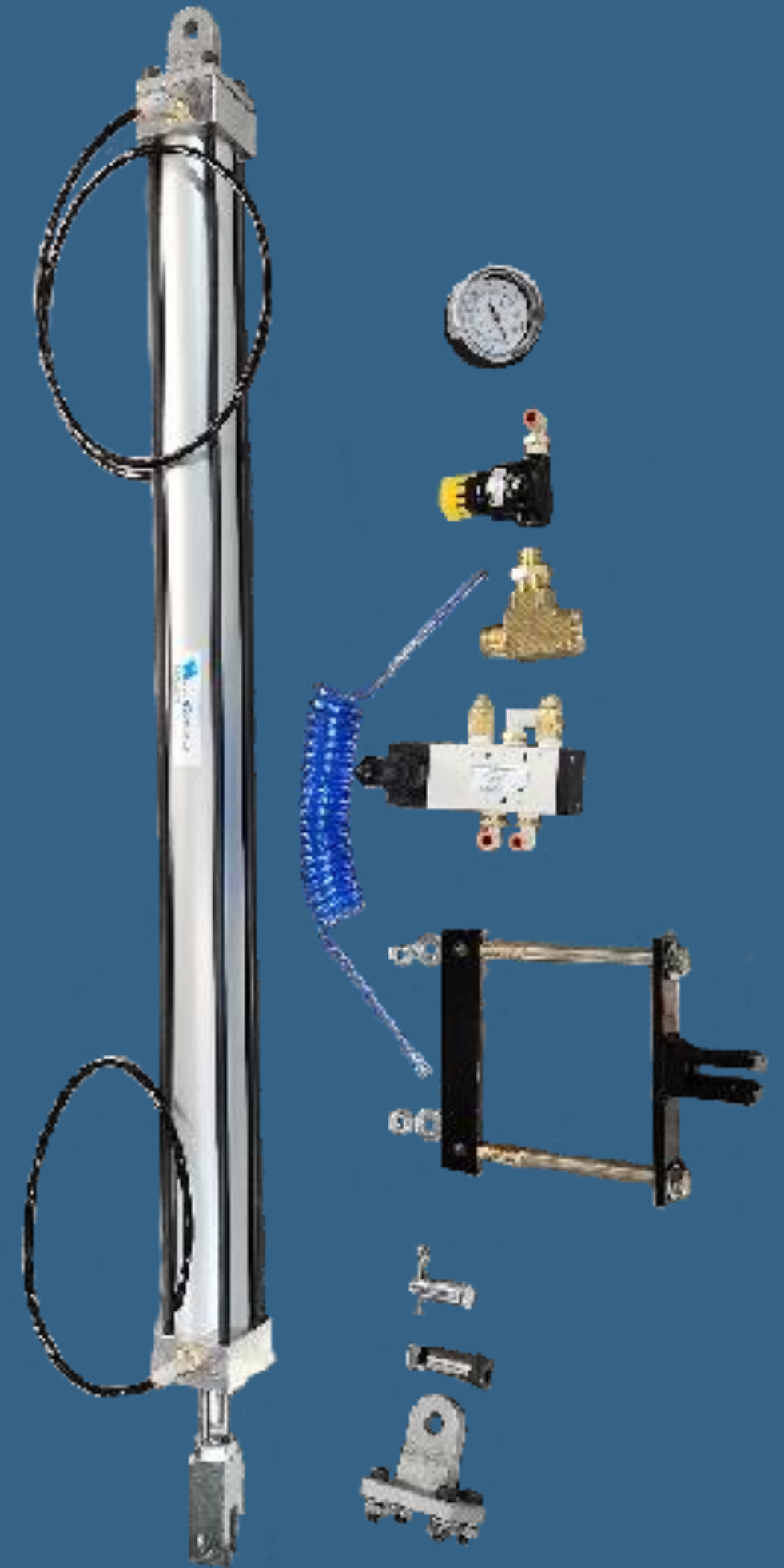
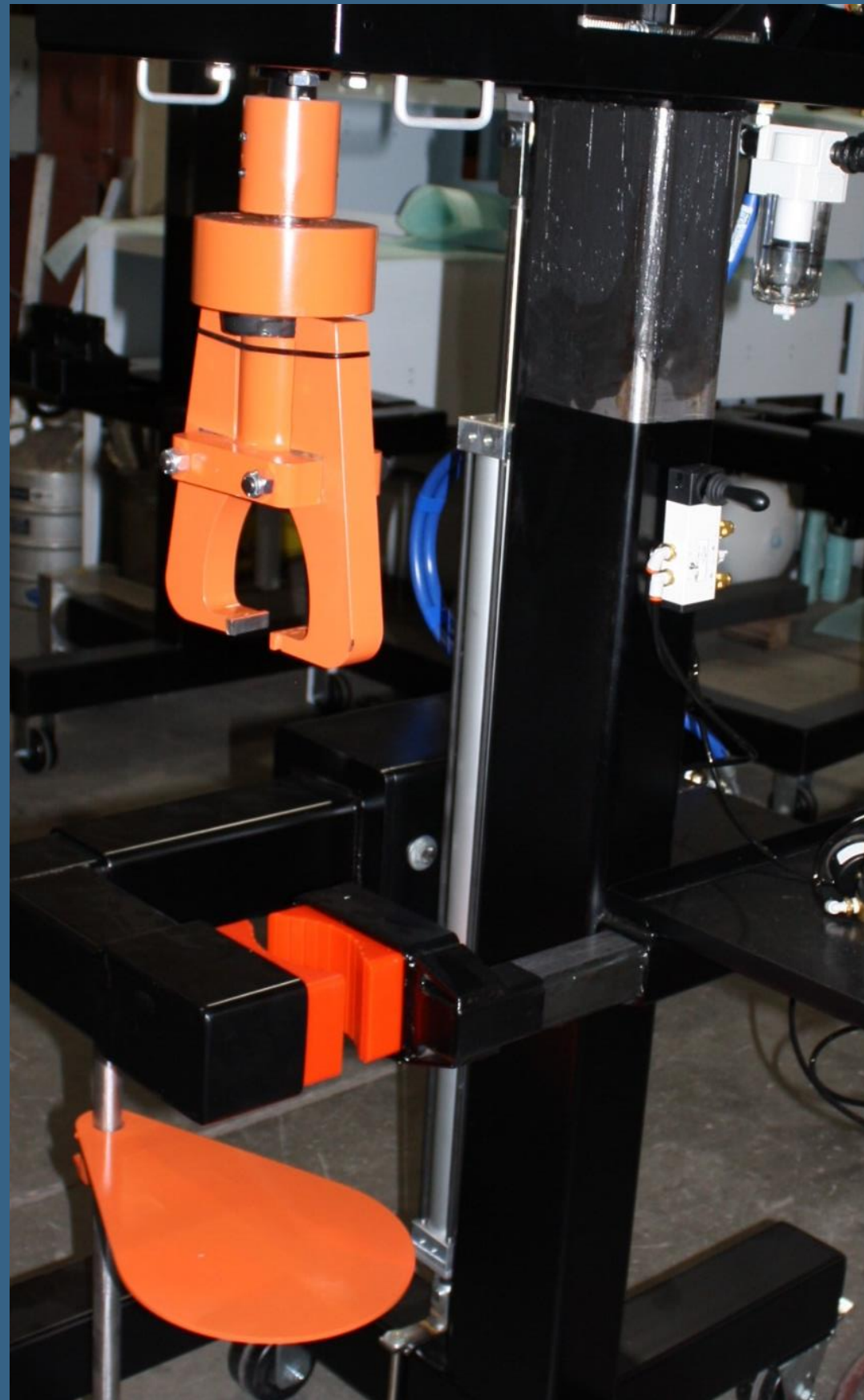
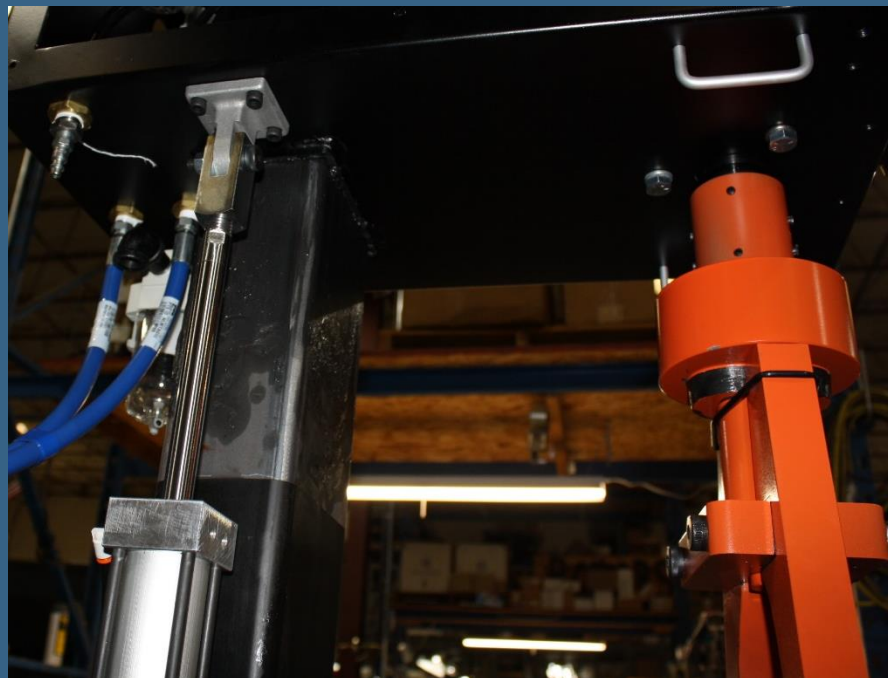
Air Requirements:..... 100-120 PSI
Power 110v



Control Box Pneumatic Lift

Features:

Control Box Pneumatic Lift.
Aging valving machines can be difficult to move up and down. The pneumatic lift gives ability to move valver head up and down with the touch of a finger. There is still play after movement to allow for setting tongs to valve flats. Equipment can be used with all Galiso Valving machines and others. Control Valve is magnetic mount to allow for convenient placement.



CIV-16G-I All Pneumatic

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

- 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 provide an unobstructed view of the cylinder bottom, fusible metal foot ring.
- The CIV-16G-I is completely air powered. The system is mounted on heavy-duty casters to allow the unit to be moved from one workstation to another.
- Limit switches prevent inversion while the de-valving head is down
- The de-valving jaws of the CIV-16G-I come with Monel Non-Sparking Stainless shoes
- System built without copper components. Copper content in brass is less than 70%

OPERATION

- 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 Turnair 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 Turnair Valve Tongs are used to replace the valve in the cylinder neck.

SPECIFICATIONS



- Dimensions 72"L x 36" W X 95" H
- Air Requirements 120 PSI @ 20 CFM at max torque
- Maximum Torque 720 ft/lbs. (Fully Adjustable)
- Maximum Clamping Force 3000 lbs (Fully Adjustable)
- Cylinder Size 3" to 16" Diameter x up to 58" Tall
- Maximum Cylinder Weight 400 lbs

Option: Small Cylinder Lift Assembly is available for loading cylinders into position for the valving operation. Max capacity for cylinder lift is 500lbs. Lifting distance up to 16".



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Cylinder Vise

The Getz Belt Vise is a well constructed, base-plate mounted pneumatic cylinder vise, ideal where an efficient means of straight thread o-ring seal valve installation and removal is required.

- 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.

Dimensions: 24"L x 18"W x 37"H,
Air Requirements:..... 100-120 PSI
Standard belt vise..... 4.25" Dia up to 10.625 Dia
Optional Belt W/Roller..... Up to 16" Diameter
*Available with CE certification



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CCV-16

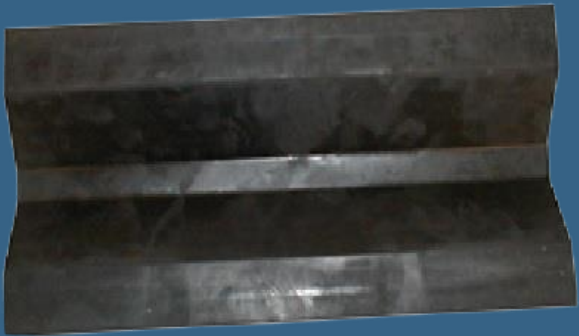


- Features:**
- The Galiso Cylinder Clamp Vise is designed from the Galiso Valving Machine Clamp mechanism. Heavy Duty good for all types of cylinder. Adjustable Clamping Force
- Dimensions: 29"L x 18"W x 33"H,
Air Requirements:..... 100-120 PSI
Cylinder Diameter..... 3" up to 16"
*Available with CE certification

Options:



Roller for Cylinders up to 16" Diameter



Adapter for Small Cylinders(under 4")

Slip Wrench 68-11-3105



GCI / IDS Manual Inverter Drier Station

Features:

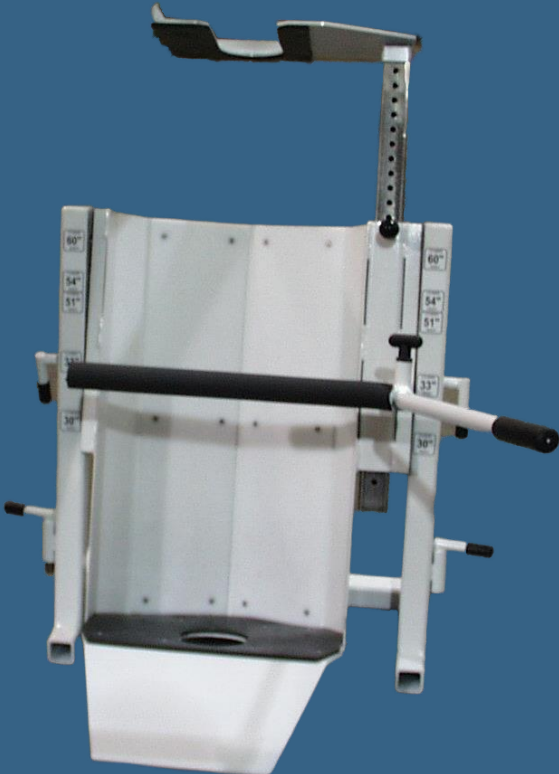
- The GCI has a 5 selectable pivot points and a locking containment arm to provided balance and safety to avoid injuries that can occur when employees use makeshift cylinder handing equipment.
- The GCI is characteristic of all Galiso products: Versatile. Durable. Efficient. Constructed of heavy-duty 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.

IDS Operations:

- 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.
- The GCI/IDS is built to Galiso's high standard of excellence and durability and comes with a 2 year warranty.



GCI-10



GCI-17



GCI VIDEO



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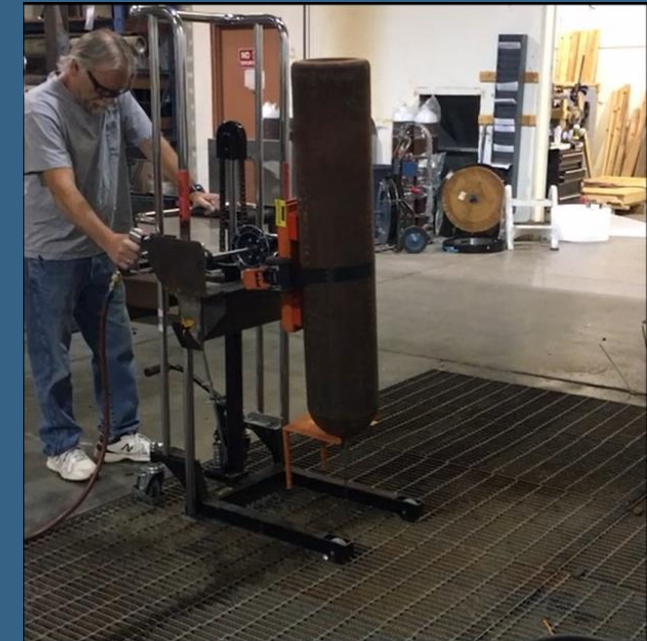
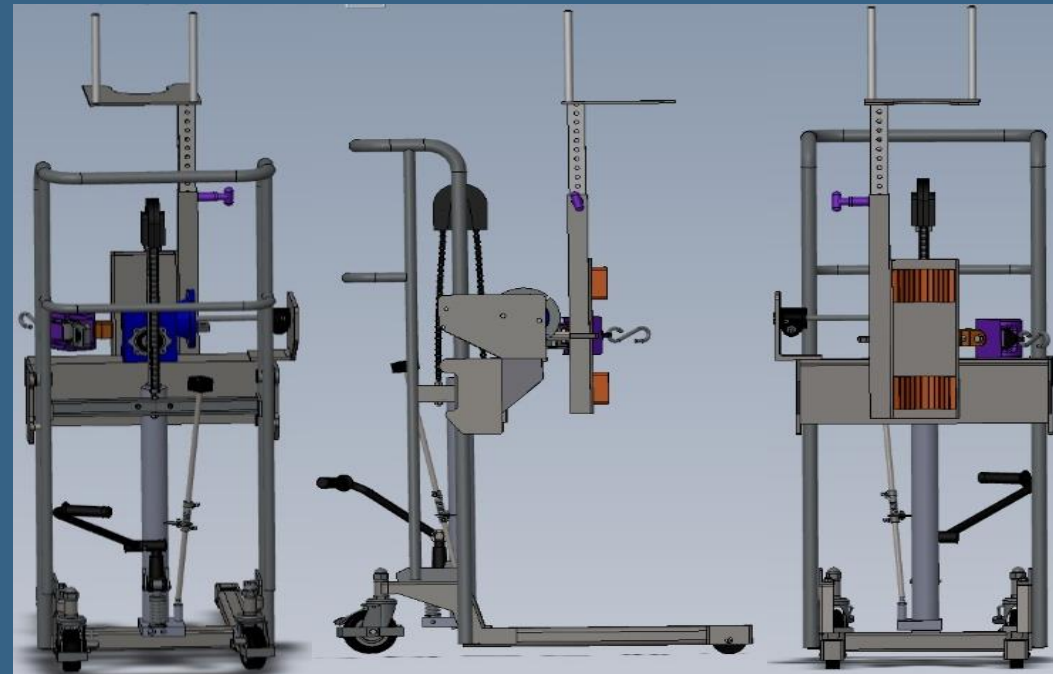
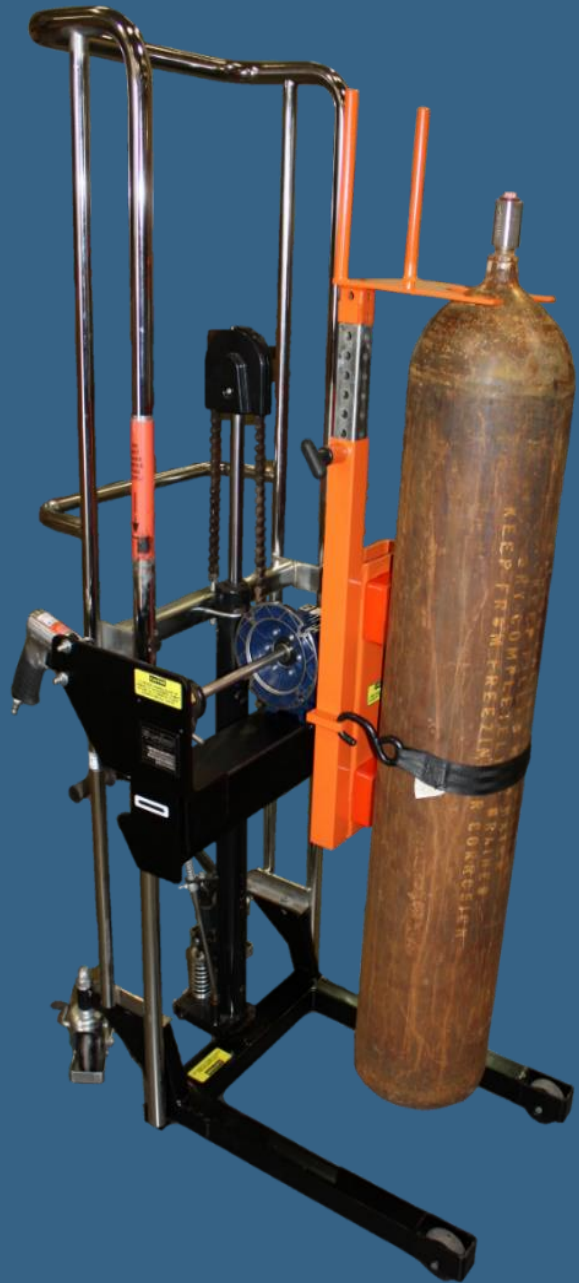
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- The GCI is available with the IDS wash/dry feature that serves as a cylinder drying station, converting the GCI into a dual function support product.

Centering Pivot Points for30", 33", 51", 54", and 60" tall cylinders
Dimensions74" L x 24" W(31"w GCI17) x 60" H
GCI10 Cylinder Sizeup to 10.5" dia. x 60" tall
GCI17 Cylinder Sizeup to 17.5" dia. X 60" tall

GLI Manual Inverter



Video

The Galiso Lift Inverter is a labor saving device capable of handling cylinders up to 60" in height. The inverter is operated by a foot pedal to lift the cylinder off of the floor (up to 400 lbs). It has a linear actuator and gear box to allow the inversion to be driven by a pneumatic or hand held drill mating to a 1/4" drive socket. Great to be used for trans-fill of cylinders or to empty a cylinder of water after test. Portable to allow easy movement of cylinders. Locking brakes to hold in place. Strap in place to hold cylinder for removing valve.



Dimensions: 39 1/2" L x 22 1/2" W x 68" H

Lift Capacity: 400 lbs

Minimum Cylinder Size: 4" x 18" Tall

Maximum Cylinder Size: 11" x 63" Tall

Identified Strap Points for: 51" and 54" Tall Cylinders

Clockwise and Counter-Clockwise rotation capable

(forward / reverse on drill)



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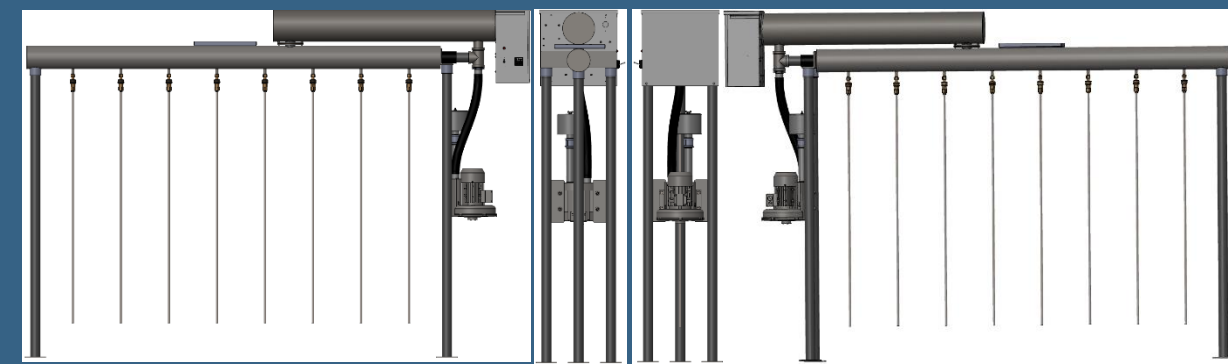
HDD-8RB Heavy Duty Cylinder Drier

Features:

- HDD driers feature a digitally controlled 8KW heating element.
- 5 Checked Ports and 3 Un-Checked to dry up to 8 Cylinders 60" x 10.5" Diameter
- A 1.74 HP 105CFM brushless regenerative blower motor moves hot air through each cylinder.
- The brushless motor provides quiet(64 Decibel), maintenance free operation without the need to periodically replace worn brushes.
- The blower assembly features a convenient Power 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.
- *Nitrogen Option available



Max Cylinder Height: 60inch / 1524mm
Dimensions: 122" L x 18" W x 78" H / 310cm L x 46cm W x 198cm H
Electrical: 30 Amps @ 220 Volts, 3 Phase 50/60 Hz
Blower Motor: 1.74 HP 60hz/1.47HP 50hz, Brushless, 105 CFM
Heater Elements: 8 KW, Digitally Controlled
Drier Tubes: 1/2" OD x 57 3/4" Long, Quick-Connect
Max Temperature: 250°F/121°C (approx. 212°/100° at probe end)



Digital Controller with
Temperature Readout
*Optional Separate Display
With Temperature Thermocouple



Fast, Efficient, Low Cost, Ideal for Medical D & E's, SCBA's, Scuba and small CO² 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, production temperatures to 175° to accelerate the drying of steel and aluminum cylinders.
 - Select the “cool” setting to protect fiber wrapped or composite cylinder. Cool temp is between 115° and 135°
- Dimensions.....59”L x 21” W x 28”H
Capacity..... Up to 4 10” x 30”
Cylinders
Electrical.....110v, 60Hz or 220v, 60Hz



Galiso P/N 25-51-3184 95CFM



Galiso P/N 25-51-3183 GCD220v 1phase only 160 CFM

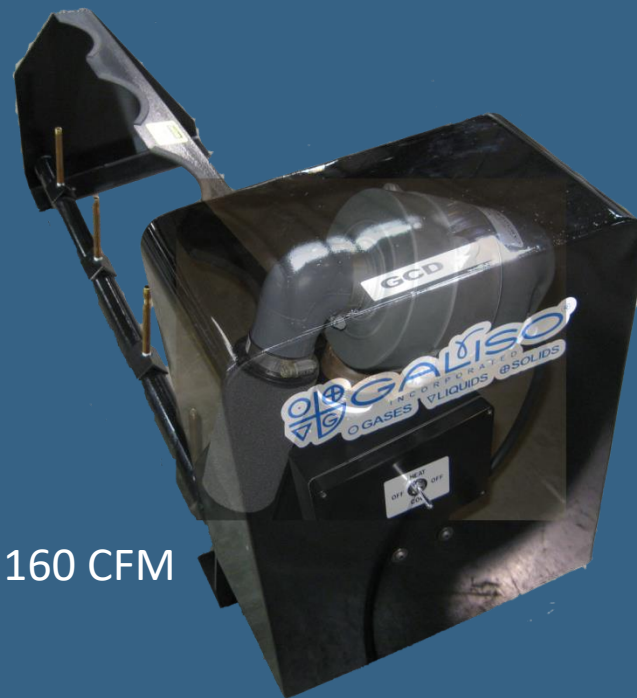
Galiso P/N 25-54-3000

LDD4

**Available in 110v,220v
CE option
Extra Tall version 67”Cyl**



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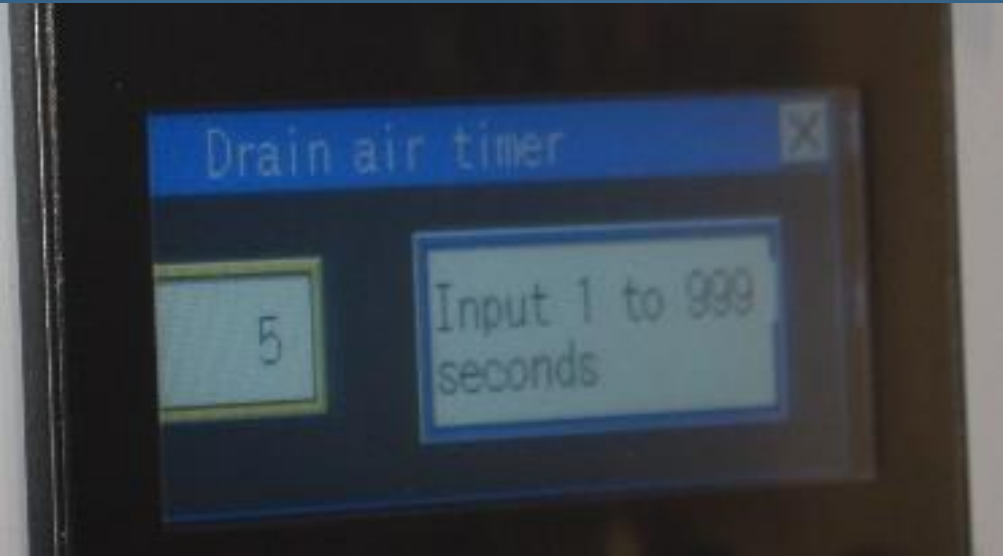
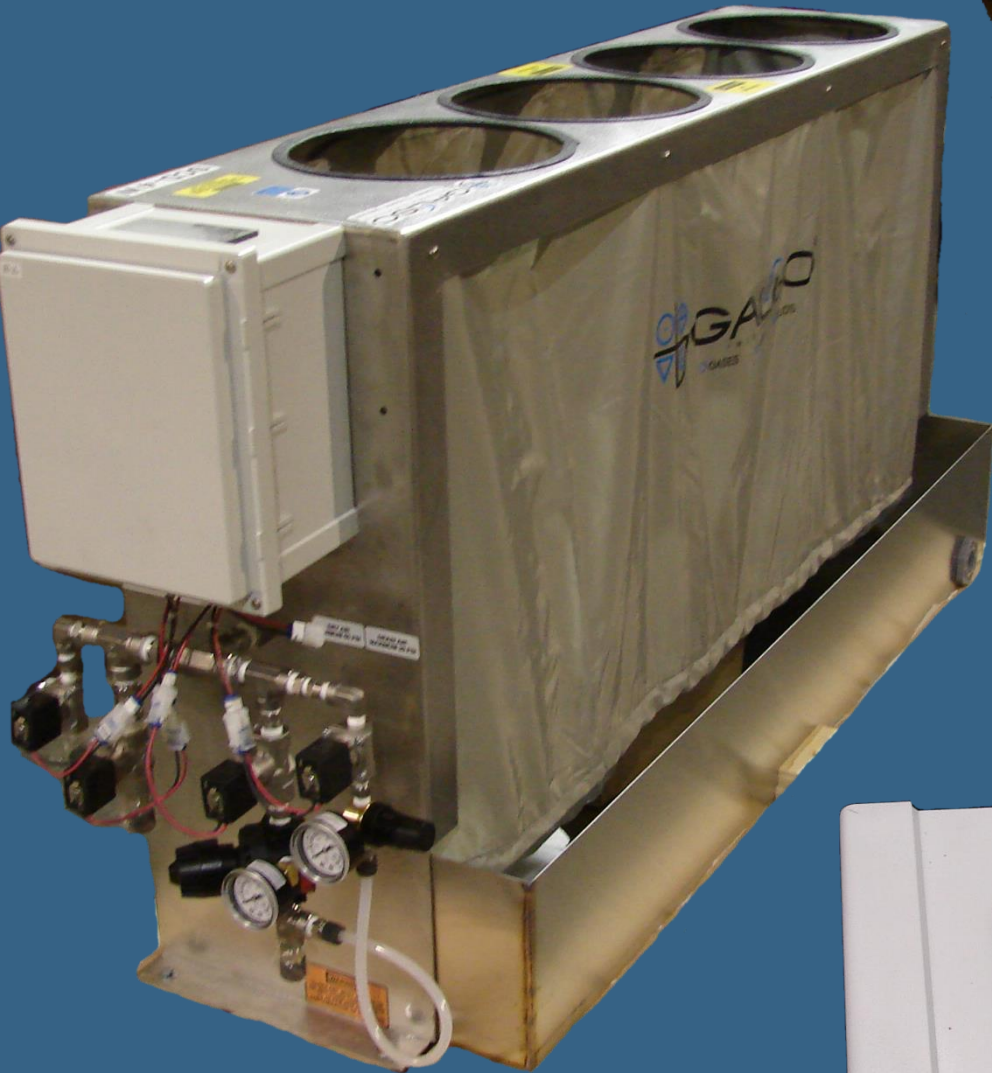
The SCD-4 small cylinder drier provides a fast, efficient means of draining and drying small compressed gas cylinders after hydrostatic testing.
The SCD uses compressed air and hot water to drain and flash dry cylinders in under 2 minutes
Timer controls are programmable

0 – 999 seconds

Drain Air Hot Water

Detergent Dry Air

SCD-4W Small Cylinder Drier



*Optional Dosing Pump



*SD-13 Recommended
Detergent for Oxygen Cylinders



Basin and Curtain (-BAS)

Dimensions 60" L x 13" W x 30" H

Electrical: 90-264VAC to 12vdc, 50/60 Hz

Capacity Up to 4 Cylinders

Max Cylinder Size10" dia x 30" tall

Air Requirements10.0cfm @90psi with <0.03 ppm contaminant.

(Recommend 80-11-0046 filter package – 0.01ppm)

Hot Water Required 5.0gpm@60psi, 180°F Max filtered

Available in Stainless Commonly used with Medical and Aircraft Oxygen Cylinders



PCT Cylinder Inverter Driers

The PCT ADW inverts, washes and dries in a single cycle. Filtered air is injected into the inverted cylinder, purging out water from the hydrostatic test. Hot water (180°) is introduced into the cylinder To rapidly heat the cylinder walls, 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 PLC controlled, freeing the operator to perform other duties during the purge/dry process. The time value for any cycle is easily programmed via the touchscreen 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.

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 acetylene cylinders to inspect the bottoms and exterior walls.

PCTI is Pneumatic Only – No Electricity



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

Emergency E-Stop



Steam rated @ 284°F/90psi



Sealed EZ Swap bearings



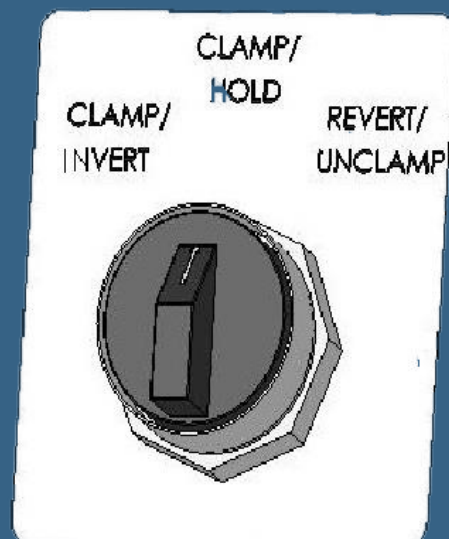
PLC Visual Interface



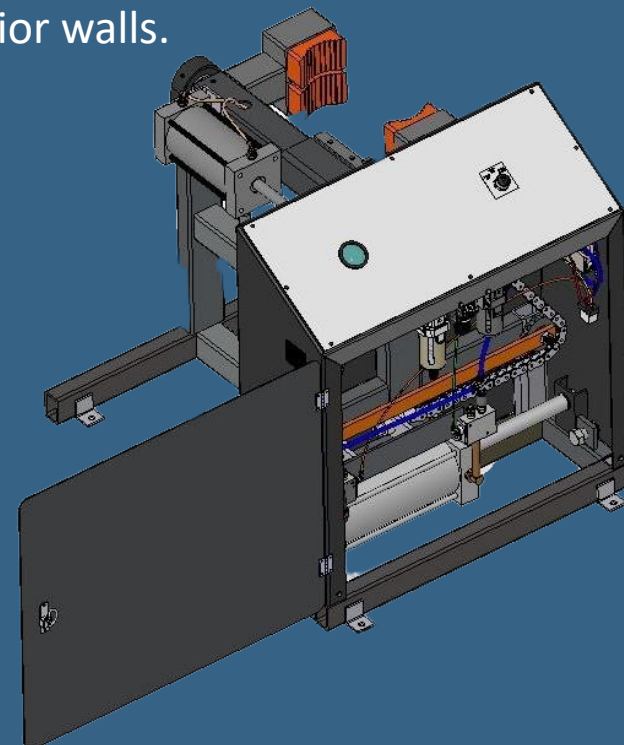
Built in GFI Protection



ADW Electrical: 110 Volts, 60 Hz., or 220 Volts, 50 Hz, Air: 100PSI @ 22 CFM, Water: 10 GPM @ 60 PSI, Hot Water: 10 GPM @ 60 PSI, Maximum Allowable Steam: 284°F/140°C @ 90psi



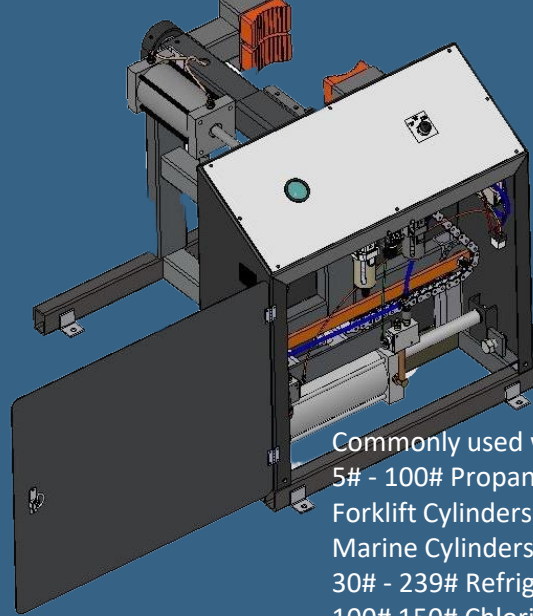
PCT-15I



[PCT – 122 ADWD VIDEO](#)

PCT Cylinder Inverter Drier Varieties

PCT-15ADW and PCT-15I
1x 4"-15.2" cylinder up to 60"T
400lbs Total invert capacity
40" L x 36" W x 40" H



Commonly used with:
5# - 100# Propane
Forklift Cylinders , Mower Cylinders
Marine Cylinders
30# - 239# Refrigerant
100# 150# Chlorine
5# - 100# CO₂
ISO&DOT High Pressure Cylinders
Type I, II, III, IV CNG
Aviation Cylinders 22cf – 114cf
Medical Cylinders D,E,M

PCT-162ADW and PCT-162I
2x 6.5"-16" Cylinders up to 60"T
800lbs Total invert capacity
60" L x 36" W x 48" H



Commonly used with:
5# - 100# Propane
Forklift Cylinders , Mower Cylinders
30# - 250# Refrigerant
100# 150# Chlorine
10# - 100# CO₂
ISO&DOT High Pressure Cylinders
Type I, II, III, IV CNG
Aviation Cylinders 22cf – 114cf

PCT-24ADW
1x 24" Cylinders up to 60"T
1,600lbs Total invert capacity
60" L x 36" W x 40" H



Commonly used with:
200# Propane

PCT-30ADW Top Load
1x 30" Cylinders up to
1,400lbs Total invert capacity
60" L x 36" W x 55" H



Commonly used with:
420 Propane
1/2Ton Refrigerant

PCT-122ADW and PCT-122I
2x 3.3"-12.2" Cylinders up to 60"T
800lbs Total invert capacity
60" L x 36" W x 40" H



Commonly used with:
5# - 100# Propane
Forklift Cylinders , Mower Cylinders
Marine Cylinders
30# - 123# Refrigerant
100# 150# Chlorine
2.5# - 100# CO₂
ISO&DOT High Pressure Cylinders
Type I, II, III, IV CNG
Aviation Cylinders 4cf – 114cf
Medical Cylinders B,D,E,M

PCT-162ADW-XL
2x 6.5"-16" Cylinders up to 72"T
1,600lbs Total invert capacity
60" L x 36" W x 48" H



Commonly used with:
40-145 liter CNG
Type I – IV Composite

PCT-30ADW Side Load
1x 30" Cylinders up to
1,400lbs Total invert capacity
60" L x 36" W x 70" H



Commonly used with:
420 Propane
1000lb Refrigerant

(Shown With 6" Riser Option allows invert from 60" Up to 72" Tall cylinders)

Medical Cylinder Accessories

Clean Air Filter Package provides clean dry air for your cylinder drying package. This takes in your compressor air and filters the air to an ISO8573 Class 1.



Indicator for Filter element replacement



Product Data Sheet

SD-13

DETERGENT FOR OXYGEN CLEANING

SD-13 is a specially formulated, free-rinsing, low foaming, biodegradable, phosphate free detergent developed for cleaning compressed gas cylinders prior to filling with oxygen. Extensive research and field and laboratory testing has shown SD-13 to effectively remove oils and most other contaminants from inside compressed gas cylinders.

SD-13 was designed to be used in conjunction with an inverter/washer such as the Galiso PCT-122ADW

Directions for use:

Inverted Cylinder Cleaner

- Inspect cylinder. Remove any loose debris and rust from inside cylinder.
SD-13 will not remove flaky scale or rust.
- Dilute 4.25 ounces SD-13 with 1 gallon of water.
- Solution temperature should be 170°F.
- Wash cylinder for 4 minutes with the solution.
- Rinse with clean, 170°F water for 4 minutes.
- Purge with nitrogen for 45 seconds.

Available in 5 gallon buckets 30 and 55 gallon drums

Sonic Wave Cleaner

- Dilute 4.5 to 5.5 ounces SD-13 with 1 gallon of water.
For best results, water should be at least 130°F
- Place parts and solution in sonic cleaner and operate according to the manufacturer's specifications.
- Thoroughly rinse all parts well with clean flowing hot water** until there is no visible suds or soap residue.
Rinsing in a tub or bath is not acceptable.
- Blow all parts dry with air and purge with nitrogen.



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(800)854-3789 (970)249-0233

Manufactured exclusively for Galiso, Inc. by SASCO Chemical Group, Inc.
For further safety information concerning this product, please consult the Material Safety Data Sheet.



Adsorption Elements Features and Benefits Type D

How The Elements Work

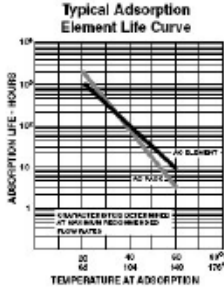
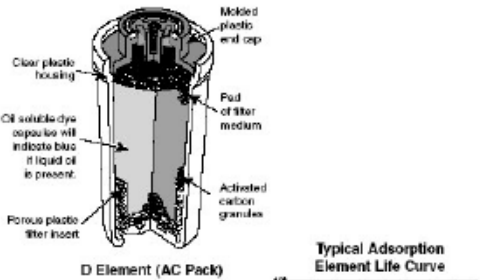
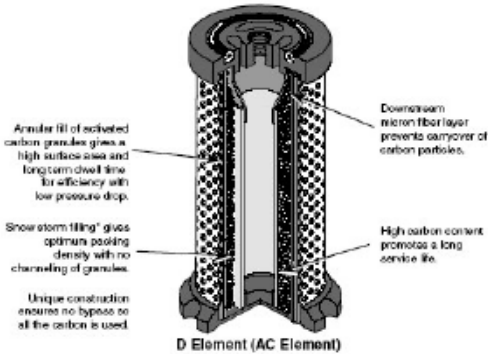
While mechanical filtration employing the Type C element is capable of removing extremely fine liquid or solid particles even as small as 0.01 micron it cannot remove gaseous contaminants such as oil vapor or odors. To do this we must employ the physical phenomena of adsorption. Activated carbon, having an affinity for oil vapor molecules and with an extremely high surface area, created by its capillary structure, is used for this.

Wilkerson activated carbon elements are designed to maximize the adsorption properties of the carbon. This is achieved by first passing the air through carbon granules, then "storm filling" into either an annular space or tubular section. The granules provide an extremely high surface area to volume and when arranged in a deep bed that increases dwell time gives the benefit of both efficiency and service life. After being passed through the carbon, the air goes through a layer of microfiber to prevent migration of fine carbon particles downstream.

Adsorption elements have a limited life and this is affected by many factors but principally temperature. Obviously, the higher the inlet temperature, the more of vapor there is present, for example at 104°F (40°C) there is more than ten times the oil vapor than at 70°F (21°C). For this reason, activated carbon filters are best installed at the lowest possible system temperature. The type C filter should always precede a type D filter.

The typical life of an adsorption element is in the region of 1000-2000 hours at 70°F (21°C). Filtration temperature is based on tests carried out on a CHI probe test rig, however, this is best determined in practice by a routine "odor" check.

Oil vapor has a distinct odor. The least expensive and very effective way to check for oil vapor getting through the filter is to install a small bleed valve downstream. Periodically crack this valve and smell the air. The human nose is extremely sensitive to oil vapor and at the first hint of this odor, change the element.



Type B Filter Element Specifications

Efficiency

99.97% when tested with 0.3 micron aerosol of DOP last Federal Standard 209B. Compatible with mineral and synthetic oils.

Residual Oil

0.5 ppm / wt (inlet temperature / pressure 70°F / 100 PSIG) when analyzed using infra red spectrophotometry based on the Pheutop 6611 procedure.

Air Quality Class *

Conforms to ISO 8573 Class 2 or better

Flow

Inside to outside

Filter Media

Resin impregnated borosilicate glass microfiber

Support Structure

Inner 304 Stainless Steel support cylinder with outer polymeric sleeve.

End Caps

Glass filled polyamide material
Initial Differential Pressure Dry — 1.5 PSID
Initial Differential Pressure Wet — 2.5 PSID
Flow range — 5 to 4800 SCFM @ 100 PSIG

Application

Installations as a coalescing prefilter for general purpose protection or as a prefilter to a high efficiency coalescer.

Appearance

White polymeric outer sleeve with black end caps.
* "M" Series Coalescing Filters, with Type "B" 0.3 micron elements: All Wilkerson Type "M" Oil Removal (Coalescing) Filters with Type "B" 0.3 micron elements exceed ISO Class 1 for maximum particle size and concentration of solid contaminants, and exceed Class 3 on maximum oil content (ppm / wt).²

Type C Filter Element Specifications

Efficiency

99.99998% when tested with 0.3 micron aerosol of dioctyl phthalate (DOP) last according to Federal Standard 209B. Compatible with mineral and synthetic oils.

Residual Oil

0.01 ppm / wt (inlet temperature / pressure 70°F / 100 PSIG) when analyzed using infra red spectrophotometry based on the Pheutop 6611 procedure.

Air Quality Class *

Conforms to ISO 8573, better than Class 1

Flow

Inside to outside

Filter Media

Pure borosilicate glass microfiber with a mean strand diameter of 0.5 micron and a voids volume of 96%. Contains no glass or resins.

Support Structure

Inner and outer 304 Stainless Steel support cylinders.

End Caps

Glass filled polyamide material
Initial Differential Pressure Dry — 1.25 PSID
Initial Differential Pressure Wet — 2.25 PSID
Flow range — 5 to 4800 SCFM

Application

Install where highest quality air is required, typically instrumentation, process air, pneumatic gauging, paint spraying, etc.

* "M" Series Coalescing Filters, with Type "C" 0.01 micron elements: All Wilkerson Type "M" Oil Removal (Coalescing) Filters with Type "C" 0.01 micron elements exceed ISO Class 1 for maximum particle size and concentration of solid contaminants, and exceed Class 1 on maximum oil content (ppm / wt).²

Type D Filter Element Specifications

Efficiency

Less than 0.003 ppm / wt maximum remaining oil content (inlet temperature / pressure of 70°F / 100 PSIG) when analyzed using infra red spectrophotometry based on the Pheutop 6611 procedure. Removal of hydrocarbon vapors and odors.

Air Quality Class *

Conforms to ISO 8573, better than Class 1

Flow

Inside to outside

Filter Media

Snow storm filled activated carbon for optimum packing density and life.

Support Structure

Model M60 - M28: Clear plastic housing with molded plastic end cap. Integral outlet filter.
Model M30 - M55: Inner and outer 304 Stainless Steel support sleeve cylinders

End Caps

Glass filled polyamide material
Initial Differential Pressure Dry — M60 - M61: 3 PSID
M62 - M65: 1 PSID
Flow range — 5 to 4800 SCFM

Application

Installation after high efficiency coalescer for process air purification, odor removal, removal of trace vapors and for critical applications.

* "M" Series Absorption Filters, with Type "D" activated carbon elements: All Wilkerson Type "M" Absorption Filters with Type "D" activated carbon elements exceed ISO Class 1 on maximum oil content (ppm / wt).²

The PCT-MA is a medical cylinder attachment for our line of PCT-15 and 122 inverter/driers. The PCT-MA processes Medical E, D, and M-6 size cylinders (3.2" to 4.4" diameter, 11.75" to 25.25" tall) and matches the footprint of our GHH-6G-12MT-4 Multi-4 Port Test Head.

4 medical cylinders are processed in the same time it takes to process 1 medical cylinder on the PCT-15 and 8 cylinders instead of 2 for the PCT-122. Cylinders can be stamped while clamped in the PCT-MA. The PCT-MA is attached or removed in less than 5 minutes.

Video:

[MEDICAL CYLINDER PTC ATTACHMENT VIDEO](#)



ECI

Electric Cylinder Inverter

The ECI Electric Cylinder Inverter is used for large composite cylinder. The ECI inverts, washes and dries in a single cycle. The ECI HD version uses Filtered air injected into the inverted cylinder, purging out water from the hydrostatic test. Hot water (180°) is introduced into the cylinder To rapidly heat the cylinder walls, followed by a final burst of clean air to produce a 'fresh dried' cylinder ready for inspection.



22 Ponderosa Ct

Montrose, CO 81401

www.galiso.com (800)854-3789

Electrical: 110 Volts, 60 Hz., or 220 Volts, 50 Hz,
Air: 100PSI @ 22 CFM,
Water: 10 GPM @ 60 PSI, Hot Water: 10 GPM @ 60 PSI,
Maximum Allowable Steam: 284°F/140°C @ 90psi

Dimensions:

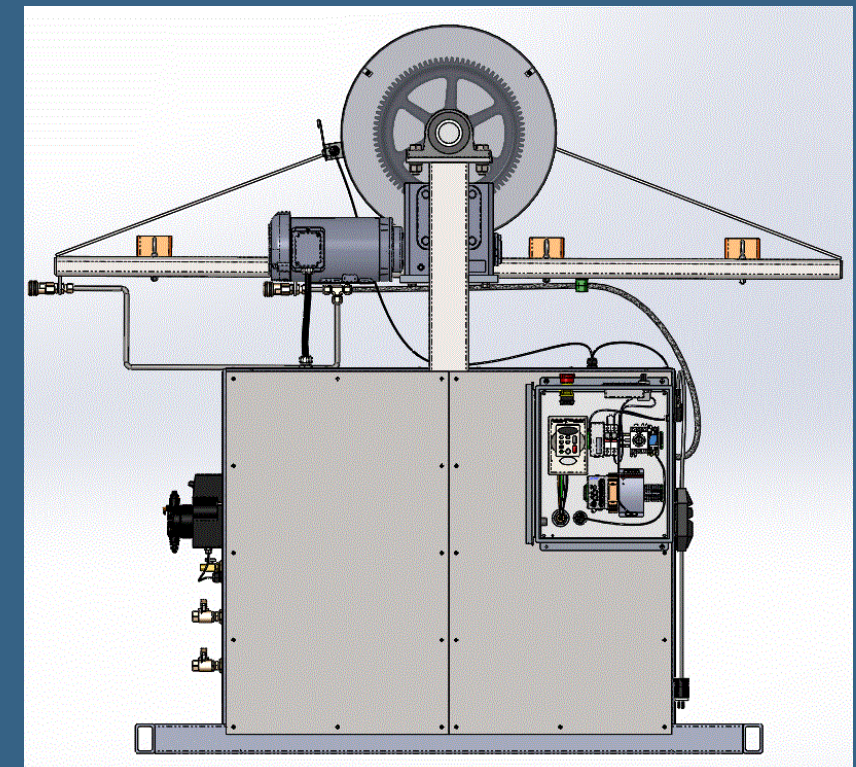
Footprint 60"W x 64" L not including Rack.
68" tall not including Rack

Operations:

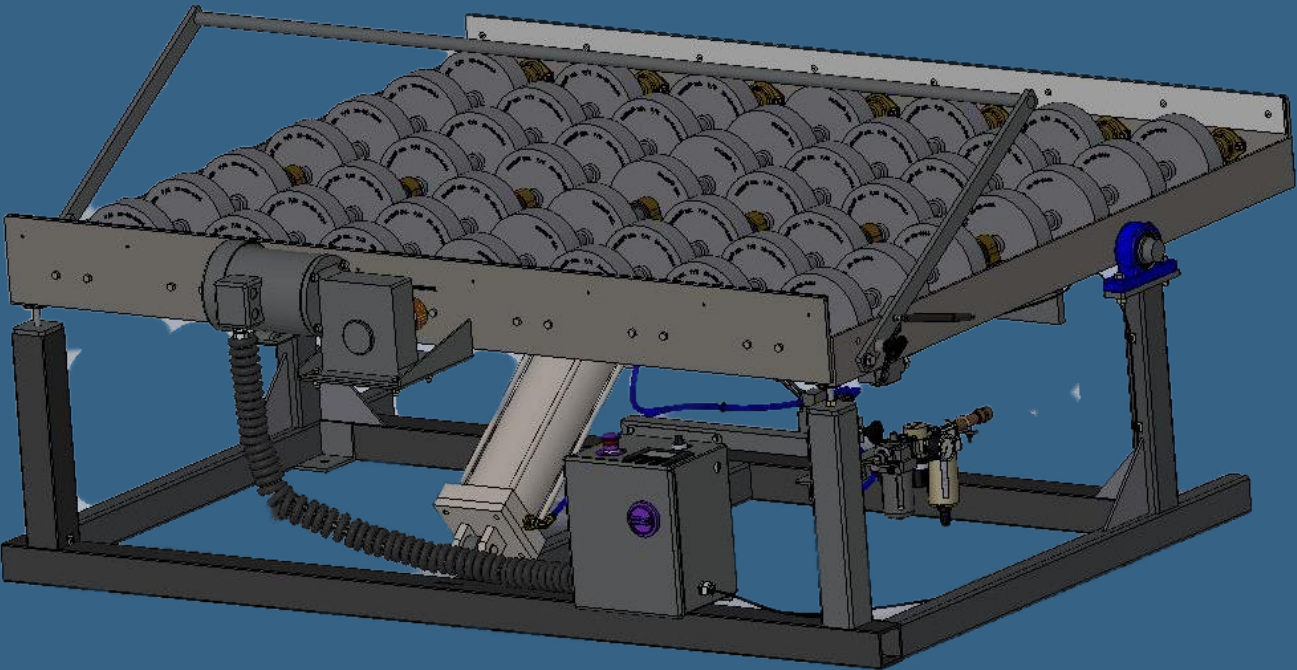
- When equipped with a detergent supply line the ECI acts as an internal washer to cleanse cylinders of oils, scale, or other foreign substances.



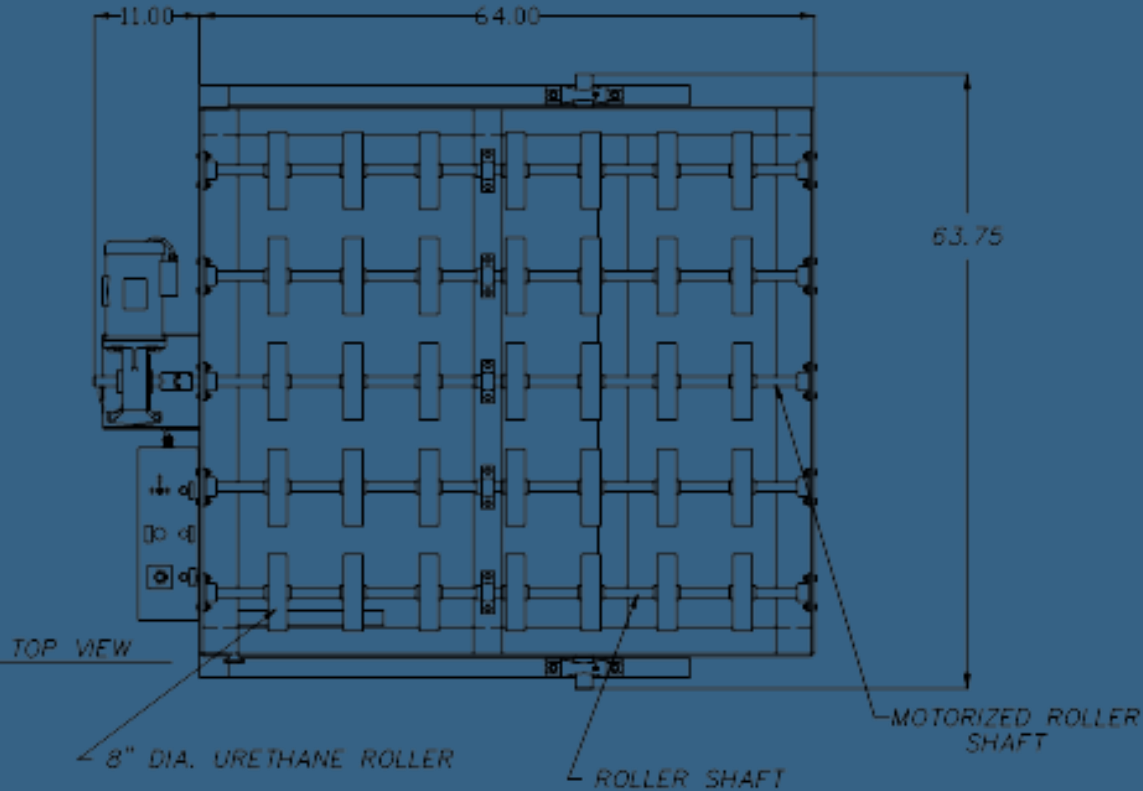
ECI has been developed to handle composite cylinders in the cng and hydrogen industry. Standard version to handle cylinders that are empty. Heavy Duty version for cylinders that can be full of water. We have 110" Length and 118" Length versions. Max Diameter 24"



LCR-4-PT & LCR-6-PT Loading Cylinder Rollers



22 Ponderosa Ct
Montrose, CO 81401
www.galiso.com (800)854-3789



FEATURES LCR 4 OR 6PT OPERATION VIDEO

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.

E-Stop

Maximum Cylinder Load 4 , 6
4 ea. 10 5/8" Diameter x 62 " Tall , 6 ea. 10 5/8" Diameter x 62 " Tall

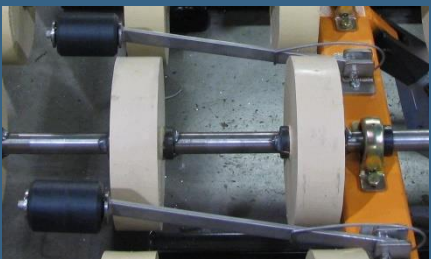
SPECIFICATIONS

Dimensions	LCR-4-PT.....	76" L x 64" W x 35" H
Dimensions	LCR-6-PT.....	76" L x 85" W x 35" H
Timer.....	6 programmable, 1-999 minutes each direction, 1-999min Total	
RPM.....	Programmable each direction10-90RPM	
Electrical.....	2.7 Amps, 220 Volts; 1.35 Amps, 440 Volt, 50/60 Hz 3-Phas	
Air.....	17CFM @ 90PSI (Intermittent)	

All Pneumatic Option



Anti-Static Option



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.

CRT-1



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.

NDS



BEFORE



AFTER



CCR-75

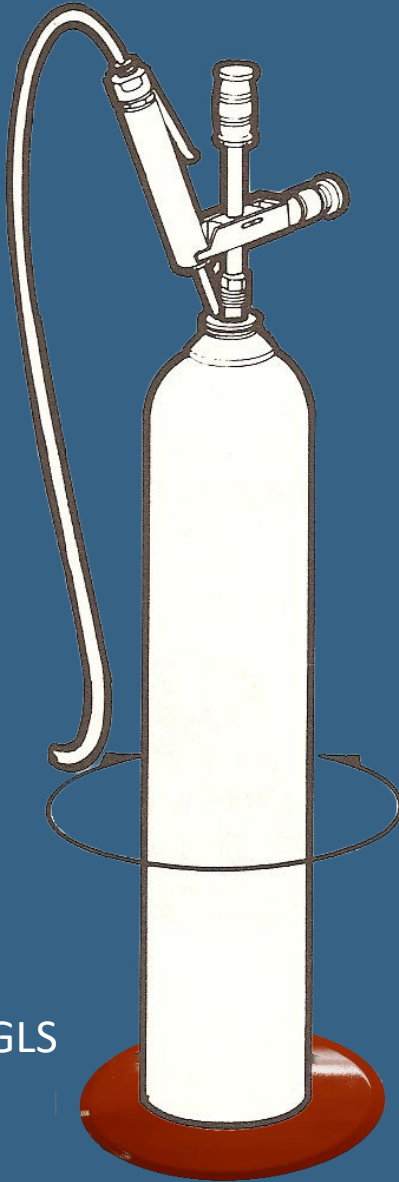
GTK Kit



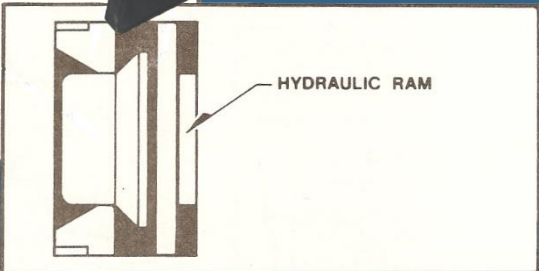
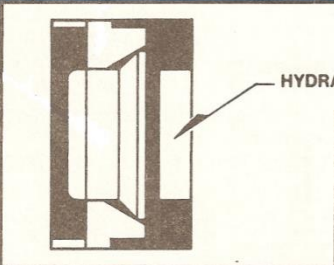
NPT-1010



GLS



CST-2





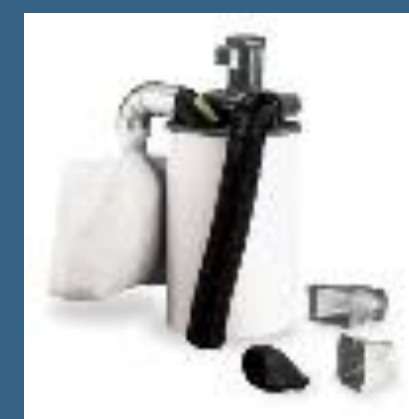
ISB-1 Internal Shot Blaster
25-54-9010

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. Steel shot is poured into the ISB-1 shot reservoir. The cylinder is loaded onto the VST-9 tumbler and rotated into position for the blasting process. Shot collector box is mounted onto the VST-9. The ISB blasting probe is inserted through the shot collector box and into the cylinder. Blasting lance trigger is actuated to begin flow of shot. While the VST-9 rolls the cylinder the lance is slowly inserted the complete length of the cylinder allowing the internal surfaces to be blasted clean. The ISB comes with Three separate nozzles that can be used during this process (straight through, 90 degrees, 70 degrees). While blasting 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.

Dimensions ISB: 30" L X 24" W X 54" H
 Air Requirements 90-120 PSI (60 SCFM)
 Electrical Requirements50/60hz 3Phase

Dust Collector: Sits on 55 Gallon drum (supplied by customer)

S330 Steel Shot



VST-9 Cylinder Tumbler 25-54-9544

VST-16 Cylinder Tumbler 25-54-9526

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

The VST-9 tumbles cylinders up to, 10 5/8" Diameter x 60" Tall.

Specifications

Dimension..... Loading Position 36" L x 15 3/4" W x 62" H
 DimensionsTumbling Position 61" L x 15 3/4" W x 43" H
 Electrical Requirements110 Volt, 60 Hz Single Phase



Viking External Shot Blasters

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.
- Each model has: a blast wheel diameter of 18”, a blast wheel horsepower of 10, a blast wheel RPM of 1725, blast motor and tumbler dr. RPMs of 1725, and ammeters.



Specifications:

	GC-	301	110	110/30	111	112	113	500	1000
Length		72”	107”	107”	112”	112”	114”	204”	258”
Depth		50”	42”	55”	80”	93”	42”	90”	90”
Height		74”	73”	84”	87”	109”	119”	111”	107”
Min. Diameter		6”	6”	6”	6”	6”	12”	12”	12”
Max Diameter		30”	20”	30”	20”	30”	36”	44”	44”
Max Length		30”	72”	72”	72”	72”	96”	120”	192”
No. of Wheels		2	2	2	2	2	4	6	8
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.
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
Blast Motor H.P.		2 @ 10	2 @ 10	2 @ 10	2 @ 10	2 @ 10	4 @ 10	6 @ 10	8 @ 10
Tumbler Dr. H.P.		1/2	1/2	1/2	1 1/2	1 1/2	1	2@ 1	2@ 1
Dust Coll. H.P.		3	3	3	3	3	3	5	2@ 3
Dust Coll. 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
F/L Amps- 440v		30.8	30.8	30.8	32.3	32.3	58.6	88.9	117.2