

## FLOAT & PROBE TYPE WATER COLUMNS

### GENERAL INTRODUCTION TO SELECTION & SPECIFICATION DATA

#### CATALOG 500 IS A COMPREHENSIVE REFERENCE TO CLARK-RELIANCE WATER COLUMNS, TRIM AND ACCESSORIES

The following pages in Catalog 500 present detailed technical, performance and application data essential to accurate specification and ordering. Individual

catalog sections are devoted to all major components:

- Water Columns, Float & Probe
- Water Gage Valves & Gage Cocks
- Flat Glass, Prismatic & 61-Color Gages
- Safety & Alarm Systems
- Illuminator & Lighting Accessories
- Remote Level Indication Systems

All Clark-Reliance water columns and components are designed and manufactured in total compliance with ASME Boiler Code provisions. Of special importance, all steel water columns are welded according to specific ASME code provisions and procedures. Water columns and components such as gages and valves are hydrostatically tested to 150% of design pressure.

Today, Clark-Reliance continues as the foremost name in water column technology and manufacture. Current, advanced products are modern-day versions of columns and trim pioneered by the

Reliance Gauge Column Co., America's oldest and most respected exclusive boiler trim manufacturer.

#### BASIC DATA AND DIMENSIONS PROMOTE ACCURATE COLUMN AND TRIM SPECIFICATIONS

Initial ordering information presented to Clark-Reliance should include specific, basic information essential to delivering the column and trim best suited to your individual application. Your preliminary inquiry will be efficiently handled when the following data, as much as possible, are provided.

- Maximum Design Pressure
- Alarm System Desired (Float Or Probe)
- Size And Type Of Steam/Water Connections
- Center-To-Center Dimension Between Steam And Water Connections
- Location and Orientation Of Connections
- Dimension From Normal Water Level To Water Connection
- Alarm Variation (Distance Between High And Low Alarm Points)
- Gage Visibility Range
- Supply Line Voltage And Frequency
- Environmental Conditions (Indoor, Outdoor, Hazardous)

The above information will help Clark-Reliance engineering and production specialists to develop the water column and trim best suited to meeting your application criteria.

Additional specification assistance is always available from local Clark-Reliance representatives or direct from Clark-Reliance headquarters and manufacturing facilities in Strongsville, Ohio.

#### CHOOSE FROM A WIDE SELECTION OF COLUMNS AND TRIM SERVING PRESSURES FROM 0 TO 3000 PSI

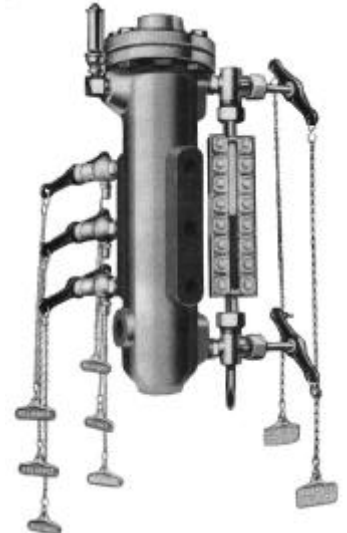


Figure 6

FLOAT TYPE WITH DIRECT READING PRISMATIC GAGE

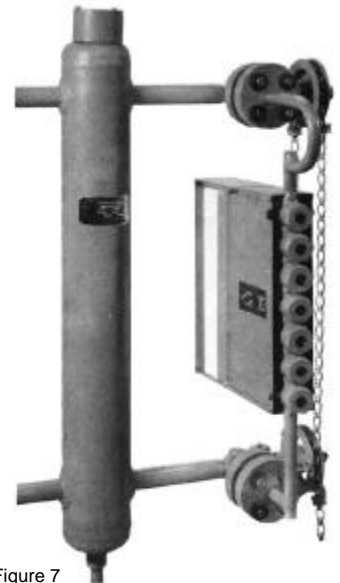


Figure 7

PROBE TYPE WITH DIRECT READING BI-COLOR SIMPLIPORT GAGE (RECOMMENDED VIEWING HOOD NOT SHOWN)



Figure 1  
DIREGT READING  
GAGES



Figure 2  
GAGE  
VALVES



Figure 3  
SIMPLIPORT®  
BI-COLOR



Figure 4  
GAGE ILLUMINATION  
EQUIPMENT



Figure 5  
GAGE COCKS

REFER TO INDIVIDUAL CATALOG 500 SECTIONS THAT PRESENT TECHNICAL AND OPERATING DATA ON MODELS AND TYPES OF CLARK-RELIANCE WATER COLUMNS, TRIM AND ACCESSORIES.

## FLOAT TYPE

CAST IRON COLUMN:  
0 TO 250 PSI

STEEL COLUMN:  
250 TO 900 PSI

Float type water column models are individually rated at pressures from 0 to 900 PSI. All float type columns are designed to feature the Clark-Reliance audible safety alarm mechanism.

At designated water levels, floats automatically trigger the alarm. The shrill tone of a brass whistle signals predetermined high or low water levels, acting to within one-quarter inch level variations. The action is direct and extraordinarily reliable.

Alarm components sit high in the column, away from corrosive agents and scale. Design simplicity eliminates periodic alarm adjustment and scheduled alarm maintenance. Alarms can respond to water levels high and low, high only, or low only. Additional float actuated electric alarms can be operated at remote locations by installing a Clark-Reliance LEVALARM® accessory. Columns without alarms are available.

Float type columns are available for all types of boilers. Models offer a variety of water gage valve connection centers and a selection of many steam and water centers. All models are products of precision manufacturing standards and employ high quality materials throughout.



Figure 8

CAST IRON FLOAT TYPE COLUMN  
REVEALING INTERNAL FLOATS.  
COLUMN IS EQUIPPED WITH A  
DIRECT READING TUBULAR GLASS  
WATER LEVEL GAGE.

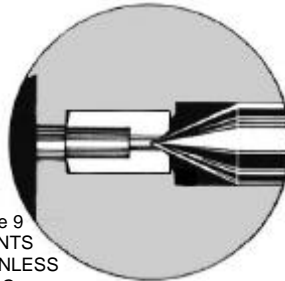


Figure 9  
FLOAT MOVEMENTS  
ACTUATE A STAINLESS  
STEEL CONE DISC  
LOCATED AT THE SEAT  
OF THE WHISTLE VALVE



EXTENSIVE MATERIALS  
RESEARCH PRODUCED  
THE OUTSTANDING  
CLARK-RELIANCE  
PATENTED PROBES.  
(Patents. U.S. 4507,521 - S.A. 831664 -Other Foreign)

## PROBE TYPE

CAST IRON COLUMN:  
0 TO 250 PSI

STEEL COLUMN:  
250 TO 3000 PSI

Probe type water column models feature high-technology electrical probes that perform the same alarm warning function as mechanical mechanisms in float type columns. However, the more versatile probes can actuate audible or visual electric alarms or be used to actuate fuel cut-out devices, pump motor controls or other controls - all at predetermined water levels.

Various standard models offer a variety of control combinations. Special control combinations are available upon request.

As many as six probes of various lengths can be accommodated in any model. Each offers an electric control capability as the water level within the column rises to touch the probe (completing a circuit) or falls beneath the probe (breaking a circuit).

Probe durability and dependability support the excellent performance of Clark-Reliance Probe Type Water Columns. Both Teflon-insulated and zirconium oxide insulated probes withstand highly corrosive environments while monitoring water levels with exceptional accuracy.

Clark-Reliance Probe Type Water Columns are available in a variety of water gage connection arrangements, and are designed to accommodate virtually any vessel connections.

*For additional information  
contact your local Clark-Reliance  
representative*

# Clark-Reliance®

