

## FOR MONITORING CHLORINE AND SO2 150 LB CYLINDERS

- SAFELY AND
  ACCURATELY
  TRACK
  CHLORINE
  USAGE AND
  REMAINING
  AMOUNT
- + WARN OF DANGEROUS UNDER AND OVERFEED CONDITIONS
- + PREVENT
  SYSTEM
  FROM RUNNING
  EMPTY
- 4-20MA REMOTE MONITORING REDUCES OPERATOR EXPOSURE TO CHLORINE









OUR ADVANCED WIZARD 4000® DIGITAL INDICATOR SIMULTANEOUSLY MONITORS REMAINING CHEMICAL, FEED RATE AND USAGE ON UP TO 4 SEPARATE CYLINDERS



WALL MOUNTED
CHAINING BRACKET
INCORPORATES HOOKS
FOR STORING CYLINDER
CHANGE-OUT TOOLS
AND WASHERS

THE ELECTRONIC CHLOR-SCALE® 150 IS
DESIGNED TO MONITOR 150 LB CHLORINE AND SO<sub>2</sub>
CYLINDERS USED AT WATER TREATMENT PLANTS,
BOOSTER STATIONS, WELL HEADS AND VARIOUS
INDUSTRIAL PROCESS PLANTS. BY MEASURING
THE WEIGHT OF THE CHEMICAL IN THE CYLINDER,
OPERATORS CAN EASILY TRACK EXACTLY HOW
MUCH CHEMICAL HAS BEEN USED, THE CURRENT
FEED RATE, AND HOW MUCH CHEMICAL REMAINS.

THE SCALE PLATFORMS ARE MADE OF 100%

PVC ELIMINATING ANY CHANCE OF CORROSION AND A
LOW OVERALL HEIGHT OF ONLY 1 5/8" ALLOWS

CYLINDERSTO EASILY BE ROLLED ON AND OFF WITHOUT
ANY LIFTING. OUR INCREDIBLY SIMPLE PIVOTED

PLATFORM DESIGN DOES NOT HAVE THE MOVING PARTS

OTHER SCALES REQUIRE SUCH AS LEVERS, FLEXURES
OR MECHANICAL LINKS WHICH CAN CORRODE, BEND OR
BREAK LEADING TO SCALE FAILURE. EACH PLATFORM
INCLUDES A SEALED ELECTRONIC STAINLESS STEEL
LOAD CELL WITH TEN FEET OF LOAD CELL CABLE AND

A WALL MOUNTED CHAINING BRACKET WITH INTEGRAL TOOL HOOKS.

THE WIZARD 4000® ADVANCED DIGITAL WEIGHT INDICATOR PROVIDES CRITICAL REAL TIME INFORMATION ON YOUR CHLORINE OR SO<sub>2</sub> FEED SYSTEM. MONITOR REMAINING CHEMICAL AND FEED RATE, SEND LOW LEVEL AND FEED RATE ALARMS, AND AUTOMATICALLY LOG DAILY CHEMICAL USAGE FOR EACH OF THE PREVIOUS 31 DAYS. THE ELECTRONIC CHLOR-SCALE 150 COMES PRE-CALIBRATED AND CAN EASILY BE INSTALLED BY PLANT PERSONNEL.

FORCE FLOW

#### ELECTRONIC CHLOR-SCALE 150°

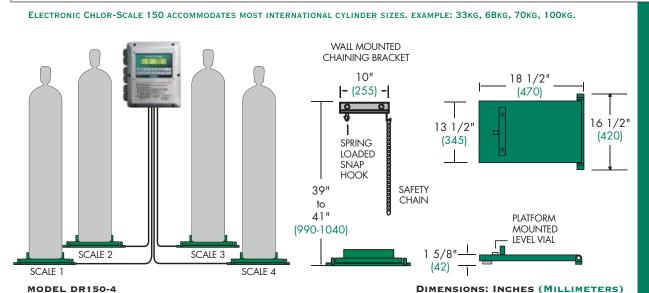
#### **MODELS AND ORDERING INFORMATION**

Models come standard with PVC platforms, electronic load cells with 10 foot cable, cylinder chaining brackets and Wizard 4000® Advanced Digital Indicator with sourcing 4-20mA outputs. For longer cable lengths, additional chaining brackets, alarm relays and MODBUS communication, please consult factory. Metric models available at no extra charge. For more information on the Wizard 4000 see Bulletin 400.

MODEL		CYLINDER CAPACITY	SCALE PLATFORMS	4-20mA OUTPUTS	SHIPPING WEIGHT	
WR150-1	(WR100K-1)	1	1	1	25 LBS (12 KG)	
WR150-2	(WR100K-2)	2	2	2	46 LBS (21 KG)	
WR150-3	(WR100K-3)	3	3	3	60 LBS (28 KG)	
WR150-4	(WR100-4)	4	4	4	<b>72</b> LBS ( <b>33</b> KG)	

STANDARD DISPLAY INCREMENTS: 0.2 LBS (0.1 KG). OTHER INCREMENTS AVAILABLE UPON REQUEST.

PLATFORM CAPACITY (GROSS WEIGHT): 300 LBS (150 Kg). FOR A SINGLE PLATFORM TO WEIGH A BANK OF 3 TO 6 CYLINDERS, PLEASE CONSULT FACTORY. FOR GAS CYLINDERS OTHER THAN CHLORINE OR SO2, PLEASE CONSULT FACTORY



(4 Single 150lb cylinder Electronic Scales and 1 WIZARD 4-Channel Indicator with 4-20ma outputs)

### TYPICAL SPECIFICATION FOR ELECTRONIC CHLORINE AND SO2 150 LB CYLINDER SCALE

SCALE PLATFORM: A QUANTITY OF \_\_\_\_\_ CHLORINE/SO2 CYLINDERS SHALL BE WEIGHED. CHLORINE/ SO2 CYLINDER SCALES SHALL BE OF THE DIGITAL READOUT/STRAIN GAGE LOAD CELL TYPE. EACH SCALE PLATFORM SHALL BE CONSTRUCTED OF SOLID PVC PLASTIC FOR CORROSION RESISTANCE AND SIZED TO ACCEPT ONE (1)150 LB CYLINDER WITH A 10 1/4" - 10 1/2" (260mm - 267mm) DIAMETER. PLATFORM SCALE COATING SYSTEM SHALL BE A MINIMUM DRY THICKNESS OF 80 MILS AND BE RESISTANT TO MOISTURE, CHEMICALS, ABRASION, IMPACT AND UV LIGHT. LOAD CELL CABLE LENGTH SHALL BE A MINIMUM OF 10 FEET IN LENGTH. A WALL MOUNTED CYLINDER RESTRAINING BRACKET WITH INTEGRAL TOOL RACK SHALL BE PROVIDED.

INSTRUMENT ENCLOSURE, OUTPUTS & ALARMS: INDICATOR SHALL CARRY CE MARKING AND SHALL BE HOUSED IN A NEMA 4X, UL APPROVED ENCLOSURE. INDICATOR SHALL HAVE A 20 KEY DIGITAL KEYPAD & ABILITY TO DISPLAY DATA FROM TWO SCALES SIMULTANEOUSLY ON A BACKLIT ALPHANUMERIC DISPLAY. IF MORE THAN TWO SCALES ARE BEING MONITORED, DISPLAY SHALL AUTOMATICALLY SCAN ALL SCALES IN THE SYSTEM. INDICATOR SHALL HAVE ADJUSTABLE 4-20MA SIGNALS THAT OUTPUT NET WEIGHT AND CHEMICAL FEED RATE FOR EACH SCALE. INDICATOR SHALL DISPLAY AN ALARM IN ANY OF THE FOLLOWING CONDITIONS: LOW LEVEL, LOW FEED RATE, HIGH FEED RATE, MAX DAILY USE, MIN DAILY USE, SUPPLY EXHAUSTED AND LOAD CELL FAILURE. AN ALARM LOG SHALL STORE THE MOST RECENT TEN (10) ALARM CONDITIONS WITH TIME AND DATE OF OCCURRENCE. A QUANTITY OF \_\_\_\_\_ RELAYS (UP TO 12 PER INDICATOR) SHALL BE PROVIDED FOR REMOTE ALARM INDICATIONS. INDICATOR SHALL BE ENABLED WITH MODBUS PROTOCOL FOR REMOTE RS485 SERIAL COMMUNICATIONS.

DISPLAY & INVENTORY CONTROL SOFTWARE: KEYPAD AND MENU ITEMS SHALL HAVE INDEPENDENT PASSWORD PROTECTION TO PREVENT UNAUTHORIZED OPERATION. BOTH A NUMERICAL AND A BAR GRAPH DISPLAY SHALL GIVE OPERATOR THE ABILITY TO MONITOR CHEMICAL BY WEIGHT, VOLUME OR PERCENT FULL. EACH CHANNEL SHALL HAVE A USER SELECTABLE, TWO DIGIT SCALE ID NUMBER AND SHALL DISPLAY NET REMAINING, FEED RATE, DAILY USAGE, TOTAL AMOUNT USED, DAYS UNTIL EMPTY, GROSS WEIGHT AND TARE WEIGHT. A TANK LOAD KEY SHALL PAUSE USAGE ACCUMULATION DURING CHEMICAL RE-SUPPLY TO MAINTAIN ACCURATE USAGE DATA OVER MULTIPLE TANK LOADS. A DATA LOG SHALL STORE THE DAILY USAGE FOR EACH OF THE PREVIOUS 31 DAYS. INDICATOR RE-CALIBRATION IN THE FIELD SHALL BE ACCOMPLISHED THROUGH THE KEYPAD AND SHALL NOT REQUIRE THE USE OF DEAD WEIGHTS.

SCALE SHALL CARRY A FULL FIVE (5) YEAR FACTORY WARRANTY. "LIMITED" WARRANTIES SHALL BE CONSIDERED UNACCEPTABLE. FULL SCALE ACCURACY SHALL BE BETTER THAN 1%. SCALE SHALL BE CHLOR-SCALE® 150 WITH TUF-COAT<sup>TM</sup> ENVIRONMENTAL ARMOR AND WIZARD 4000® DIGITAL DISPLAY, MODEL WR\_\_\_\_\_\_, AS MANUFACTURED BY FORCE FLOW, 1150-D BURNETT AVENUE, CONCORD, CA 94520 USA WWW.FORCEFLOW.COM.

# CHLOR-SCALE 150 OPTIONS



SINGLE
OR DUAL
CHANNEL
SOLO 1000
SEE
BULLETIN 408



BATTERY POWERED SOLO XT SEE BULLETIN 514



HYDRAULIC CENTURY DIAL SEE BULLETIN 204

FOR MORE INFORMATION ON THE WIZARD 4000, SEE BULLETIN 400

ALL SPECIFICATIONS CAN BE DOWNLOADED FROM OUR WEBSITE.

