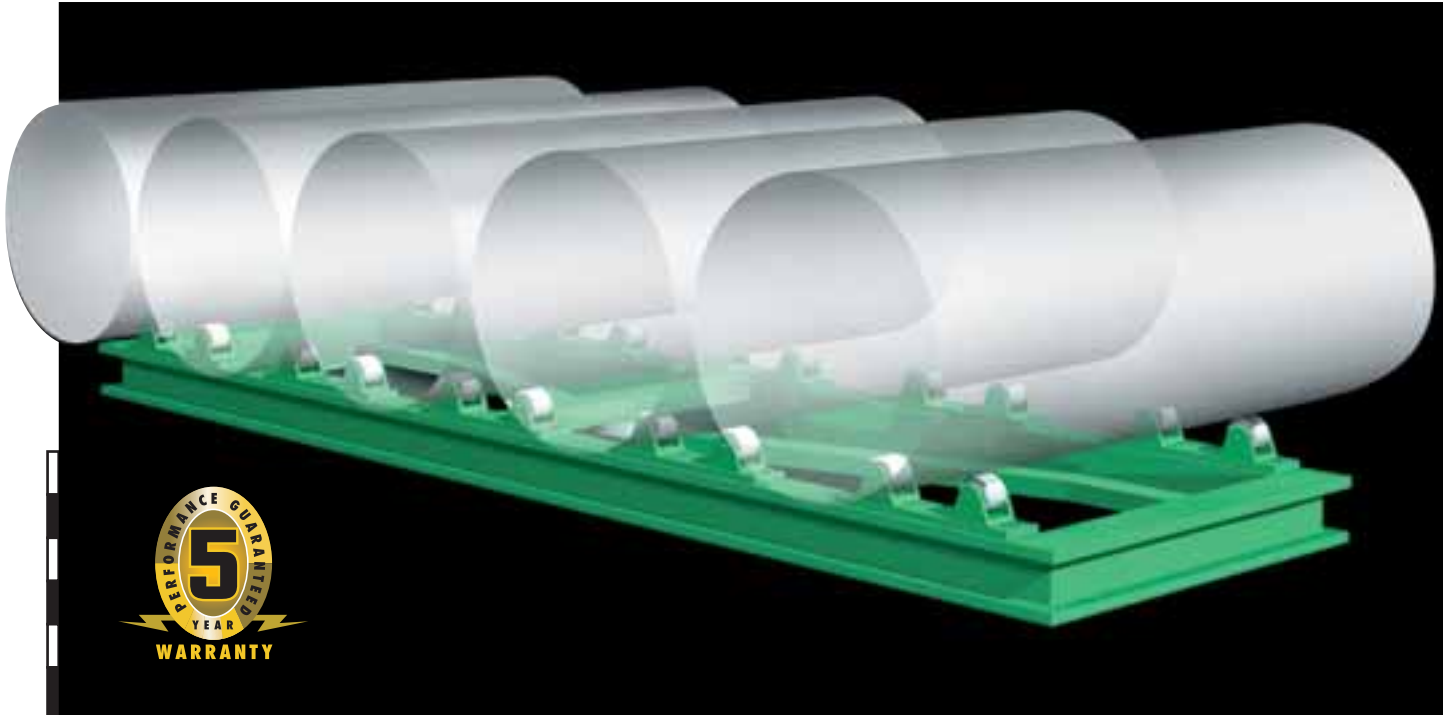


## FOR MONITORING 3 TO 6 MANIFOLDED TON CONTAINERS



+ SAFELY AND ACCURATELY TRACK CHLORINE USAGE AND TANK LEVELS

+ 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 USAGES ON UP TO 4 MULTIPLE CHLOR-SCALES.

LARGE TREATMENT PLANTS OFTEN REQUIRE MULTIPLE TON CONTAINERS OF CHLORINE OR SO<sub>2</sub> TO BE MANIFOLDED TOGETHER IN ORDER TO MEET THE HIGH DEMAND FOR CHEMICAL DURING THE TREATMENT PROCESS. THE MULTIPLE ELECTRONIC CHLOR-SCALE ALLOWS A WHOLE "BANK" OF MANIFOLDED CONTAINERS TO BE ACCURATELY MONITORED ON A SINGLE SCALE.

THE PATENTED LEVER DESIGN OF THE MULTIPLE CHLOR-SCALE USES JUST ONE LOAD CELL TO MONITOR UP TO SIX MANIFOLDED TON CONTAINERS. THIS DESIGN HELPS MAKE THE CHLOR-SCALE THE MOST DURABLE AND RELIABLE MONITORING SYSTEM EVER CREATED FOR TON CONTAINERS. THE LEVER DESIGN INSURES FULL SCALE ACCURACY OF BETTER THAN 0.25% AND ELIMINATES ANY CHANCE OF LOAD CELL DAMAGE FROM HEAVY HANDLING OF CONTAINERS. SINCE THE SCALE DOES NOT USE A LOAD CELL SUMMING BOX,

THERE IS NO NEED FOR TIME CONSUMING LOAD CELL BALANCING PROCEDURES THAT OTHER SCALES REQUIRE.

WHEN COMBINED WITH OUR WIZARD 4000® ADVANCED DATA WEIGHT INDICATOR, THE MULTIPLE ELECTRONIC CHLOR-SCALE LETS YOU CROSS CHECK YOUR CHEMICAL FEED RATES, DATA LOGS THE AMOUNT OF CHEMICAL USED FOR EACH OF THE PAST 30 DAYS TO INSURE GOVERNMENT RECORD KEEPING REQUIREMENTS ARE MET AND ALLOWS REMOTE MONITORING OF THE CHEMICAL FROM YOUR PLC OR SCADA SYSTEM. ALARMS WARN OF UNDER AND OVER FEEDING, LOW TANK LEVELS AND ALSO WHEN SUPPLY HAS BEEN COMPLETELY EXHAUSTED. THE WIZARD 4000 CAN INDEPENDENTLY MONITOR UP TO FOUR BANKS OF TANKS AND ALL FUNCTIONS ARE MENU DRIVEN FOR EASY OPERATION.

**FORCE FLOW**

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# MULTIPLE ELECTRONIC CHLOR-SCALE®

## MODEL AND ORDERING INFORMATION

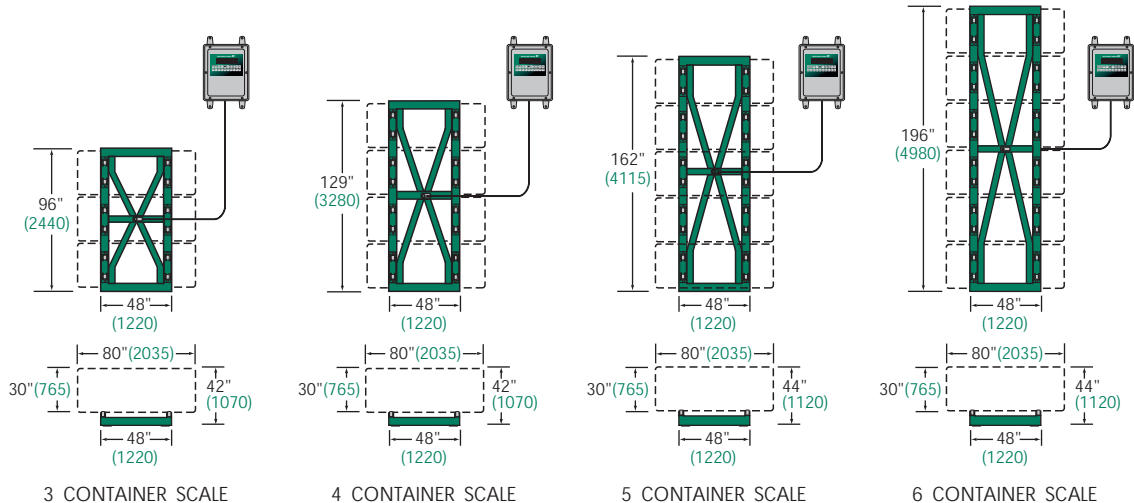
STANDARD MODELS ARE SIZED TO ACCEPT TON CONTAINERS WITH APPROXIMATELY 2000 LBS. OF CHEMICAL AND 1600 LBS. OF TARE WEIGHT. SCALES COME STANDARD WITH LOAD CELL AND 20 FT OF CABLE. FOR LONGER CABLE LENGTHS, TANK RESTRAINT STRAPS OR NON-STANDARD TANK SIZES, PLEASE CONSULT FACTORY. WIZARD 4000 CAN MONITOR UP TO FOUR (4) MULTIPLE ELECTRONIC CHLOR-SCALES (SEE BULLETIN 400, "WIZARD 4000"). METRIC DISPLAY AVAILABLE AT NO ADDITIONAL COST.

MODEL	NUMBER OF CONTAINERS	CAPACITY	STANDARD INCREMENTS
DR120 (DR60K)	3	12,000 LBS (6000KG)	2 LB. (1KG)
DR160 (DR80K)	4	16,000 LBS (8000KG)	2 LB. (1KG)
DR200 (DR100K)	5	20,000 LBS (10,000KG)	5 LB. (2KG)
DR240 (DR120K)	6	24,000 LBS (12,000KG)	5 LB. (2KG)

METRIC MODELS SUITABLE FOR 864, 907 & 1000 KG TANKS

### SPECIFYING GUIDELINES:

THESE MULTIPLE TANK SCALES ARE DESIGNED FOR SYSTEMS THAT HAVE ALL TANKS MANIFOLDED TOGETHER FEEDING SIMULTANEOUSLY. IF YOU ARE FEEDING FROM ONE TANK AT A TIME, OR ARE CONCERNED ABOUT KNOWING INDIVIDUAL WEIGHTS OF EACH TANK, WE RECOMMEND OUR SINGLE TANK SCALES FOUND ON BULLETIN 401.



### DIMENSIONS: INCHES (MILLIMETERS)

## TYPICAL SPECIFICATION FOR MULTIPLE ELECTRONIC CHLORINE AND SO<sub>2</sub> TON CONTAINER SCALE

**SCALE PLATFORMS:** A QUANTITY OF \_\_\_ CHLORINE/SO<sub>2</sub> SCALES SHALL BE PROVIDED AND SHALL BE OF THE DIGITAL READOUT/ELECTRONIC LOAD CELL TYPE. SCALE FRAME SHALL HAVE A 2-PART EPOXY FINISH AND BE SIZED TO ACCEPT \_\_\_ (3, 4, 5, OR 6) 3,600 LB CONTAINERS. THE FRAME SHALL HAVE THE REQUIRED NUMBER OF HEAVY DUTY BRONZE BUSHED BEARING TRUNNIONS INSTALLED FOR EACH CONTAINER TO ALLOW EASY CONTAINER ROTATION. SCALE SHALL BE OF SUCH A SIZE THAT IT IS WITHIN THE DIMENSIONS OF THE TANKS IT SUPPORTS. SCALE SHALL BE OF THE SINGLE LOAD CELL DESIGN. WEIGHT SHALL BE TRANSFERRED VIA LEVERS TO A SINGLE, NTEP APPROVED LOAD CELL OF THE SHEAR BEAM STRAIN GAUGE TYPE. FLEXIBLE CABLE SHALL CONNECT LOAD CELL TO INDICATOR TO ALLOW EASY REMOTE INSTALLATION OF THE READOUT. CABLE LENGTH SHALL BE \_\_\_ FT. (20' STANDARD).

**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 2 SCALES AT A TIME ON A BACKLIT ALPHANUMERIC DISPLAY. IF MORE THAN 2 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, HIGH 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 10 ALARM CONDITIONS WITH TIME AND DATE OF OCCURRENCE. A QUANTITY OF \_\_\_ RELAYS (UP TO 12 PER INDICATOR) SHALL BE PROVIDED FOR REMOTE ALARM INDICATION. 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, PURE CHEMICAL REMAINING, FEED RATE, DAILY USAGE, TOTAL AMOUNT USED, DAYS UNTIL EMPTY, GROSS WEIGHT AND TARE WEIGHT. A TANK LOAD KEY SHALL PAUSE & PROJECT USAGE ACCUMULATION DURING CHEMICAL RESUPPLY 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 1/4 OF 1%. SCALE SHALL BE CHLOR-SCALE® MODEL DR \_\_\_\_\_, AND ELECTRONIC WIZARD 4000® DIGITAL DISPLAY MODEL 4000-\_\_\_\_\_, AS MANUFACTURED BY FORCE FLOW, 1150-D BURNETT AVENUE, CONCORD, CA 94520 USA (WWW.FORCEFLOW.COM).

## OPTIONS & ACCESSORIES



THE MULTIPLE ELECTRONIC CHLOR-SCALE CAN ALSO BE USED WITH OUR SINGLE OR DUAL CHANNEL SOLO 1000® DIGITAL WEIGHT INDICATOR WHEN REMAINING CHEMICAL IS ALL THAT NEEDS TO BE MONITORED. OPTIONAL LOW LEVEL ALARM RELAYS ARE AVAILABLE AND 4-20MA OUTPUTS ARE STANDARD. SEE BULLETIN 513, "SOLO 1000" FOR COMPLETE INFORMATION.



POLYESTER HOLD DOWN SLINGS WITH RATCHETING BUCKLES, OR CHAINS AND BINDERS CAN BE FACTORY FITTED TO THE CHLOR-SCALE FOR INSTALLATIONS THAT REQUIRE SEISMIC RESTRAINT. PLEASE CONSULT FACTORY.



ROLLER STORAGE TRUNNIONS ARE AVAILABLE FOR SECURELY STORING TON CONTAINERS ON-SITE. SEE BULLETIN 208, "CHLOR-SCALE STORAGE TRUNNIONS" FOR MORE INFORMATION.

FOR MORE INFORMATION ON THE WIZARD 4000, SEE BULLETIN 400.

ALL SPECIFICATIONS ARE AVAILABLE IN ELECTRONIC FORMAT AT OUR WEBSITE.

