ELECTRONIC CHEM-SCALE®



- SAFELY TRACK CHEMICAL USAGE AND TANK LEVELS
- WARN OF DANGEROUS OVER AND UNDERFEED CONDITIONS
- PREVENT SYSTEM FROM RUNNING EMPTY
- 4-20MA REMOTE MONITORING REDUCES OPERATOR EXPOSURE TO CHEMICALS

MONITORS Chemical Level WARRANTY

SODIUM HYPOCHLORITE POLY-ORTHOPHOSPHATE SODIUM BISULFITE FLUORIDE POLYMER CAUSTIC ALUM



OUR ADVANCED WIZARD 4000® DIGITAL INDICATOR SIMULTANEOUSLY MONITORS REMAINING CHEMICALS, FEED RATES, AND USAGES ON UP TO 4 SEPARATE CHEM-SCALES.

STRICT FEDERAL AND STATE REPORTING REQUIREMENTS HAVE CREATED A NEED FOR WATER AND WASTEWATER PLANT OPERATORS TO EASILY AND ACCURATELY TRACK CHEMICAL FEED RATES AND USAGES. THE CHEM-SCALE GIVES YOU THIS INFORMATION ALONG WITH THE ASSURANCE THAT YOUR CHEMICAL SUPPLY WILL NOT UNEXPECTEDLY RUN OUT.

THE HEAVY DUTY STEEL PLATFORM IS PROTECTED WITH OUR ADVANCED 80 MIL THICK TUF-COAT™ ENVIRONMENTAL ARMOR. TUF-COAT IS HIGHLY RESISTANT TO CHEMICALS, ABRASION, IMPACT AND ULTRAVIOLET LIGHT DEGRADATION MAKING THE CHEM-SCALE IDEAL FOR EVEN THE HARSHEST ENVIRONMENTS. OPTIONS INCLUDE 316 STAINLESS STEEL AND MAXSENSE™ HIGH ACCURACY MODELS FOR SPECIAL APPLICATIONS SUCH AS MONITORING BRINE TANKS.

THE CHEM-SCALE UTILIZES WEIGHING TECHNOLOGY TO CREATE A HIGHLY RELIABLE, NON-CONTACTING CHEMICAL MONITORING SYSTEM THAT AVOIDS PROBLEMS OTHER SENSOR TECHNOLOGIES FACE CAUSED BY IRREGULAR TANK SHAPES, CORROSIVE CHEMICAL FUMES, FLUCTUATING TEMPERATURES AND CHANGES IN SPECIFIC GRAVITY.

FORCE FLOW

WWW.FORCEFLOW.COM

4

ELECTRONIC CHEM-SCALE"

MODELS AND ORDERING INFORMATION

SCALE INCLUDES PLATFORM WITH ADJUSTABLE TANK RESTRAINT CLIPS OR BACKSTOP AND ELECTRONIC LOAD CELL WITH 20 FT. CABLE. REQUEST LONGER CABLE LENGTH (UP TO 200') FOR REMOTE MOUNTING OF INDICATOR. ELECTRONIC WEIGHT INDICATOR REQUIRED AND ORDERED SEPARATELY. SEE WIZARD 4000 (BULLETIN 400) OR SOLO 1000 (BULLETIN 513).

н Ш	PLATFORM SIZE	x	Y	z	н	CAPACITIES*	FULL SCALE Accuracy	MIN. DISPLAY Increments
J	30" x 30"	30" (760)	30" (760)	34" (865)	3.25" (81)	1,2,3,4K	1/4 of 1%	0.1 LB
1	40" x 40"	40" (1016)	40" (1016)	44" (1118)	3.25" (81)	2,3,4,5,6K	1/4 of 1%	0.1 LB
	50" x 50"	50" (1270)	50" (1270)	54" (1372)	3.25" (81)	3,4,5,6,8K	1/4 of 1%	0.5 LB
2	60" x 60"	60" (1524)	60" (1524)	64" (1626)	3.25" (81)	4,5,6,8,10K	1/4 of 1%	0.5 LB
m	72" x 72"	72" (1829)	72" (1829)	76" (1930)	3.5" (89)	10, 12, 15, 20, 30K	1/4 of 1%	1.0 LB

DIMENSIONS: INCHES (MILLIMETERS) *OTHER CAPACITIES AVAILABLE UPON REQUEST

MODEL NUMBER DEFINITION SPECIFYING GUIDELINES A. FOR MAXIMUM ACCURACY SIZE 30-DR 20 LP **OPTIONS** – S = 316 STAINLESS STEEL OP SCALE CAPACITY TO MATCH THE тв $HA = MAXSENSE^{TM}$ HIGH ACCURACY **GROSS WEIGHT (CHEMICAL & TANK** (1/10 OF 1%) TARE WEIGHT) LP = STATIONARY DAY TANK B. TANK DIAMETER SHOULD NOT EXCEED PLATFORM SIZE. TB = TOTE BIN (PORTABLE TANK) 20 = SYSTEM CAPACITY X 0.01 C. SUPPLY CONNECTIONS MUST BE FLEXIBLE AND PREFERABLY (EXAMPLE: 20 = 2,000 LBS.) CONNECTED TO TANK OVER PIVOTED DR = FOR USE WITH DIGITAL READOUT SIDE OF PLATFORM. 30 = PLATFORM SIZE (INCHES)Х OUR WIZARD 4000 WEIGHT INDICATOR SIMULTANEOUSLY MONITORS REMAINING DAY TANK CHEMICALS, FEED OR TOTE BIN Z RATES AND USAGES (NOT INCLUDED) ON UP TO 4 SEPARATE CHEM-SCALES. н⊣ TANK RESTRAINT CLIP HINGE ELECTRONIC LOAD CELL **TYPICAL SPECIFICATION FOR ELECTRONIC CHEMICAL FEED SCALES** LBS CAPACITY SHALL BE PROVIDED AND SHALL BE OF THE A QUANTITY OF CHEMICAL SCALE(S) OF INCH DIAMETER DIGITAL READOUT/ELECTRONIC LOAD CELL TYPE. SCALE PLATFORM SHALL BE SIZED TO ACCEPT A TANK. FOUR (4) ADJUSTABLE HOLD DOWN LUGS SHALL SECURE THE VESSEL TO THE PLATFORM. PLATFORM SCALE COATING SHALL BE A MINIMUM DRY THICKNESS OF 80 MILS AND BE RESISTANT TO MOISTURE, CHEMICALS, ABRASION, IMPACT AND UV LIGHT. FLEXIBLE CABLE SHALL CONNECT LOAD CELL TO INDICATOR TO ALLOW EASY REMOTE INSTALLATION OF THE READOUT.

INDICATOR SHALL CARRY CE MARKING AND SHALL BE HOUSED IN A NEMA 4X, UL APPROVED ENCLOSURE. INDICATOR SHALL HAVE A 20 KEY DIGITAL KEYPAD WITH ABILITY TO DISPLAY TWO SCALES SIMULTANEOUSLY ON A SINGLE BACKLIT ALPHANUMERIC DISPLAY. IF MORE THAN TWO SCALES ARE MONITORED, DISPLAY SHALL AUTOMATICALLY SCAN ALL SCALES IN THE SYSTEM. INDICATOR SHALL HAVE AN ADJUSTABLE 4-20MA SIGNAL THAT OUTPUTS 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 (UP TO 12 PER INDICATOR) (SOLID STATE OR DRY CONTACT) RELAYS SHALL BE PROVIDED FOR REMOTE ALARM INDICATION OR TRANSFER PUMP CONTROL. INDICATOR SHALL BE ENABLED WITH MODBUS PROTOCOL FOR REMOTE RS 485 SERIAL COMMUNICATIONS.

KEYPAD AND MENULITEMS 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 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 1/4 OF 1%. SCALE SHALL BE CHEM-SCALE® MODEL TUF-COATTM ENVIRONMENTAL ARMOR AND WIZARD 4000[®] Model 4000-___ (1,2,3,4), AS MANUFACTURED BY FORCE FLOW, 1150-D BURNETT AVENUE, CONCORD, CA 94520 USA (WWW.FORCEFLOW.COM), OR EQUAL.

FEET (20' STANDARD).

SOLO 1000[™] OPTION

• THE CHEM-SCALE CAN ALSO BE MONITORED WITH OUR SINGLE OR DUAL CHANNEL SOLO 1000 DIGITAL



SEE BULLETIN 513 FOR MORE INFORMATION.

- FOR MORE INFORMATION ON THE WIZARD 4000, SEE BULLETIN 400.
- FOR TYPICAL SPECS FOR TOTE BIN SCALES AND OTHER DOWNLOADABLE INFORMATION, PLEASE SEE OUR EXTENSIVE WEBSITE AT WWW.FORCEFLOW.COM

FORCE FLOW WWW.FORCEFLOW.COM

1150-D BURNETT AVE., CONCORD, CA 94520 USA, 925.686.6700 FAX 925.686.6713, E-MAIL: INFO@FORCEFLOW.COM ©2004 Force Flow, All Rights Reserved, 11/02/2004

S

CABLE LENGTH SHALL BE