

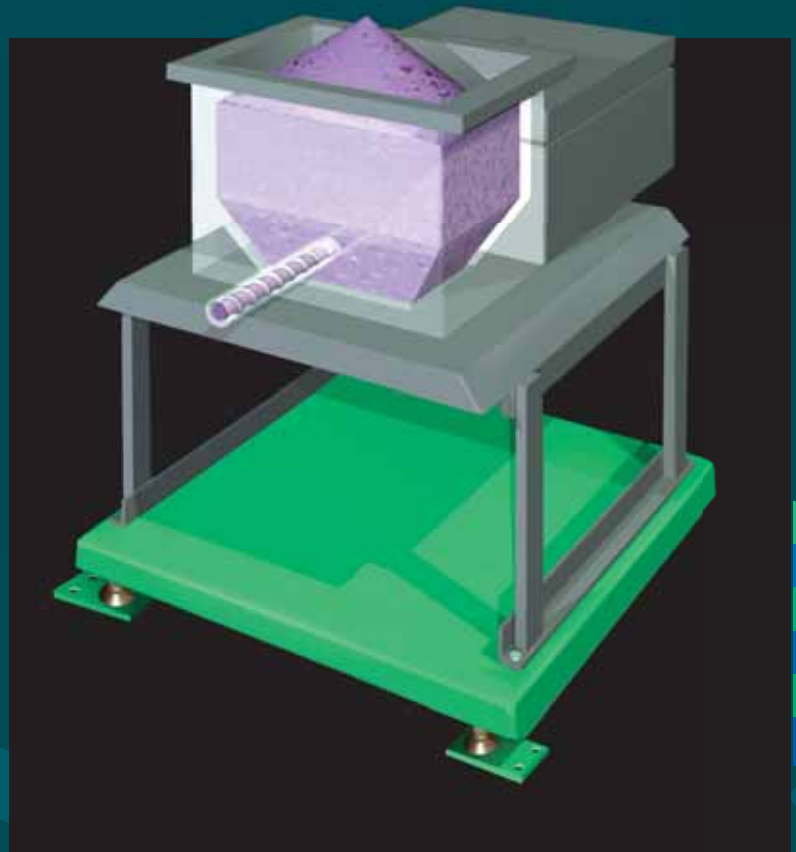
## FOR CHEMICAL INVENTORY MANAGEMENT

- + SAFELY AND ACCURATELY TRACKS USAGE & LEVEL
- + WARNS OF DANGEROUS OVER AND UNDERFEED CONDITIONS
- + PREVENTS FEEDER FROM RUNNING EMPTY
- + REMOTE MONITORING REDUCES OPERATOR EXPOSURE TO CHEMICAL

- POTASSIUM PERMANGANATE
- DRY POLYMER • FLUORIDE
- CARBON • LIME



OUR ADVANCED WIZARD 4000® DIGITAL INDICATOR SIMULTANEOUSLY MONITORS REMAINING CHEMICAL, FEED RATE AND USAGES ON UP TO FOUR SEPARATE FEEDERS.



STRICT FEDERAL AND STATE REPORTING REQUIREMENTS HAVE MADE IT NECESSARY FOR OPERATORS AT WATER AND WASTEWATER TREATMENT PLANTS TO ACCURATELY TRACK THE USAGE OF THEIR PROCESS CHEMICALS. FOR POWDERED OR GRANULAR CHEMICALS, OUR ELECTRONIC VOLUMETRIC FEEDER SCALE PROVIDES A SIMPLE YET HIGHLY ACCURATE METHOD FOR COMPLYING WITH THESE REPORTING REQUIREMENTS BY CONSTANTLY MONITORING THE LOSS-IN-WEIGHT OF THE CHEMICAL IN THE FEEDER.

THE ELECTRONIC VOLUMETRIC FEEDER SCALE IS A HEAVY DUTY, LOW PROFILE WEIGH PLATFORM DESIGNED TO BE INSTALLED BETWEEN YOUR FEEDER AND THE FLOOR. ANCHOR POINTS ARE PRE-DRILLED AND TAPPED IN THE SCALE PLATFORM TO MATCH THE BOLT PATTERN OF YOUR SPECIFIC FEEDER STAND. THIS ENABLES QUICK, POSITIVE SECURING OF THE FEEDER TO THE SCALE. THE SCALE PLATFORM IS PROTECTED AGAINST CORROSION BY OUR ADVANCED 80 MIL THICK TUF-COAT™ ENVIRONMENTAL ARMOR AND IF ADDITIONAL PROTECTION IS CALLED FOR, 316 STAINLESS STEEL MODELS ARE AVAILABLE. THE MULTI-LOAD CELL SENSING DESIGN OF THE ELECTRONIC VOLUMETRIC

FEEDER SCALE GUARANTEES THAT EVEN THE SMALLEST FEED RATES WILL BE ACCURATELY MONITORED.

THE WIZARD 4000® IS THE INDICATOR OF CHOICE FOR THE ELECTRONIC VOLUMETRIC FEEDER SCALE. IN ADDITION TO DISPLAYING THE WEIGHT OF REMAINING CHEMICAL, THE WIZARD ALSO TRACKS HOW MUCH CHEMICAL HAS BEEN FED, SHOWS THE CURRENT FEED RATE AND DATA LOGS THE DAILY CHEMICAL USED FOR EACH OF THE PREVIOUS 31 DAYS. BUILT-IN ALARMS AND REMOTE MONITORING CAPABILITIES GIVE YOU CONFIDENCE THAT YOUR FEED SYSTEM IS FUNCTIONING PROPERLY EVEN WHILE YOU ARE AWAY. ADVANCED OPTIONS ALLOW THE WIZARD TO AUTOMATICALLY REFILL THE FEEDER FROM BULK SUPPLY BY ACTUATING YOUR ROTARY VALVE OR AUGER AND, IF YOUR APPLICATION REQUIRES BATCHING, THE WIZARD CAN ACTIVATE YOUR FEEDER UNTIL AN EXACT PRESET AMOUNT OF CHEMICAL IS FED INTO THE SOLUTION TANK OR PROCESS.

**FORCE FLOW**

WWW.FORCEFLOW.COM

# ELECTRONIC VOLUMETRIC FEEDER SCALE™

## MODELS AND ORDERING INFORMATION

STANDARD MODELS INCLUDE TUF-COAT™ STEEL PLATFORM PRE-DRILLED FOR SPECIFIC FEEDER, (3) SHEAR BEAM LOAD CELLS, SUMMING BOX AND 20 FT. CABLE. WIZARD 4000® OR SOLO 1000® DIGITAL DISPLAY SOLD SEPARATELY. FOR METRIC MODELS AND LONGER CABLE LENGTHS, CONSULT FACTORY. FEEDER PROVIDED BY OTHERS.

MODEL	SIZE† X	Y	H	MATERIALS*	CAPACITY	DISPLAY INCREMENTS
27-DR10VFHA3	27.5"	27.5"	2"	TUF-COAT STEEL	1,000 LBS	0.2 LBS
30-DR20VFHA3	30"	30"	3"	TUF-COAT STEEL	2,000 LBS	0.2 LBS
30-DR30VFHA3	30"	30"	3"	TUF-COAT STEEL	3,000 LBS	0.5 LBS
33-DR10VFHA3	24"	33"	3"	TUF-COAT STEEL	1,000 LBS	0.2 LBS
33-DR20VFHA3	24"	33"	3"	TUF-COAT STEEL	2,000 LBS	0.2 LBS

† SPECIFY YOUR FEEDER MODEL NO. AND MANUFACTURER WHEN ORDERING

\* FOR 316 STAINLESS STEEL, ADD AN "S" TO THE MODEL NUMBER BETWEEN THE "F" AND THE "H"

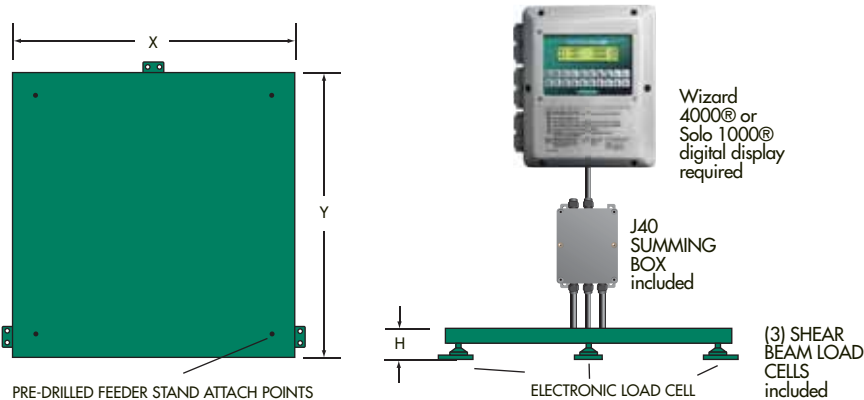
### TYPICAL MODEL NUMBER DEFINITION

27 - DR 10 VF S HA3

- HA3 = HI-ACCURACY (3) LOAD CELL DESIGN
- S = OPTIONAL 316 STAINLESS STEEL PLATFORM MATERIAL
- VF = VOLUMETRIC FEEDER SCALE DESIGN (PRE-DRILLED FEEDER ATTACH POINTS)
- 10 = SYSTEM CAPACITY X 0.01 (EXAMPLE "10" = 1,000 LBS.)
- DR = DIGITAL READOUT
- 27 = PLATFORM SIZE (INCHES)

### SPECIFYING GUIDES:

- A. FOR MAXIMUM ACCURACY, SIZE SCALE CAPACITY TO MATCH GROSS WEIGHT (FEEDER AND APPARATUS PLUS FULL CHEMICAL)
- B. WHEN REFILLING FEEDER FROM AN OVERHEAD HOPPER, MAKE SURE ALL CONNECTIONS ARE FLEXIBLE UNLESS HOPPER IS TO BE FULLY SUPPORTED BY THE FEEDER AND FEEDER STAND
- C. TO VERIFY WHICH MODEL NUMBER IS DESIGNED FOR YOUR FEEDER, CONSULT FACTORY.



### TYPICAL SPECIFICATION FOR ELECTRONIC VOLUMETRIC FEEDER SCALE

**SCALE PLATFORMS:** A QUANTITY OF \_\_\_\_ VOLUMETRIC FEEDER SCALES OF \_\_\_\_ LB CAPACITY SHALL BE PROVIDED AND SHALL BE OF THE DIGITAL READOUT/ELECTRONIC LOAD CELL TYPE. SCALE PLATFORM SHALL HAVE DRILLED AND TAPPED ANCHOR POINTS TO ALLOW EASY POSITIVE SECURING OF THE SPECIFIC FEEDER TO THE SCALE. PLATFORM SCALE COATING SYSTEM SHALL BE A MINIMUM DRY THICKNESS OF 80 MILS AND BE RESISTANT TO MOISTURE, CHEMICALS, ABRASION, IMPACT AND UV LIGHT. SCALE SHALL BE OF THE MULTIPLE ELECTRONIC SHEAR BEAM LOAD CELL DESIGN. FLEXIBLE CABLE SHALL CONNECT LOAD CELLS TO A SUMMING BOX AND INDICATOR. 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 AND 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 LEVEL, HIGH FEED RATE, MAX DAILY USE, MIN DAILY USE, SUPPLY EXHAUSTED AND LOAD CELL FAILURE. THE INDICATOR SHALL ALLOW THE OPERATOR TO RECALL THE TIME, DATE AND TYPE OF THE TEN MOST RECENT ALARM OCCURRENCES. A QUANTITY OF \_\_\_\_ RELAYS (UP TO 12 PER INDICATOR) SHALL BE PROVIDED FOR REMOTE ALARM INDICATION OR TRANSFER CONTROL. INDICATOR SHALL BE ENABLED WITH MODBUS PROTOCOL FOR REMOTE RS232 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. EACH CHANNEL SHALL DISPLAY NET REMAINING, FEED RATE, DAILY USED, TOTAL USED, DAYS UNTIL EMPTY, AND REMAINING BULK SUPPLY. A TANK LOAD KEY SHALL PAUSE USAGE ACCUMULATION DURING CHEMICAL RE-SUPPLY TO MAINTAIN ACCURATE USAGE DATA OVER MULTIPLE HOPPER REFILLS. 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 1/10 OF 1%. SCALE SHALL BE VOLUMETRIC FEEDER SCALE™ WITH TUF-COAT™ ENVIRONMENTAL ARMOR, MODEL \_\_\_\_ WITH WIZARD 4000® DIGITAL DISPLAY, MODEL 4000-\_\_, AS MANUFACTURED BY FORCE FLOW, 2430 STANWELL DRIVE, CONCORD, CA 94520 USA (WWW.FORCEFLOW.COM)

### INDICATOR OPTIONS



WIZARD 4000®  
ADVANCED DIGITAL  
DISPLAY

- + MONITORS UP TO FOUR FEEDERS
  - + DISPLAYS CHEMICAL WEIGHT, FEED RATE, DAILY USED AND MORE
  - + OUTPUTS AND RELAYS FOR REMOTE MONITORING/ALARMS
- SEE BULLETIN 400 FOR MORE INFO



SOLO 1000®  
DIGITAL WEIGHT  
INDICATOR

- + SINGLE OR DUAL CHANNEL
  - + EASY TARE ADJUST
  - + OUTPUTS AND RELAYS FOR REMOTE MONITORING/ALARMS
- SEE BULLETIN 513 FOR MORE INFO

