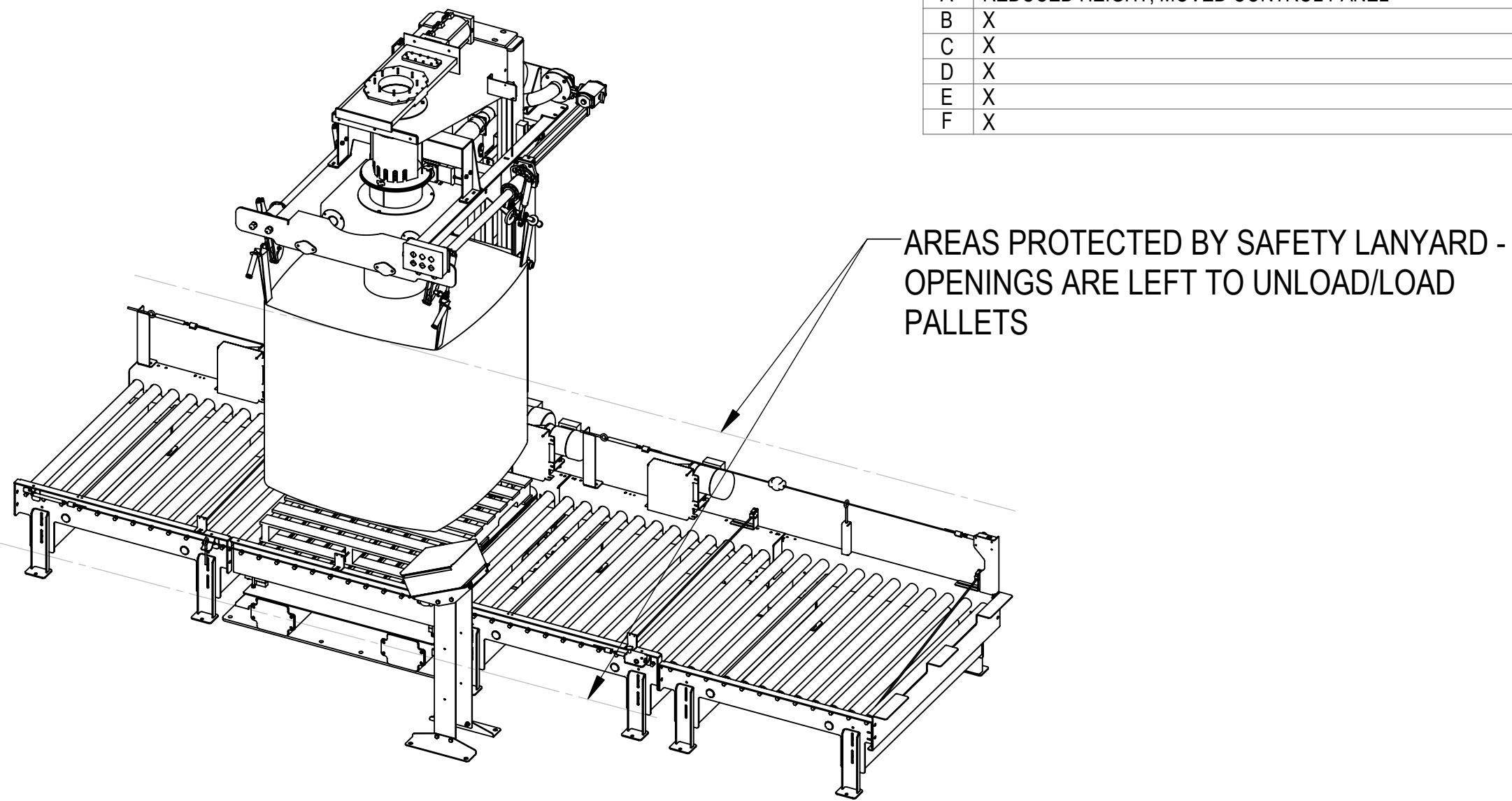
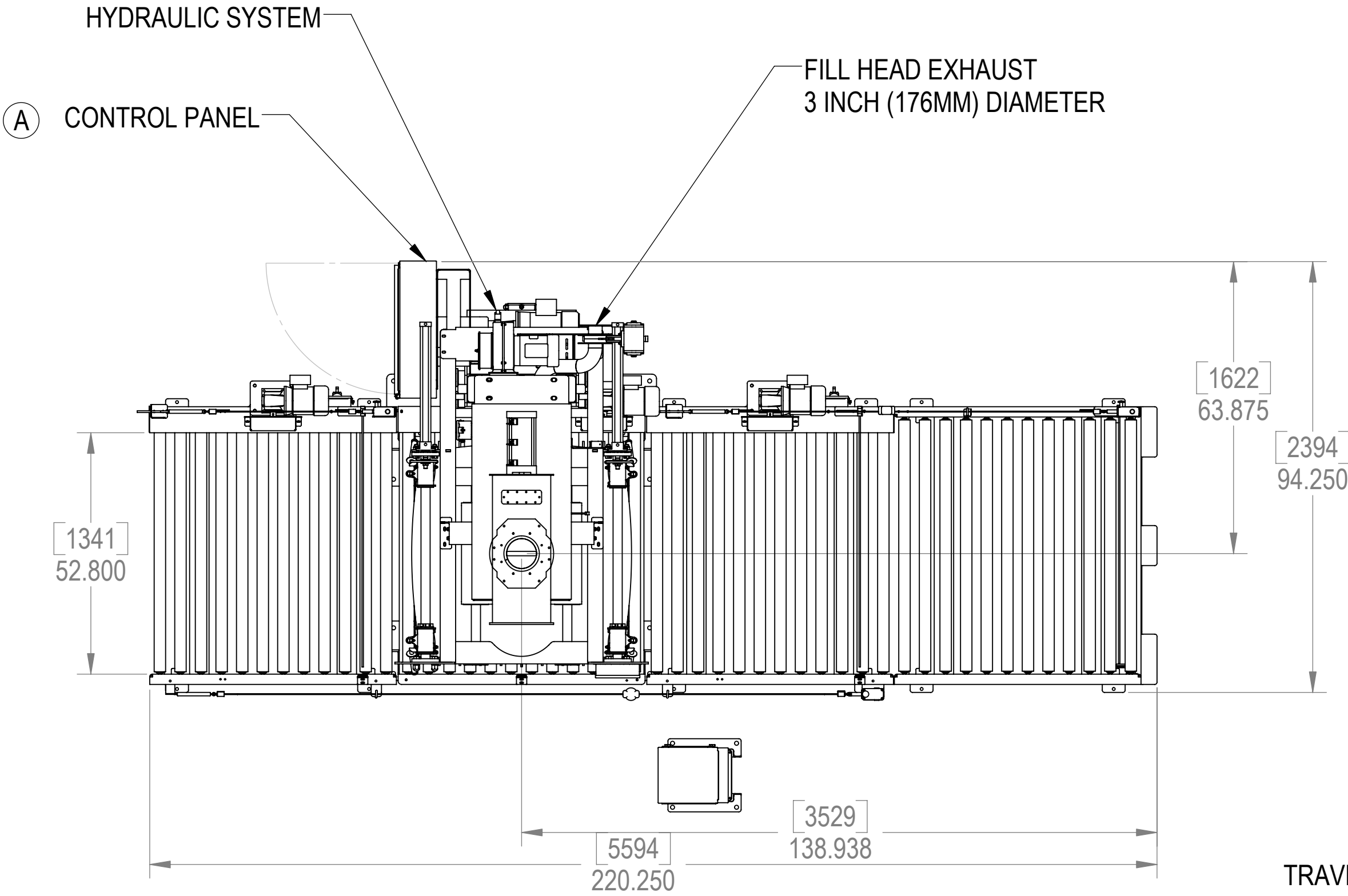


LET.	REVISION	NAME	DATE
A	REDUCED HEIGHT, MOVED CONTROL PANEL	TJB	07/27/07
B	X	X	XX/XX/XX
C	X	X	XX/XX/XX
D	X	X	XX/XX/XX
E	X	X	XX/XX/XX
F	X	X	XX/XX/XX



EQUIPMENT SPECIFICATIONS:
MATERIAL OF CONSTRUCTION:
PRODUCT CONTACT SURFACES 304 STAINLESS STEEL WITH 2B SURFACE FINISH
NON PRODUCT SURFACES CARBON STEEL PAINTED WITH STEEL-IT EPOXY
GASKETS AND SEALS: EPDM ELASTOMER AND WHITE BUNA-N (NITRILE) RUBBER

WELD SPECIFICATIONS: PRODUCT CONTACT WELDS ARE CONTINUOUS AND GROUND SMOOTH TO 80 GRIT
NON PRODUCT WELDS ARE STITCHED OR CONTINUOUS DEPENDING ON STRENGTH REQUIREMENTS

CONTROL ENCLOSURES ARE NEMA 4X, STAINLESS STEEL. MAIN CONTROL PANEL IS MOUNTED ON MACHINE
FRAME. OPERATOR CONTROL STATION IS PEDESTAL MOUNTED. CONTROL IS WITH AN ALLEN BRADLEY
MICROLOGIX 1200 PROCESSOR AND A TOUCH SCREEN INTERFACE. SCALE CONTROLLER IS MOUNTED
INSIDE THE MAIN CONTROL PANEL.
CONVEYOR MOUNTED ELECTRICAL SENSORS ARE WIRED TO JUNCTION BOXES MOUNTED ON THE CONVEYOR
CONVEYOR MOTORS ARE WIRED TO LOCAL DISCONNECTS ON EACH CONVEYOR.

CARRIAGE HEIGHT ADJUSTMENT RANGE IS 763MM (30 INCHES). THE CARRIAGE IS MOVED USING A SINGLE
HYDRAULIC CYLINDER MOUNTED IN THE FRAME OF THE MACHINE. HYDRAULIC POWER IS PROVIDED FROM
A 3HP ((2.24KW) MOTOR DELIVERING 4 GALLON PER MINUTE TO A 2 1/2 INCH BORE HYDRAULIC CYLINDER.

THE CARRIAGE INCLUDES TRAVERSING FILL HEAD AND BAG HOOKS. THE FILL HEAD AND HOOKS MOVE
TOWARDS THE OPERATOR REDUCING THE REACH REQUIRED TO SPOUT AND HANG A BAG. THE FILL HEAD
FEATURES A BAG INFLATION PORT FOR EXPANDING THE BAG PRIOR TO BEGINNING THE FILL PROCESS AND
AN EXHAUST PORT FOR EXHAUSTING THE DISPLACED AIR AS THE BAG IS FILLED.

AN INFLATABLE EPDM SEAL, AROUND THE FILL HEAD, AND AN AIR OPERATED FILL TUBE CLAMP COMBINE TO
RETAIN THE BAG SEAL PREVENTING EXPOSURE TO MATERIAL BEING TRANSFERED INTO THE BAG.

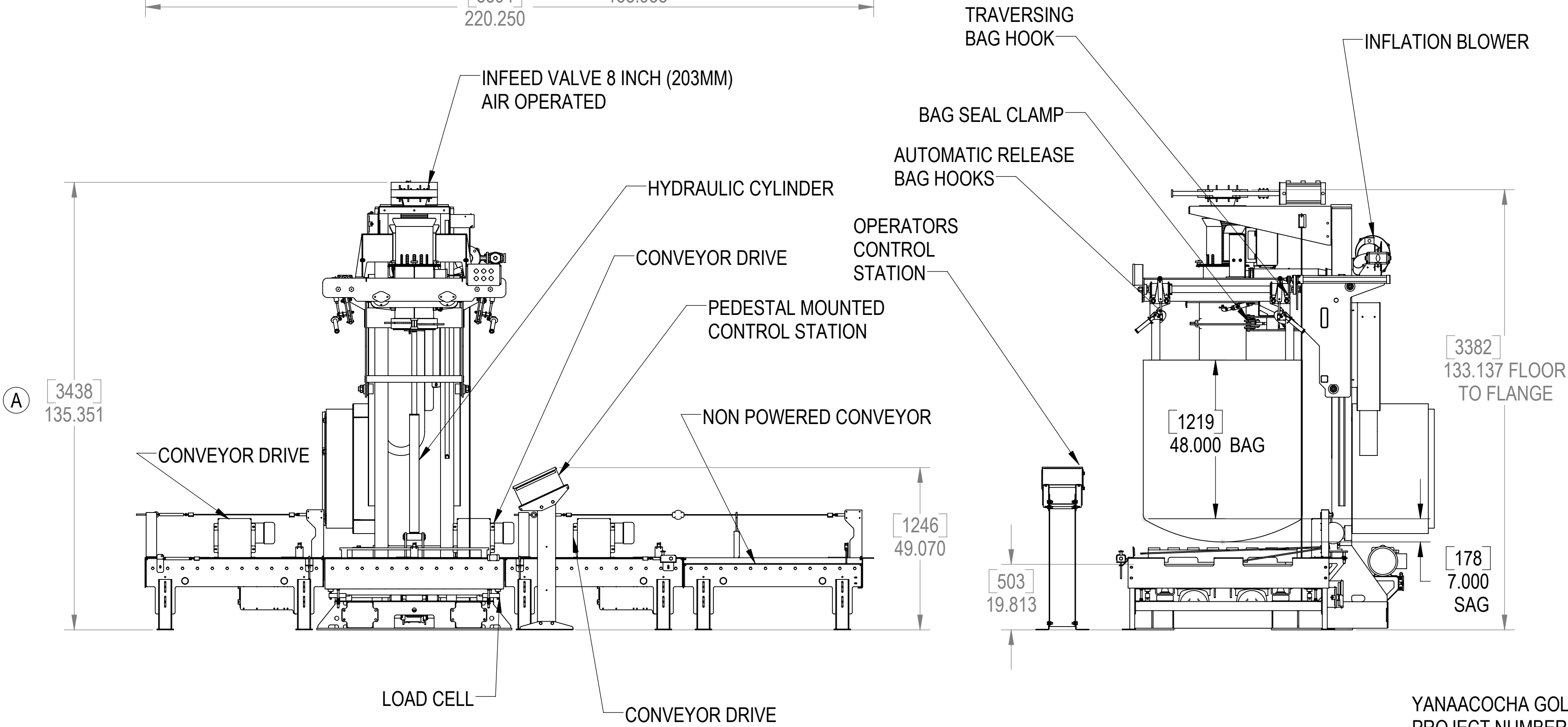
AN INLET VALVE MOUNTED ON TOP OF THE MACHINE FRAME CONTROLS THE FLOW OF MATERIAL BEING
TRANSFERED INTO THE BAG. THIS VALVE IS CONTROLLED BY THE SCALE SYSTEM AND PROVIDES A FAST
AND SLOW FEED FOR ACCURATE BAG FILLING.

THE SCALE SYSTEM CONSISTS OF FOUR REVERE LOAD CELLS, MOUNTED UNDER THE CONVEYOR SECTION
ON THE MACHINE BASE, AND A GSE SCALE SIGNAL INSTRUMENT MOUNTED IN THE MAIN CONTROL PANEL. THE
SCALE SYSTEM PROVIDES AN ACCURACY OF PLUS OR MINUS 1/2 PERCENT OF THE PREDETERMINED BAG WEIGHT

THE CONVEYOR SUPPORTED BY THE LOAD CELLS HAS POWERED ROLLERS WITH A 1/2 HP DRIVE. THIS CONVEYOR
IS USED TO MOVE FULL BAGS FROM AND EMPTY BAGS TO THE FILL STATION.

BELOW THE CONVEYOR IS A PAIR OF COUNTER ROTATING ELECTRIC VIBRATORS THAT PROVIDE A VERTICAL
VIBRATION TO COMPACT THE MATERIAL BEING INTRODUCED TO THE BAG.

THE SYSTEM INCLUDES SECTIONS OF POWERED INFEED CONVEYOR AND POWERED EXIT CONVEYOR. IN
ADDITION TO THE POWERED EXIT CONVEYOR, THERE IS A SECTION OF NON POWERED CONVEYOR WITH A PALLET
STOP TO RECEIVE THE FULL BAGS OF MATERIAL.



YANAACocha GOLD MILL PROJECT
PROJECT NUMBER 53235200
PURCHASE ORDER 53235200-49-6047
TAG NUMBERS 3420-PK-12001 AND 3420-WS-12001

CONNECTED MOTORS :
INFLATION FAN 1 HP 460VAC 3PH
VIBRATORS TWO AT 1 1/2 HP 460VAC 3PH
HYDRAULIC SYSTEM 2 HP 460VAC 3PH
FILLER CONVEYOR 1/2 HP 460VAC 3PH
IN FEED CONVEYOR 1/2 HP 460VAC 3PH
EXIT CONVEYOR 1/2 HP 460VAC 3PH

UTILITY REQUIREMENTS
ELECTRICITY: 30 AMP 460VAC 3PH
COMPRESSED AIR: 5SCFM AT 90 PSIG
WATER: NONE
GAS: NONE

FLUOR CHILE S.A.
REYES LAVALLE # 3340
LAS CONDES
SANTIAGO CHILE
CSO E400740004
PO 53235200-49-6047
c/o YANAACocha GOLD MILL, PERU

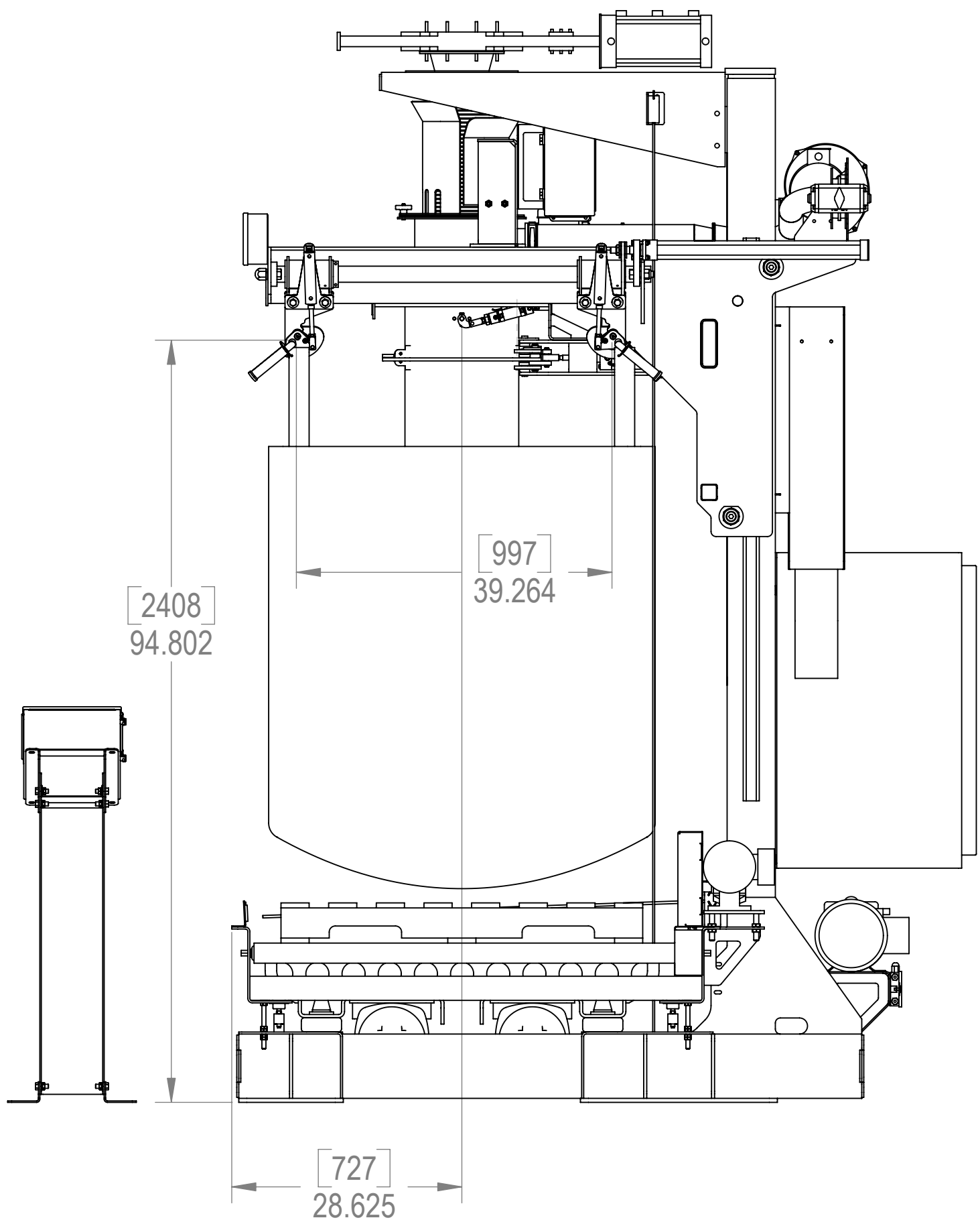
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BULK BAG FILLER
MATERIAL HANDLED: COPPER SULFIDE PRECIPITATE
MATERIAL DENSITY: 20 POUNDS PER CUBIC FOOT DRY
60 POUNDS PER CUBIC FOOT WET
PARTICLE SIZE: 90 TO 95 PERCENT IS LESS THAN 200 MESH
ANGLE OF REPOSE: 60 DEGREES OR GREATER
MOISTURE CONTENT: 65 PERCENT
PROCESS RATE: 2 TO 3 BAGS PER HOUR
BAG SIZE: 1220MM (48 INCH) SQUARE BY 1220MM (48 INCHES) TALL
INLET SPOUT 356MM (14 INCH) DIAMETER X 457MM (18 INCHES) LONG
PALLET SIZE: 1118MM (44 INCHES) SQUARE BY 127MM (5 INCHES) TALL

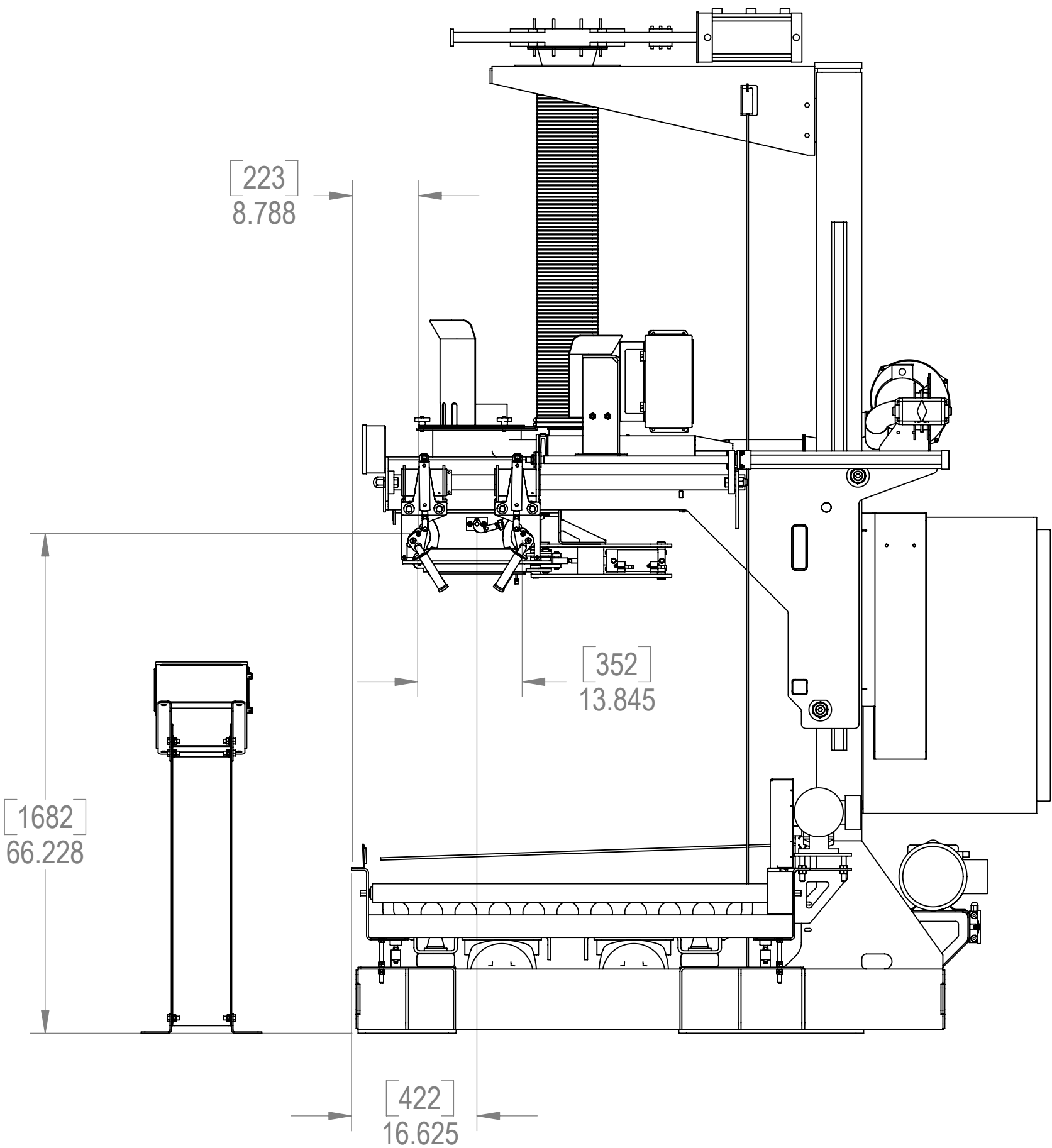
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12939 STANLEY DR., HOLLAND, MICHIGAN 48624 PHONE: (616) 399-2220 FAX: (616) 399-7360					
SCALE:	1:24	DRAWN BY: CFA	DATE:	03/27/07	MODEL CREATOR: NAME DATE WEIGHT 7592.054 LBS
ASSEMBLY BAG FILLER WITH CONVEYORS					
CODE	TOLERANCE UNLESS OTHERWISE SPECIFIED + .03 ON BEND AND SHEAR LINES + .03 ON HOLE LOCATIONS			1 OF 2 Sheet1	DRAWING NUMBER A53535

LET.	REVISION	NAME	DATE
A	REDUCED HEIGHT, MOVED CONTROL PANEL	TJB	07/27/07
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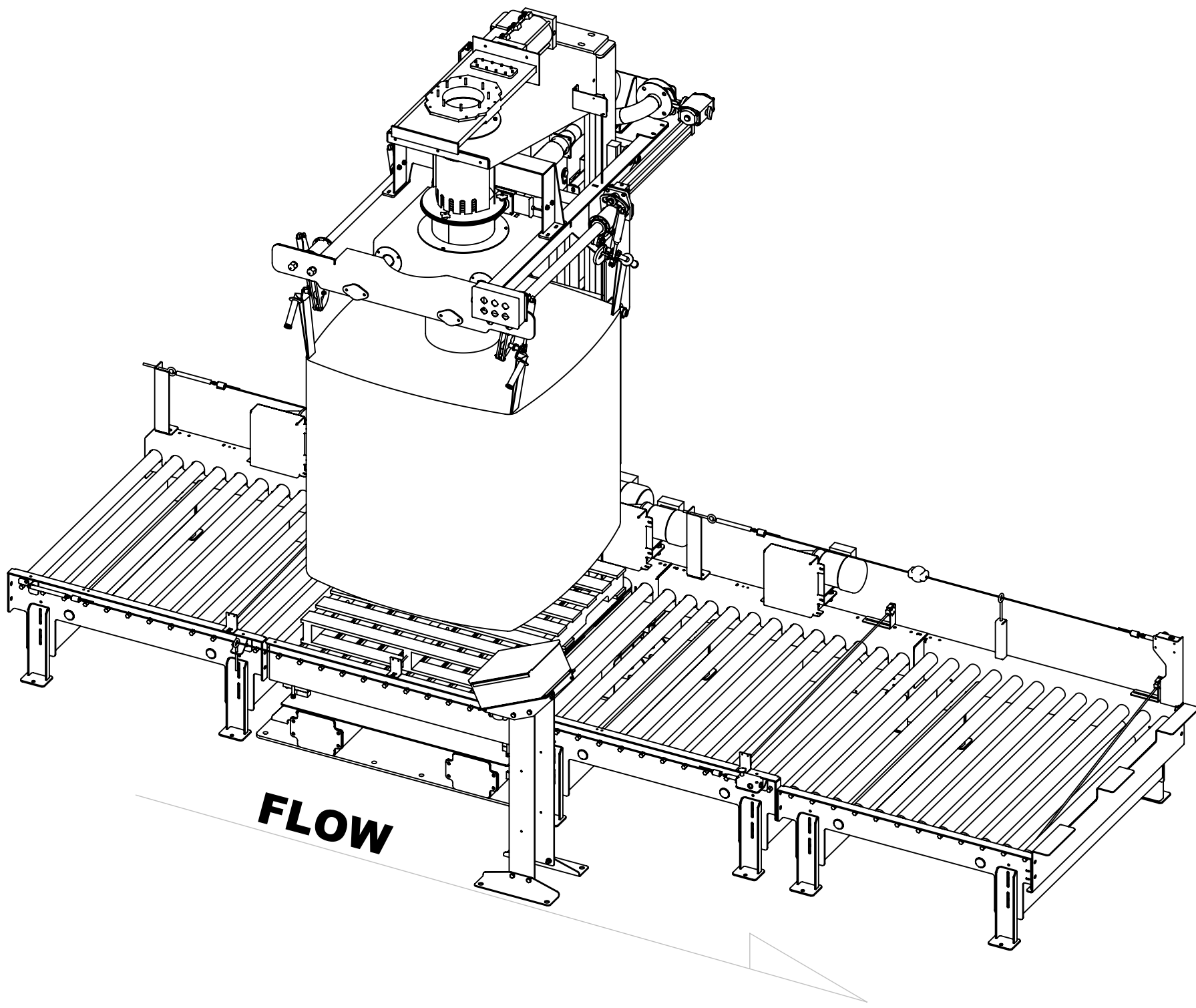
BAG FILLER SEQUENCE OF OPERATION
OPERATOR PREPARES NEW BAG ON PALLET ON INFEED CONVEYOR
OPERATOR CYCLES CONVEYOR TO MOVE PALLET WITH EMPTH BAG INTO FILL POSITION.THEN:
ATTACHES BAG TO BAG LOOP HOOKS
PULLS BAG SPOUT UP AROUND INFLATABLE SEAL
CLOSES BAG CLAMP AROUND SEAL
BAG CLAMP LOCKS CLOSED
BAG SEAL INFLATES
BAG INFLATION BLOWER STARTS
BAG EXHAUST VALVE CLOSES
FILL HEAD RETRACTS TO BAG FILL POSITION
BAG HOOKS RETRACT
CARRIAGE RISES
INFLATION BLOWER STOPS (AFTER PREDETERMINED TIME)
EXHAUST VALVE OPENS VENTING AIR FROM BAG
FILL HEAD LOWERS TO FILL (INTERMEDIATE) POSITION
SCALE TARES BAG DEFLATED
PRODUCT VALVE OPENS BEGINNING FILL
CARRIAGE LOWERS TO DENSIFICATION (INTERMEDIATE) POSITION (AFTER PREDETERMINED TIME)
DENSIFICATION SYSTEM RISES (LIFTS BAG OFF OF SCALE CONVEYOR)
VIBRATORS RUN (FOR PREDETERMINED TIME)
DENSIFICATION SYSTEM LOWERS (LOWERS BAG ONTO SCALE CONVEYOR)
CARRIAGE RISES TO FILL POSITION
BAG WEIGHT INCREASES TO NEAR FULL CONDITION
FILL VALVE MOVES FROM FULL OPEN TO NEAR CLOSED (SLOW FEED POSITION)
BAG WEIGHT REACHES PREDETERMINED SETTING
SCALE SYSTEM SHUTS OFF FILL VALVE
CARRIAGE LOWERS TO BAG RELEASE (INTERMEDIATE) POSITION
BAGSEAL DEFLATES
BAG CLAMP OPENS
BAG HOOKS RELEASE
CARRIAGE RISES
CONVEYOR INDEXES FULL BAG FROM FILL POSITION (IF NO BAG IS ON THE EXIT CONVEYOR)
PALLET WITH EMPTY BAG INDEXES INTO FILL POSITION



FILLER WITH CARRIAGE IN RAISED POSITION WITH FILL HEAD AND BAG HOOKS RETRACTED FOR FILLING BAG



FILLER WITH CARRIAGE IN LOWERED POSITION WITH FILL HEAD AND BAG HOOKS FORWARD FOR ATTACHING BAG



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SCALE: 1:16	DRAWN BY: CFA	DATE: 03/27/07	MODEL CREATOR: NAME DATE
ASSEMBLY BAG FILLER WITH CONVEYORS		WEIGHT 7592.054 LBS	
CODE	TOLERANCE UNLESS OTHERWISE SPECIFIED + .03 ON BEND AND SHEAR LINES + .03 ON HOLE LOCATIONS	2 OF 2 Sheet2	DRAWING NUMBER A53535