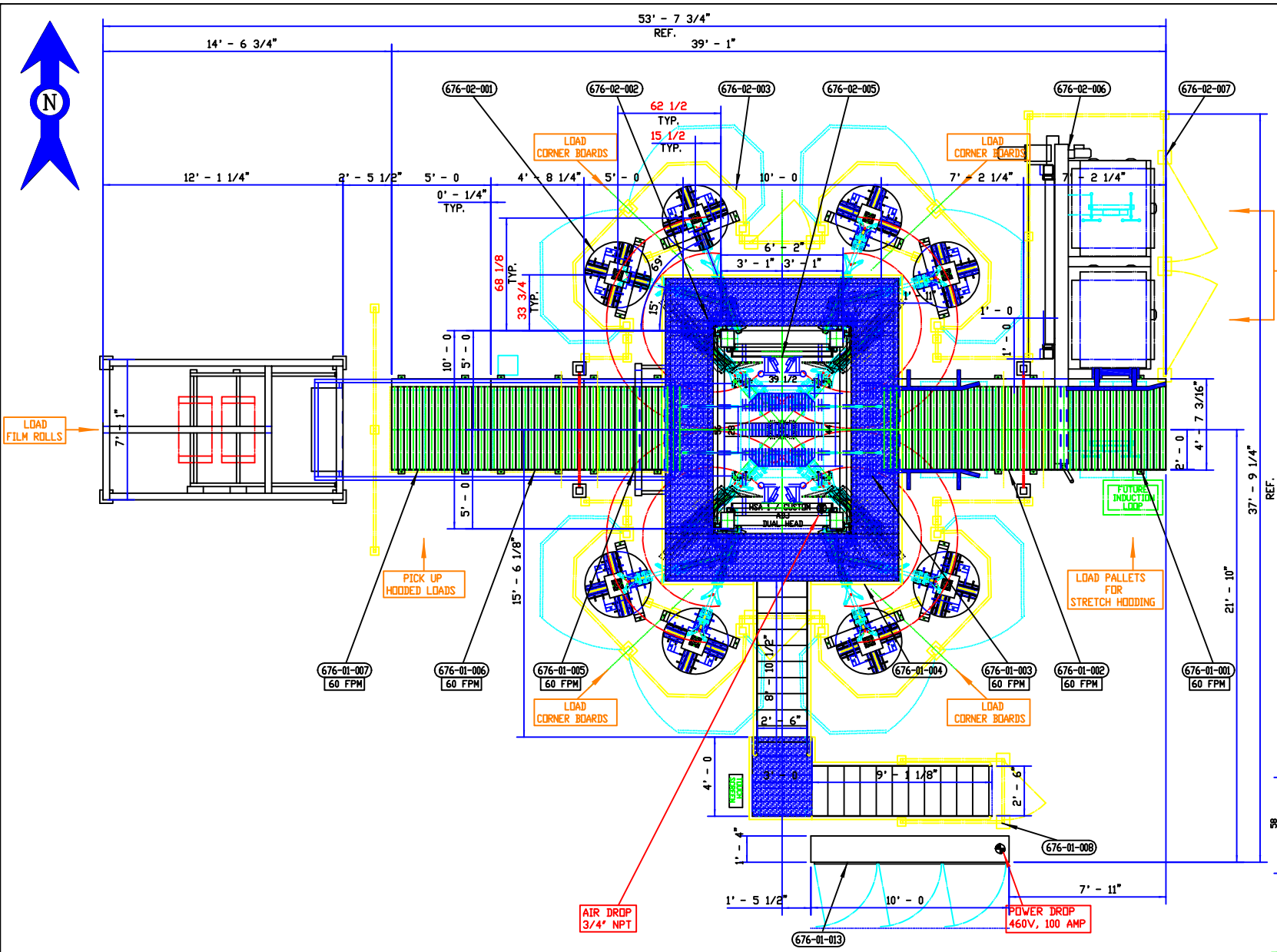
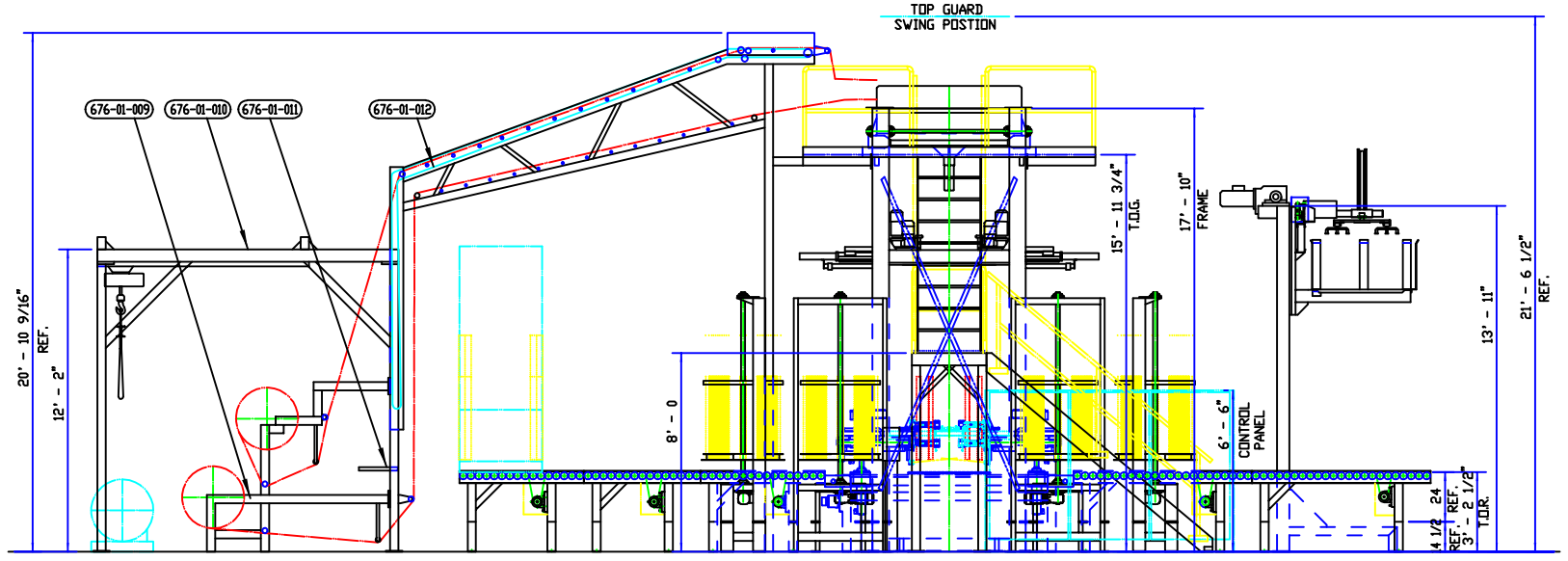


DIRECTION OF FLOW



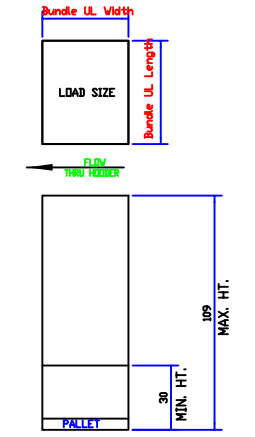
DESCRIPTION OF ITEMS

676-01-001	PALLET CONVEYOR (LIVE ROLLER)	676-01-008	PERMITER FENCING (CONV. /HOODER AREA)
676-01-002	PALLET CONVEYOR (LIVE ROLLER)	676-01-009	DETACHED DUAL FILM ROLL HOLDER
676-01-003	SLAT CONVEYOR	676-01-010	FILM HOIST
676-01-004	AUTOMATIC STRETCH HOODER	676-01-011	FILM SPLICING STATION
676-01-005	PALLET CONVEYOR (LIVE ROLLER)	676-01-012	FILM FEEDING SYSTEM
676-01-006	PALLET CONVEYOR (LIVE ROLLER)	676-01-013	CONTROL PANEL
676-01-007	PALLET CONVEYOR (LIVE ROLLER)		

676-02-001	CORNER BOARD CAROUSEL MAGAZINE (8)
676-02-002	CORNER BOARD APPLICATOR ARM (4)
676-02-003	PERMITER FENCING (CORNER BOARD AREA)
676-02-004	CONTROLS FOR CORNER BOARD ITEMS (IN 676-01-013)
676-02-005	TOP SHEET LIFTING SYSTEM
676-02-006	TOP SHEET DISPENSER (DUAL MAGAZINE)
676-02-007	PERMITER FENCING (TOP SHEET DISPENSER AREA)

FLOOR REQUIREMENT - 6" REINFORCED CONCRETE

	DATE	BY		DATE	BY		DATE	BY
C			MARKED CORNER BOARD AND TOP SHEET ITEMS "FUTURE". REVISED FENCE.	8/29/11	JAB	A	ADDED SLIP SHEET WITH 4" FLAPS. ADDED +/- 1/2" TO PALLET HT. DIMS, & LOADS MUST FLOW CENTERED NOTE. ADDED NOTE INDICATING MANUAL ADJUST MAY BE REQUIRED TO PALLET DETAILS. ITEM 006 WAS 5'-0" I.G. ADDED BUILDING COLUMN ONEAR 065. ADDED NOTE 25. ADDED 48X56 & 40X48 TOP SHEETS AND NOTE INDICATING MIN FLAP. ADDED "+/-" TO NOTE 11. REMOVED "HINGED / COVER" FROM NOTE 10 REGARDING GUARDING ON HEAD. ADDED URETHANE COVERED PINCH ROLLS TO NOTE 10.	6/30/11	JAB
D			CORNER BOARD AND TOP SHEET ITEMS WERE MARKED "FUTURE" WENT BACK TO REV B. CORRECTED ITEM # OF 676-02-007 IN DESC OF ITEMS TABLE (WAS SHOWN AS 676-01-007). MOVE CONTROL PANEL 676-01-013 EAST 17 1/2" (PER AS BUILT). ADDED NOTE 26.	8/29/11	JAB			
						B	REVISED CORNER BOARD APPLICATOR ARMS & CAROUSELS PER TEST (REVISED FENCE ACCORDINGLY). REVISED TOP SHEET DISP SYMBOL.	8/17/11	JAB



LOAD DETAILS

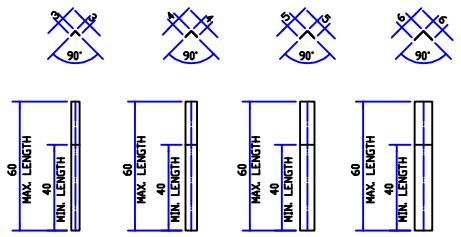
NOTE: LOAD HEIGHTS SHOWN ARE MIN & MAX FOR HOODER
SEE CORNER BOARD DETAILS FOR LIMITS PERTAINING TO CORNER BOARD ITEMS

NOTE: LOADS MUST BE PLUMB WITHIN 1".

NOTE: LOADS MUST BE CENTERED (+/-1/2") FLOWING INTO SYSTEM

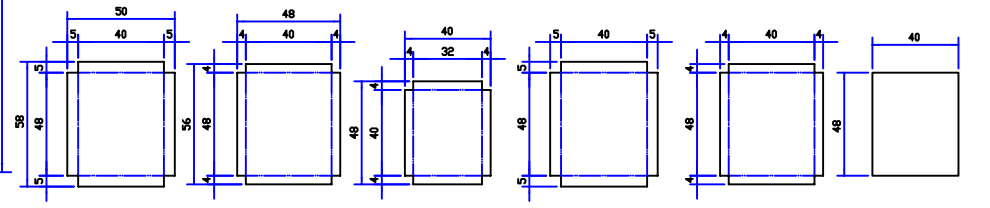
LOADS MUST BE CENTERED ON PALLETS / PALLETS MUST BE CENTERED UNDER LOADS

NOTE: LOADS FLOW THROUGH SYSTEM WITH WIDE SIDE LEADING



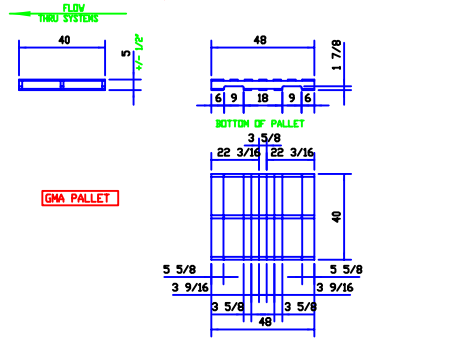
CORNER BOARD DETAILS

MATERIAL: 3/16"-1/4" THICK LAMINATED PAPER BOARD



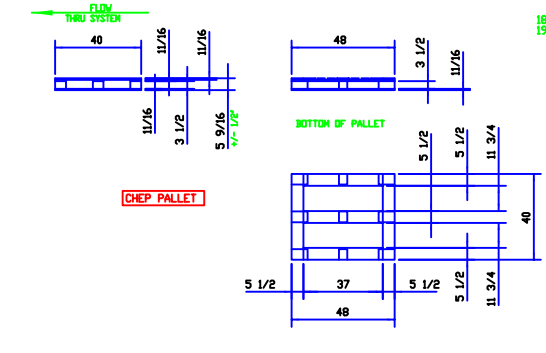
TOP SHEET DETAILS

MATERIAL: 3/16" THICK CORRUGATED
NOTE: TOP SHEET FLAPS MUST OVERHANG LOAD 4" (MIN.) EACH SIDE. THEREFORE, SMALL TOP SHEET SHOWN COULD NOT BE RUN WITH MANY LOADS



SLIP SHEET DETAILS

MATERIAL: 3/16" THICK CORRUGATED



PALLET DETAILS

NOTE: IF PALLET HEIGHTS VARY (AS SHOWN) MANUAL ADJUSTMENT MAY BE REQUIRED TO CORNER BOARD HANDLING ITEMS.

Corrugate RM #	Bundle UL Length	Bundle UL Width	Bundle UL Height
BCR1	45.88	39.38	50.63
BCR2	45.38	37.25	50.63
BCR4	35.75	34.25	50.63
BCR29	38.25	36.00	50.63
BCR30	37.25	35.25	50.63
BCR31	45.38	39.75	50.63
BCR32	40.25	36.38	50.63
BCR33	44.13	33.75	50.50
BCR34	45.88	37.25	51.88
BCR35	47.13	39.75	49.38
BCR36	47.13	39.75	50.75
BCR37	45.25	39.25	49.38
BCR38	37.25	37.25	49.38
BCR39	39.75	37.00	50.63
BCR42A	45.25	39.75	50.00
BCR43	44.88	38.63	49.38
BCR50	46.25	36.75	47.50
BCR51	40.88	33.75	53.13
BCR52	45.88	37.25	53.75
BCR53	40.88	37.38	51.88
BCR54A	46.25	39.50	49.38
BCR55	45.13	32.75	48.13
BCR56A	47.50	38.50	48.13
BCR57	44.50	39.25	49.38
BCR59	45.38	34.50	50.63
BCR60A	37.88	37.88	50.75
BCR63	45.38	34.88	50.63
BCR64A	47.25	38.25	50.63
BCR65	47.88	39.00	50.63
BCR66	46.88	35.88	50.63
BCR68	45.00	28.63	49.38
BCR69	42.13	38.63	49.38
BCR70	34.75	33.50	51.88
BCR71	45.13	39.38	51.88
BCR72	45.88	39.38	51.88
BCR76	40.00	39.25	53.13
BCR77	40.00	39.25	53.13
BCR84	44.25	36.75	48.13
BCR85	45.25	37.50	49.38
BCR86	43.25	39.75	45.88
BCR87A	39.75	39.00	48.88
BCR88	44.13	33.75	53.13
BCR89	45.88	37.25	46.88
BCR90	47.13	39.75	50.75
MIN.	34.75	28.63	30.00
MAX.	51.50	42.00	109.00

SYSTEM SPECIFICATIONS

PRODUCT	FABRIC & COTTON PRODUCTS
LOAD SIZE(S) (L X W X H)	SEE LOAD DETAIL
MAX LOAD HT. (INCLUDING PALLET)	109" (BUILD 120" HOODER DUE TO PASS HEIGHT)
SEE CORNER BOARD DETAILS FOR LIMITS PERTAINING TO CORNERBOARD ITEMS	
LOAD WEIGHT(S)	2500 lbs. MAX.
FILM SIZE	40" x 28" TO 32" x 24", 4 & 5 mil (TBD AT TEST)
LOADS PER HOUR	70 (STRETCH HOODING CAPACITY)
	40 (CORNER BOARD APPLICATOR)
PALLET TYPE	GMA & CHEP (SEE PALLET DETAIL)
OPERATING VOLTAGE	460V - 60HZ - 3ph
CONTROL VOLTAGE	24V DC
PROTECTION SYSTEM	NEMA 12
AIR CONSUMPTION	20 SCFM
AIR PRESSURE REQUIRED (CLEAN & DRY)	90 PSIG
PAINT COLOR	RAL 7035 (LIGHT GREY)
	FENCING TO BE BLACK
	SAFETY YELLOW GUARD, RAILINGS, KICK PLATES,
	FILM UPTAKE ROLLS, STRETCH ARMS, CORNER BOARD
	PLACER ARMS, TOP SHEETLIFTER ARMS, TOP SHEET
	DISPENSER BOOM COVER, FENCE POSTS
DRIVES	SEW/EURODRIVE (SYNTHETIC LUBE)
CYLINDERS	MUNATICS
VALVES (SOLENOID)	FESTO
BEARINGS	FAFNIR

SPECIAL NOTES:

* 1- STRETCH HOODER & TOP SHEET DISPENSER TO BE BUILT FOR 109" MAX LOAD HEIGHT. (SAME AS FIRST QUALITY 647-01) EVEN THOUGH CURRENT LOADS BEING RUN AT THIS PLANT MAY BE SHORTER
2- LOADS / PALLETS WILL FLOW THRU SYSTEM WITH WIDE SIDE LEADING
3- EQUIPMENT WILL INITIALLY BE INSTALLED AS "STAND ALONE" SYSTEM
- PRODUCT WILL BE LOADED ONTO 001 WITH FORK TRUCK
4- SYSTEM TO BE DESIGNED / BUILT TO REACH FULL HT ON CONVEYOR LEG EXTENSIONS TO BE REMOVED IN FUTURE IF SYSTEM IS RE-INSTALLED IN LINE WITH OTHER EQUIPMENT AT 24" PASS HEIGHT.
- SLAT CONVEYOR WILL BE IN PIT DUE TO FLAP FOLDERS
- CONVEYOR PASS HEIGHT (INITIALLY) IS 38 1/2" (DUE TO CLEARENCE REQ'D FOR FLAP FOLDERS)
5- VFD CONTROL OF INFEED CONVEYORS
6- DUE TO 24V DC CONTROL INCLUDE 110V BRAKES ON BRAKE MOTORS CONTROLLED WITH VFD'S
- VALVES TO BE 24V DC
7- PALLET LOADING BACK STOP ON 001 DESIGNED TO CLEAR TOP SHEET DISPENSER FRAME
- FIRST QUALITY WILL PROVIDE OVERHEAD PULL GUARD / SWITCH AT PALLET LOADING AREA
- ROLLERS TO INCORPORATE FUNCTION INTO SYSTEM
- INDUCTION LOOP WILL BE REQUIRED IN FUTURE WHEN INSTALLED "IN LINE" (NOT STAND ALONE)
8- STANDARD PALLET GUIDES ON 002
9- STRETCH HOODER TO INCLUDE:
- HSA 1/CUSTOM ADJUSTABLE LOWER FRAME
- AUTO ADJUST CARRIAGE ADJ SCREWS ARE SHORT (DUE TO WIDE SIDE LEADING, REF 631-01)
- BALL SCREW TYPE STRETCH ARMS (3/4" SCREWS)
- STRETCH ARMS ARE ROTATED 10 DEG DUE TO WIDE SIDE LEADING (REF 631-01)
- HORNS ARE ROTATED 10 DEG (REF 631-01)
- M HORNS ARE LOGISTIC TYPE
- GATHER WHEEL MOUNTS / OFFSET PLATES TO ACCOMODATE 10 DEG (REF 631-01)
- AIR TYPE FILM OPENING
- M PINCH ROLLERS ARE URETHANE COVERED TYPE
- FILM ROLL HOLDER IS DETACHED STAND ALONE UNIT)
- LOCK OUT AIR VALVE IS ROSS BRAND (L-D-X/EEZ-ON 3/2 MANUAL VALVE
- M HEAD IS ROTATED 10 DEG FROM BASE TO ACCOMODATE WIDE SIDE LEADING FLOW DIRECTION
- M HEAD IS "DUAL HEAD" TYPE, STANDARD ADJUST ON FILM OPENING BOXES
- DUAL HEAD IS FOR VARIABLE FILM THICKNESS, EXTRA ROLL, OR SLIGHTLY DIFFERENT FILM SIZE)
- LOWER CROSS TUBES POSITIONED TO CLEAR SLAT CONVEYOR / FLAP FOLDER
- LOWER FRAME IS TWO PIECE DESIGN (DUE TO HEIGHT)
- SPECIAL WORK PLATFORM TO INCLUDE:
- COMPLETE SURROUND OF HOODER
- OFFSET 2" ON SIDES TO PROVIDE MORE CLEARENCE FOR SUCTION BOX FRAME
- STAIRS WITH 30" WIDE TREADS (NOT LADDER)
- PLATFORM LANDINGS
- DESIGNED FOR 125 PSF
- FILM FEEDING SYSTEM MOUNTING / CLEARENCE
- M AB VERTICAL CARRIAGE DRIVES (SS ENCODER TO SUIT)
- M GUARD ON HEAD TO BE EXPANDED METAL DESIGN
- M INCLUDE TAPPING PLATES FOR MOUNTING CORNER BOARD APPLICATOR
- M INCLUDE TAPPING PLATES FOR MOUNTING TOP SHEET LIFTER
- M WIRING MUST BE RUN TO PROVIDE CLEARANCE FOR CORNER BOARD APPLICATOR ARM TRAVEL AND CLEARENCE FOR TOP SHEET LIFTER
11- SLAT CONVEYOR TO BE "FLIGHT TYPE" DESIGNED WITH FLAP FOLDERS
- M SHEET FLAPS TO BE 4"-5" LARGER THAN PALLET DIMENSIONS.
- SHEETS WILL ALWAYS BE RUN ON TOP OF PALLETS (NOT SLIP SHEETS ONLY)
- SYSTEM TO HAVE FUNCTION TO TURN FLAP FOLDERS ON AND OFF (NOT REQUIRED FOR SHEETS WITHOUT FLAPS)
12- END STOP ON CONVEYOR 007
- M 13- SAFETY FENCE ADJACENT TO HOODER TO INCLUDE:
- STANDARD HEIGHT (70") POSTS / PANELS
- LEXAN CURTAINS (WITH HEAVY DUTY POST) AT INFEED AND OUTFEED CONVEYORS
- M TWO ACCESS GATES WITH AB GUARD LOCKING SWITCHES ONE EACH SIDE OF LINE (HOODER ACCESS AREA)
- ONE ACCESS GATE WITH AB GUARD LOCKING SWITCH AT BOTTOM OF STAIRS
- 7 AB E-STOPS
14- 009 IS DETACHED DUAL FILM ROLL HOLDER WHICH INCLUDES:
- FILM ROLLS SUPPORTED BY BISCHOFF SAFETY CHUCKS
- AUTOMATIC LOW END OF FILM DETECTION
- END OF ROLL SPLICE TRACKING TO MINIMIZE FILM WAIST WHEN SPLICING
- IDLER ROLLERS TO SUPPROT FILM TRAVEL AREA TO HOODER
- M DUAL FILM FEED DESIGN (FOR DUAL HEAD HOODER)
15- 010 IS FILM ROLL HOIST (REF 646-01)
- 2000 LB CAPACITY
- LOW SPEED TROLLEY
- TWO SPEED VERTICAL LIFT
- M 16- 011 IS FILM SPLICING STATION (REF 646-01)
- TABLE WITH FILM SPLICING AIDS
- SCISSOR SEALING UNIT
17- 012 IS FILM FEEDING SYSTEM DESIGNED TO FEED FILM FROM ROLL POSITION TO HOODER DURING INITIAL FILM LOADING OPERATION
- M DUAL FILM FEED DESIGN (FOR DUAL HEAD HOODER)
18- TOUCH SCREEN IS IN REMOTE ENCLOSURE
19- MISC. SPECIAL ITEMS:
-ALLEN BRADLEY VERTICAL CARRIAGE DRIVES
-ALLEN BRADLEY POWERFLEX 40'S UPGRADE
-ALLEN BRADLEY PUSH BUTTON UPGRADE
-ALLEN BRADLEY PANELVIEW PLUS UPGRADE
-ALLEN BRADLEY CIRCUIT BREAKERS UPGRADE
-ALLEN BRADLEY STARTERS UPGRADE
-ALLEN BRADLEY MAIN DISCONNECT
-SIDNEY LAN HOWEN
-DISCONNECTS ON MOTORS (SQUARE D HEAVY DUTY) CONVEYORS ONLY (2)
-ALL WIRES FERRULES AND TO NUMBERING
-QUICK DISCONNECT ON ALL SENSORS UPGRADE
-SINKING INPUTS UPGRADE
-CABINET COMPONENTS TO BE DIN RAIL MOUNTED (WHERE PRACTICAL)
-HOFFMANN DUCT TO COMPLY WITH NEMA 12 WIRE WAYS
-CORD GRIPS -EXCEPTION WILL PROVIDE AS WATERPROOF
-ALL AUXILIARY CONTACTS TO HAVE CONTACTS WIRED TO PLC INPUT
-ALL BEARING TO BE FAFNIR
-PNEUMATIC FITTINGS TO BE FESTO
-PNEUMATIC REGULATORS
-FOR FR TO BE WILKERSON
-FOR MANIFOLD TO BE FESTO
- PNEUMATIC PRESSURE GAUGES TO BE WILKERSON / FESTO
- PNEUMATIC LUBRICATORS TO BE WILKERSON
- PNEUMATIC SOLENOID VALVES TO BE FESTO
- PNEUMATIC SWITCHES TO BE FESTO
- BALL & CHECK VALVES TO BE PARKER OR NORGREN
- DRIVE BELTS TO BE GATES
- HARDWARE (BOLTS, ECT) TO BE GRADE 8 OR BETTER
- CONVEYOR ROLLERS ARE NOT TO BE PAINTED
- INCORPORATE METAL BOXES FOR WIRE JUNCTION
- WIRE-WAY DESIGNED WITH CONTINUOUS HINGED WITH QUICK RELEASE (NO TOOL REQUIRED)
- INCORPORATE METAL BOXES FOR E-STOPS
- M 20- TOP SHEET DISPENSER IS DUAL MAGAZINE TYPE
- FRAME, TRACKS, LIFT MECHANISM, HEAVY DUTY DESIGN FOR USE WITH DUAL TRAYS
- HIGH SPEED LIFT FOR USE WITH 109" STACK HEIGHT & SYSTEM CAPACITY
- TERMINAL BOX LOCATED TO CLEAR FENCE
- INCLUDES BECKER VACUUM PUMP
- M 21- CORNER BOARD CAROUSELS TO INCLUDE 4 MAGAZINES EACH (8 CAROUSELS TOTAL)
- M 22- "LARGE" SAFETY FENCE GATES TO INCLUDE CASTER ON END FOR ADDITIONAL SUPPORT
- M 23- CORNER BOARD CAROUSEL FENCING TO INCLUDE INTERLOCKED GATES WITH AB GUARD LOCKING SWITCHES INTERLOCK FUNCTION WILL FUNCTION INDEPENDENTLY AT EACH STATION.
- FENCING TO BE DESIGNED TO ALLOW ACCESS TO 3 OF THE 4 MAGAZINES WITHING EACH CAROUSEL
- AN ESTOP WILL BE PROVIDED AT EACH STATION
- M 24- TOP SHEET DISPENSER FENCING TO INCLUDE INTERLOCKED GATES INTERLOCK FUNCTION WILL FUNCTION INDEPENDENTLY FROM REST OF SYSTEM
- AN ESTOP WILL BE PROVIDED AT ACCESS GATE
- M 25- BRAKE MOTORS ON 676-01-001, 676-01-005, 676-01-006
- M 26- SPECIAL VALVE / REGULATOR CONFIGURATION TO FILM ROLL BRAKES TO PROVIDE "LIGHT" BRAKE FORCE DURING INTIAL FILM LOADING/FEEDING.

* INDICATES NOTES THAT HAVE BEEN REVISED, ADDED TO, OR NEW NOTES COMPARED TO THOSE ON 656-01 SYSTEM

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Grand Rapids, Michigan
An Affiliate of Maschinenfabrik Möllers GmbH
Beckum, Germany

TITLE: AUTOMATIC STRETCH HOODING & CORNER BOARD PLACING SYSTEM

CUSTOMER: *FIRST QUALITY PRODUCTS* LEWISTOWN, PA

DRAWN	J.A. BRAKE
APPROVED	
SCALE	1/4" = 1'-0"
DATE	6/20/11
DRAWING NUMBER	676 01-02 000 4 001
REV.	D