

Addendum 1C: MRF Equipment Specifications

A. Fibre MRF

Figure 1.1 Updated equipment list in the Fibre MRF as a result of the 2019 investments

EQUIPMENT LIST FIBRE MRF							
EQUIP No	LINE No	DESCRIPTION	MODEL	DIMENSION	POWER	POWER	SPEED
C-1	FIBRES	INFEED CONVEYOR (EXISTING)	ROLLER CHAIN	60" BELT X 23'-8 1/2" LG	3 HP	575/3/60	10 TO 30 FPM
C-2	FIBRES	INCLINED CONVEYOR (EXISTING C-2 WITH MODIFICATION)	ROLLER CHAIN	60" BELT X 41'-6" LG	7 1/2 HP	575/3/60	30 TO 50 FPM
C-3	FIBRES	TRANSFER CONVEYOR (EXISTING C-3A WITH MODIFICATION)	SLIDER BED	60" BELT X 18'-5 1/2" LG	3 HP	575/3/60	90 FPM
S-4	FIBRES	OCC DISC SCREEN	MACHINEX	72" WIDE X 14 SHAFTS	2 X 5 HP	575/3/60	65 RPM
C-5	FIBRES	OCC INSPECTION CONVEYOR	SLIDER BED	60" BELT X 28'-5" LG	2 HP	575/3/60	100 FPM
C-6	FIBRES	OCC UNDERS TRANSFER CONVEYOR	SLIDER BED	60" BELT X 21'-4" LG	2 HP	575/3/60	100 FPM
C-7	FIBRES	INCLINED CONVEYOR	SLIDER BED	72" BELT X 46'-4" LG	5 HP	575/3/60	300 FPM
C-8	FIBRES	HIGH SPEED CONVEYOR	SLIDER BED	96" BELT X 20'-1" LG	5 HP	575/3/60	500 FPM
OPT-9	FIBRES	OPTICAL SYSTEM	BOREAS 24-07 BB			575/3/60	
C-10	FIBRES	ONP TRANSFER CONVEYOR	SLIDER BED	48" BELT X 26'-5" LG	3 HP	575/3/60	200 FPM
C-11	FIBRES	SORTING CONVEYOR (EXISTING C-3B)	SLIDER BED	60" BELT X 52'-4" LG	5 HP	575/3/60	50 TO 200 FPM
C-12	FIBRES	REVERSIBLE CONVEYOR (EXISTING C-4)	SLIDER BED	48" BELT X 16'-5 1/2" LG	2 HP	575/3/60	125 FPM
C-13	FIBRES	PAPERS TRANSFER CONVEYOR	SLIDER BED	30" BELT X 38'-6" LG	HP	575/3/60	120 FPM
C-14	FIBRES	OCC/OBB INSPECTION CONV. (EXISTING C-10 WITH MODIFICATION)	SLIDER BED	30" BELT X 46'-4" LG	5 HP	575/3/60	50 TO 200 FPM
C-15	FIBRES	RESIDUE BUNKER CONVEYOR	ROLLER CHAIN	60" BELT X 23'-8 1/2" LG	2 HP	575/3/60	15 FPM
C-16	FIBRES	RECLAIM CONVEYOR (EXISTING C-5)	ROLLER CHAIN	60" BELT X 79'-11" LG	7 1/2 HP	575/3/60	30 FPM
C-17	FIBRES	BALER FEED CONVEYOR (EXISTING C-6)	ROLLER CHAIN	60" BELT X 64'-4 1/2" LG	10 HP	575/3/60	50 FPM
B-18	FIBRES	BALER (EXISTING B-7)	American Baler 8043h10150F				

MACH Hyspec® Optical Sorter

OS-104

MODEL: HYPERSPECTRAL

The original conception of our sensor and lighting system brings key advantages:

- 1) Very high speed;
- 2) Between 16,384,000 and 28,344,320 measurements per second;
- 3) Signal quality is far superior than classic technologies with a signal to noise ratio of 64dB and a dark noise of only 9.3 ADU;
- 4) The analysis resolution is between 3mm x 15mm and 5mm x 15mm at 200Hz or 3mm x 8.7mm and 5mm x 8.7mm at 346Hz;
- 5) The timing precision between the sensing unit and the ejection unit is 500µs;
- 6) The distance between the detection line and the ejection line is only 15 cm. This allows a better efficiency on the ejection of rolling objects which can move on the belt before the ejection line, a major cause of 'lost' material;

HIGH PERFORMANCE LIGHTING SYSTEM

- 7) The depth of field of the optical system (lens and lighting system) is 430mm. This means that an object is detected as effectively when flat on the belt as it is at 430mm above the belt;
- 8) The lighting system uses diffused light, which generates very little heat at the belt level.
- 9) The lighting system has been optimized to help identify thin and transparent objects as well as thick and opaque objects;
- 10) No moving parts used in the optical and detection system;

HOODING OF SORTING MACHINE

- 11) The hooding of the machines is made of tubing and formed steel plate (Heavy duty)
- 12) All our conveyors are equipped with attachment rings for uplifting as well as a bracket for the handling of the conveyor's motor reducer.

TECHNICAL DESCRIPTION OF THE HYPER SPECTRAL MACHINE

- 13) Equipment allowing the detection of objects according to their nature (one or several materials simultaneously), except black or very dark objects, by means of short wave infra-red spectrometry (SWIR), including:
 - 14) 1 halogen lighting system, protected by a glass pane (for power see table);
 - 15) 1 acquisition system;
 - 16) 1 air-conditioned electric control cabinet – 50-60Hz;
 - 17) High speed SWIR Hyper Spectral detection system;
 - 18) Central computing unit & associated software;
 - 19) Touch screen control panel with user-friendly menus;
 - 20) Safety and protection components;
 - 21) Remote access capabilities for remote maintenance;
 - 22) 1 compressed air nozzle ejection unit(s) fixed on the sub-frame of the machine;

All these devices are integrated into a welded frame encased in Steel covers comprising 2 side access doors with safety switches;



Proposal # 2218027-0

DRIVES AND MOTORS

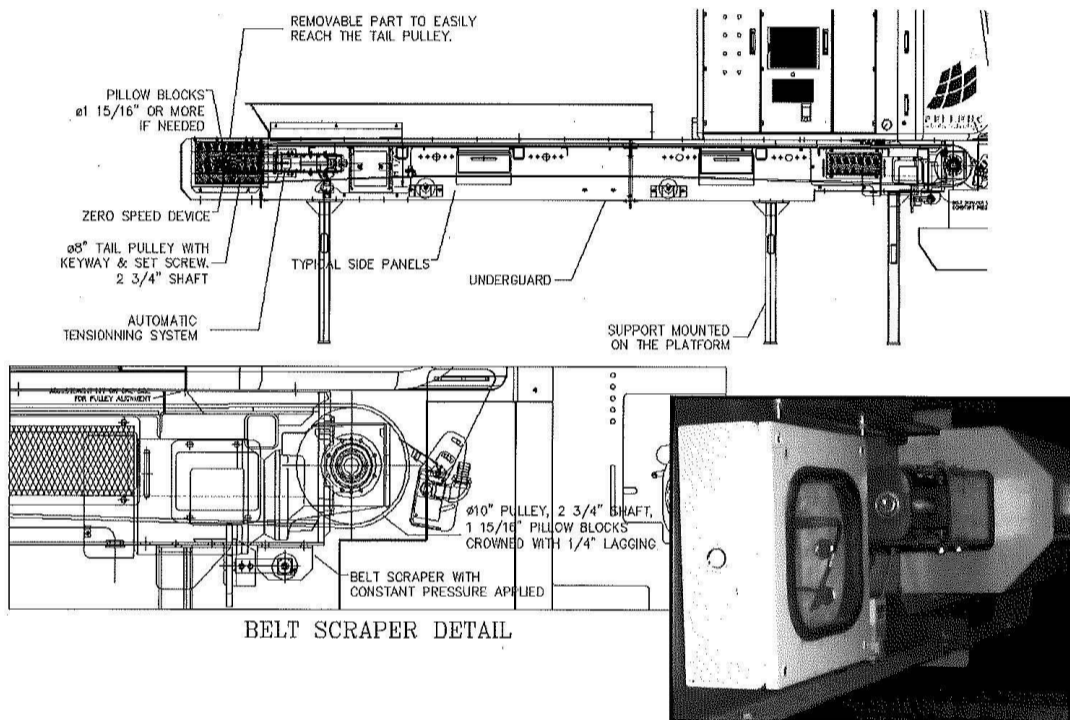
- 24) All gear reducers and motors will be shaft mounted Nord Gear or equivalent, sized by application. Motors will be mounted on gear reducers.
- 25) All motors are mounted on reducers and are PREMIUM efficiency type, 1.15 Service factor.
- 26) Conveyor will have variable speed ensured by a V.F.D. where necessary, please refer to the electrical controls specifications for more information

STRUCTURAL SUPPORTS

- 27) All equipment structural supports will be made of square tubing and structural steel.
- 28) All legs will have boot adjustments. Each boot will be attached using "Red Head anchors" through 2 holes in each footpad.
- 29) Support bracings will be made of angle Iron or structural steel.

TRANSFER PANELS

- 30) All transfer panels will be made of formed steel plate. Transfer panels will be bolt on type for easy access to head shafts.
- 31) Transitions will be equipped with rubber skirting, where necessary, to avoid material spillage.
- 32) Top belt skirting will be full length and adjustable. Steel side skirts will be provided, extending at least 6" to 36" above the belt. Feed hoppers and adaptor chutes will be provided to assure that all transitions between conveyors and other operating equipment are sufficiently enclosed to minimize spillage or dust emissions.



Proposal # 2218027-0

Figure 1.4 2019 Fines Screen equipment description sheet.

Experience Results
FOSS at Windsor MRF

Fines Screen (2" Minus By-Pass)

S-100

FRAME DESCRIPTION

- 1) One (1) single deck separator
- 2) One (1) screening surface mounted in one (1) section. The entire deck is mounted on a fix angle.
- 3) A total of twelve (12) shafts with steel disks
- 4) Every shaft will be "Quick Disconnect type" using flexible couplings for ease of disc replacement and maintenance on the screens. The entire shaft can be removed for disk maintenance at a remote location. The shafts will be made of 1020 steel mounted on heavy-duty bearings.
- 5) Shaft replacement will be done without dismantling any part of the screen frame, side skirts, chain and sprockets, gear-reducer, motor, driving components or any other components of the screen
- 6) The disk are Steel disk to break the Glass and reduce Wear and Tear
- 7) Every driving chain will be lubricated by an automatic oiler
- 8) Every driving chain will be tensioned by an automatic tensioning device
- 9) The minimum inside working width of the screen deck will be 8'-0".
- 10) Frame type: Closed frame construction design with hinged access doors for ease of maintenance. All frames will be made of formed steel plate with reinforcements. Frames will be made of minimum 3/16" formed steel plate.
- 11) The entire screening surface will remove the 2 1/2" minus fraction by passing through the disc spacing.
- 12) Equipment will be shipped in the largest practical sections for ease of installation.

DRIVES AND MOTORS

- 13) Each separator will be powered by one (1) 7.5 HP gear motor operating at a variable speed insured by variable frequency inverter VFD, see Control specifications.
- 14) All gear reducers and motors will be shaft mounted Nord Gear or equivalent, sized by application. Motors will be mounted on gear reducers.
- 15) All motors are mounted on reducers and are PREMIUM efficiency type, 1.15 Service factor.

BEARINGS AND SHAFTS

- 16) Shafts are running on heavy duty bearings. The large diameter of the shafts help to reduce material wrapping around the shafts

STRUCTURAL SUPPORTS

- 17) All equipment structural supports to be made of square tubing and/or structural steel.
- 18) All legs will have boot adjustments. Each boot to be attached using "Red Head anchors" through 2 to 4 holes in each footpad.
- 19) Support bracings to be made of angle iron and/or structural steel.


TRANSFER PANELS

- 20) All transfer panels will be made of formed steel plate. Transfer panels to be bolt on type for easy access to head shafts. (No rubber strip transfer acceptable)
- 21) Transitions to be equipped with rubber skirting, where necessary, to avoid material spillage.
- 22) Appropriate adapter skirts or shields, chutes and transfer panels to be provided at all transfer points to assure that all transitions are sufficiently enclosed to minimize spillage or dust emissions.

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Industries Machinex Inc 14

Figure 1.5 Specifications for the Fibre Baler



SPECIFICATIONS

8043 SERIES

AUTO-TIE HORIZONTAL SERIES

Revised 7/21/06
Spec. 817

APPLICATION: Secondary Fibers including Pre-packed or Pre-flattened OCC and Rebaling of Store Bales, Light Non-ferrous Metals, UBC & Siding, PET, HDPE, other Plastics and Miscellaneous Recyclables

GENERAL SPECIFICATIONS		PRESSURE DATA			
		9"	10"	12"	
Feed Opening:	80" x 41-1/2"	Normal Operating Pressure:	3,000 psi	3,000 psi	3,000 psi
Charge Box:	43" x 43" x 87.5"	Compressing Force:	190,850 lbs.	235,620 lbs.	339,290 lbs.
Charge Box Volume:	93.8 cu. ft.	Unit Face Pressure:	103 psi	127 psi	183.5 psi
Bale Chamber:	43" x 43" x 115"	Tension Force:	772,500#	987,500#	1,492,500#
Bale Size Expanded:	Approx. 44" x 44" x Var. to 72"	Bale Density:	Up to 30#/cf	Up to 34#/cf	Up to 36#/cf

PERFORMANCE DATA:

Model	9-100	9-150	10-100	10-150	12-100	12-150
Horsepower	(2) 50	(2) 75	(2) 50	(2) 75	(2) 50	(2) 75
Installation Dwg. (Contact Factory)	CF	CF	CF	CF	CF	CF
Installation Dwg. W/Fluffer	CF	CF	CF	CF	CF	CF
Gallons Per Minute	191	271	191	271	191	271
Cycle Time (In Seconds) **	10.6	8.4	12.4	9.6	15.5	12.5
Cycles Per Minute	5.7	7.2	4.8	6.2	3.9	4.8
Normal Displacement (cf/Hr) **	31,820	40,365	27,235	35,100	20,390	26,930
Production ***						
at 3#/cf (up to TPH)	23.9	30.3	20.4	26.3	15.3	20.2
at 4.5#/cf (up to TPH)	32.2	40.9	27.6	35.5	20.6	27.3
at 6#/cf (up to TPH)	38.2	48.4	32.7	42.1	24.5	32.3
at 8#/cf (up to TPH)	N/A	N/A	38.1	49.1	28.6	37.7
Machine Weight			46,700#	46,800#	50,000#	50,950#

TECHNICAL DATA:

Compressing Cylinder:	9" I.D. Bore x 6.5" Rod x 95" Stroke 10" I.D. Bore x 7" Rod x 95" Stroke 12" I.D. Bore x 8.5" Rod x 95" Stroke	Heat Transfer Unit:	Two Air-to-Oil Heat Exchangers – Std.
Maximum Cylinder Burst:	12,000# 4:1 Safety Factor	Oil Capacity:	400 Gal.
Type of Mount:	Trunnion Mount	Operator Interface:	CTC 8" Color Touchscreen – Std 10" Pathfinder Plus Touchscreen – W/Fluffers
Motor:	T.E.F.C. 460V/3 Ph/60 Hertz Across the line starting standard	Command Center:	Manual and automatic controls. PLC and operator interface are user friendly, giving control over user selectable field values, along with text error messaging.
Hydraulic Control:	Hi-Low Pump with full regenerative circuit Logic controlled manifolds on all models	Auto-Tier:	AMBACCO Electrohydraulic tier unit. Inserter heads pull wire through platen and twist on same side as inserter. Tier assembly can be mounted on either side of baler and can swing left or right for maintenance. Number of wires is adjustable.
Filtration:	Combination of cleanable tank screens and magnets and 10 micron absolute filter. Clogged filter indicator warns of need to replace filter.	Wire:	1000# coil (12, 11 or 10 Ga. Black Annealed Std.)
Tie Cycle Time:	25 Seconds	No. of Ties:	5

CONSTRUCTION: Fabricated from heavy structural steel members, gusseted and braced as required. Fitted in jigs and fixtures for proper alignment. Abrasive resistant liner materials are used in wear areas.

LINERS: SHARP-SX replaceable floor plate made of 500 Brinell hardness materials. Platen bottom is made of abrasive resistant 320 Brinell hardness materials. All liners are replaceable.

OTHER FEATURES:

Bale Retainer Locks: Spring loaded - 4 each side of compressing chamber

Power Saver: When machine is inactive for a preset time, motors will shut off automatically and will only start again when material blocks infrared sensors. On dual motors, motors will restart staggered to further reduce load.

Shear Knife: Heavy duty serrated replaceable bolt-in

* Bale weights and tonnage results can be affected by variables, such as moisture content, shape, size, thickness and mass of the material to be baled.

** Normal displacement times include 1.5 seconds for valve shifting and 2 seconds for time delays to allow material to adequately disperse in baling chamber.

*** In most applications a 2 second delay to allow material to adequately disperse in baling chamber will be required.

**** Tons per hour are based on operating efficiencies, including tying the bale, of 50% on 3#/CF material, 45% on 4.5#/CF material, 40% on 6#/CF material and 35% on 8#/CF material.

American Baler, in an effort to keep the product "efficient and up to date", reserves the right to modify these specifications without notice or liability to previously sold machines.

B. Container MRF

Figure 2.1 Container MRF equipment list. Note: that the perforator mechanism has been decommissioned.

CONTAINER MRF EQUIPMENT								
EQUIP. No	LINE No	DESCRIPTION	MODEL	DIMENSION	POWER	POWER SUPPLY	SPEED	NO. MFT
C-1	CONTAINER	INFEEED CONVEYOR	CH-ROLLER	72' WO, 29'-8 1/2" LG.	3 HP	575/3/60	30 FPM (VDF)	CCA-1751L
C-2	CONTAINER	INCLINED CONVEYOR	CH-ROLLER	36" WO x 57'-11 1/2" LG.	7.5 HP	575/3/60	50 FPM (VFD)	CCA-1752L
C-3	CONTAINER	PRE-SORT CONVEYOR	SUDER BED	36" WO x 41'-10 1/2" LG	3 HP	575/3/60	100 FPM (VFD)	COT-B40L
C-4	CONTAINER	TRANSFER CONVEYOR	SLIDER BED	36" WO x 11'-10 1/2" LG.	2 HP	575/3/60	200 FPM	CSR4-057L
M-5	CONTAINER	MAGNET	ELECTRO	EXISTING	2 HP	575/3/60	280 FPM	MAG-060L
C-6	CONTAINER	TIN TRANSFER CONVEYOR	SLIDER BED	30" WP , 24'-10" LG.	2 HP	575/3/60	100 FPM	CSR4-058L
S-7	CONTAINER	2 1/2" MINUS SCREEN	MDS-3608	36" WD , 8 ROLLS	3 HP	575/3/60	79 RPM	DS-152L
C-8	CONTAINER	2 1/2" MINUS TRANSFER CONVEYOR	SLIDER BED	30" WO , 23'-4" LG.	2 HP	575/3/60	100 FPM	CSR4-059L
AS-9	CONTAINER	HEAVY/LIGHT SEPARATOR FOR FINES (BLOWER)	MACHINEX	SEE DWG	10 HP	575/3/60	2350 RPM	SA-057L
AS-9	CONTAINER	HEAVY/LIGHT SEPARATOR FOR FINES (ROTARY VALVE)	MACHINEX	SEE DWG	2 HP	575/3/60	19 RPM	
AS-9	CONTAINER	HEAVY/LIGHT SEPARATOR FOR FINES (SHEAKER)	MACHINEX	SEE DWG	1/2 HP	575/3/60		
AS-9	CONTAINER	HEAVY/LIGHT SEPARATOR FOR FINES (BLOWER)	MACHINEX	SEE DWG	2 HP	575/3/60		
AS-10	CONTAINER	FEED CONV. HEAVY/LIGHT AIR SEPARATOR	MACHINEX	SEE DWG	2 HP	575/3/60	120 FPM (VFD)	SA-058L
AS-10	CONTAINER	HEAVY/LIGHT AIR SEPARATOR (BLOWER)	MACHINEX	SEE DWG	10 HP	575/3/60	1470 RPM	
C-11	CONTAINER	HEAVY SORTING CONVEYOR	SUDER BED	30" WO x 18'-5 1/2" LG	2 HP	575/3/60	100 FPM	CDT-841L
C-12	GLASS	MIXED GLASS TRANSFER CONVEYOR	SLIDER BED	24" WO x 48'-2 1/2" LG.	2 HP	575/3/60	100 FPM	CSR3-127L
PP-13	CONTAINER	PLASTICS PERFORATOR	MACHINEX	SEE DWG	2 & 2 HP	575/3/60	18 RPM	EP-031L
05-14	CONTAINER	2 1/2" MINUS SCREEN	MACHINEX	36" DE , 4 SHAFTS	2 HP	575/3/60	78 RPM	DS-153L
C-15	CONTAINER	LIGHT FRACTION HOPPER FEEDER CONVEYOR	SUDER BED	48" WO, 48'-2 1/2" LG.	7.5 HP	575/3/60	170 FPM (VFD)	CSR3-121L
C-16	CONTAINER	CONTAINER TRANSFER CONVEYOR	SLIDER BED	48" WO x 01" LG.	3 HP	575/3/60	550 FPM (SS)	CS0-023L
OPT-17	CONTAINER	CONTAINERS AUTOSORT PET & HDPE	MISTRAL			230/1/60		PST-029L
QPT-17	CONTAINER	CONTAINERS AUTOSORT PET & HDPE (COMPRESSOR)	KEASER KC20		20 HP	575/3/60		
C-18	CONTAINER	PET & HDPE INSPECTION CONVEYOR	SUDER BED	48" WO x 17'-10 1/2" LG	2 HP	575/3/60	100 FPM	COT-B42L
C-19	CONTAINER	PLASTIC RETURN CONVEYOR	SLIDER BED	24" WO x 10'-10 1/2" LG.	2 & 2 HP	575/3/60	100 FPM	CSR4-060L
C-20	CONTAINER	CONTAINER TRANSFER CONVEYOR	SUDER BED	30" WO, 23'-3 1/2" LG.	2 HP	575/3/60	100 FPM	CSR3-122L
C-21	CONTAINER	CONTAINER TRANSFER CONVEYOR	SLIDER BED	30" WO x 29'-9 1/2" LG.	7 1/2 HP	575/3/60	100 FPM	CSR3-123L
C-22	CONTAINER	CONTAINER SORTING CONVEYOR	SUDER BED	30" WO, 59'-0 1/2" LG.	3 HP	575/3/60	100 FPM (VFD)	COT-B43L
ECS-23	CONTAINER	EDDY CURRENT SEPARATOR	MACHINEX	EXISTING	2 & 10 HP	575/3/60	280 FPM (VFD)	ECS-029L
C-24	CONTAINER	ALUMINUM SORTING CONVEYOR	SUDER BED	30" WO X 19'-6" LG	2 HP	575/3/60	100 FPM	COT-B44L
AB-25	CONTAINER	AL AIR BLOWER	MACHINEX	SEE DWG	7 1/2 HP	575/3/60		AB-024L
C-26	CONTAINER	REJECT TRANSFER CONVEYOR	SUDER BED	24" WO x 17'-4" LG,	2 HP	575/3/60	100 FPM	CSR3-124L
C-27	CONTAINER	REJECTS TRANSFER CONVEYOR	SLIDER BED	24" WO x 27'-9 1/2" LG.	2 HP	575/3/60	100 FPM	CSR3-125L
C-28	CONTAINER	REJECTS TRANSFER CONVEYOR	SUDER BED	24" WD x 11'-4 1/2" LG.	2HP	575/3/60	100 FPM	CSR4-061L
C-29	CONTAINER	REJECT TRANSFER CONVEYOR	SLIDER BED	36" WO , 35'-9" LG.	2 HP	575/3/60	100 FPM	CSR3-126L
C-30	CONTAINER	REJECT RETURN CONVEYOR	SUDER BED	18" WO, 15'-4 1/2" LG.	2 HP	575/3/60	100 FPM	CSR4-062L
C-31	RESIDUE	RESIDUE TRANSFER CONVEYOR	SLIDER BED	36" WO x 48'-2 1/2" LG.	2 HP	575/3/60	100 FPM	CSR3-128L
C-32	GLASS	CONTAINER SORTING CONVEYOR	SUDER BED	24" WO, 49'-8 1/2" LG.	2 HP	575/3/60	100 FPM	CSR3-129L
C-33	CONTAINER	CONTAINER TRANSFER CONVEYOR	SLIDER BED	18" WO X 11'-4 1/2" LG	2HP	575/3/60	100 FPM	CSR4-063L
C-34	CONTAINER	CONTAINER TRANSFER CONVEYOR	SUDER BED	18" WD X 17'-10 1/2" LG	2 HP	575/3/60	70 FPM	CSR4-064L
C-35	CONTAINER	RECLAIM CONVEYOR	CH-ROLLER	48" WO x 87'-5 1/2" LG.	7.5 HP	575/3/60	45 FPM (S.S.)	CCA-1753L
C-36	CONTAINER	BALER INFLO CONVEYOR	CH-ROLLER	48" WO x 51'-7 1/4" LG	7.5 HP	575/3/60	50 FPM (S.S.)	CCA-1754L

Figure 2.2 Specifications for the Container Baler.



HARRIS MODEL - BADGER 75S-2-10/8
 Automatic Two-Ram Baling Press
 General Specification Number BAD75S2108R1
 Revised 6/4/2013

***PERFORMANCE**

Bale Size	48 in. wide x 31 in. high x 81 in. long (1168 mm wide x 787 mm high x 1549 mm long)
Bale Volume	50 cubic feet (1.42 cubic meters) expanded (approximate)
Dry Cycle Time	14.6 seconds (15.4 seconds 50hz) No Load
Capacity	12,687 cubic feet per hour (356 cubic meters per hour) no load

GENERAL SPECIFICATIONS

Hopper Opening (Top)	86 in. x 88 in. (1651 mm x 1753 mm)
Charge Box Opening	42 in. x 80 in. (1067 mm x 1524 mm)
Strapper	Automatic Wire Tie
Non-ferrous liners	Main frame floor and ram
Approximate Shipping Weight	30.6 Tons (27.7 Tonnes)

***BALING MATERIAL SPECIFICATIONS**

Material	Bale Weight lbc (kg)	Density lbs/cu ft (kg/cu m)		w/ Combo Door tons/hr (tonnes/hr)		w/o Combo Door tons/hr (tonnes/hr)	
		Loose	Baled	60hz	50hz	60hz	50hz
BULK OCC	1160-1460 (522-658)	3-8 (48-96)	23-28 (369-465)	5.7-8.0 (5.2-7.3)	(4.7-6.6)	8.1-8.7 (5.5-7.8)	(4.9-7.1)
SOLID WASTE	1800-2200 (817-998)	7.0-12.0 (112-192)	38-44 (577-705)	12.0-19.0 (10.9-17.2)	(9.8-15.5)	13.0-21.0 (11.8-19.1)	(10.6-17.2)
NEWSPRINT	1200-1600 (544-680)	8.8-8.0 (109-128)	24-30 (385-481)	12.2-17.8 (11.1-16.2)	(10.0-14.8)	14.0-20.0 (12.7-18.1)	(11.4-16.3)
WHOLE ALUMINUM CANS	925-1100 (420-499)	1.5-4.5 (24-72)	18.5-22 (296-352)	3.2-8.2 (2.9-5.6)	(2.6-5.1)	3.4-8.9 (3.1-6.3)	(2.8-5.7)
STEEL CANS	1400-1800 (635-817)	8.0-9.0 (96-144)	28-38 (449-577)	10.0-13.0 (9.1-11.8)	(8.2-10.6)	11.0-16.0 (9.9-13.6)	(8.9-12.2)
PLASTIC	1050-1300 (476-590)	1.2-4.0 (19-64)	21-28 (336-416)	2.8-5.7 (2.4-5.2)	(2.2-4.7)	2.7-8.0 (2.5-5.4)	(2.3-4.8)
NON-FERROUS	900-2300 (408-1043)	3.0-8.5 (48-104)	18-48 (288-737)	5.7-10.0 (5.2-9.1)	(4.7-8.2)	8.0-10.0 (5.4-9.1)	(4.9-8.2)

*Performance rates and/or production rates are subject to material input density, feed rates, and other variables of production outside the control of HWMG, Inc.

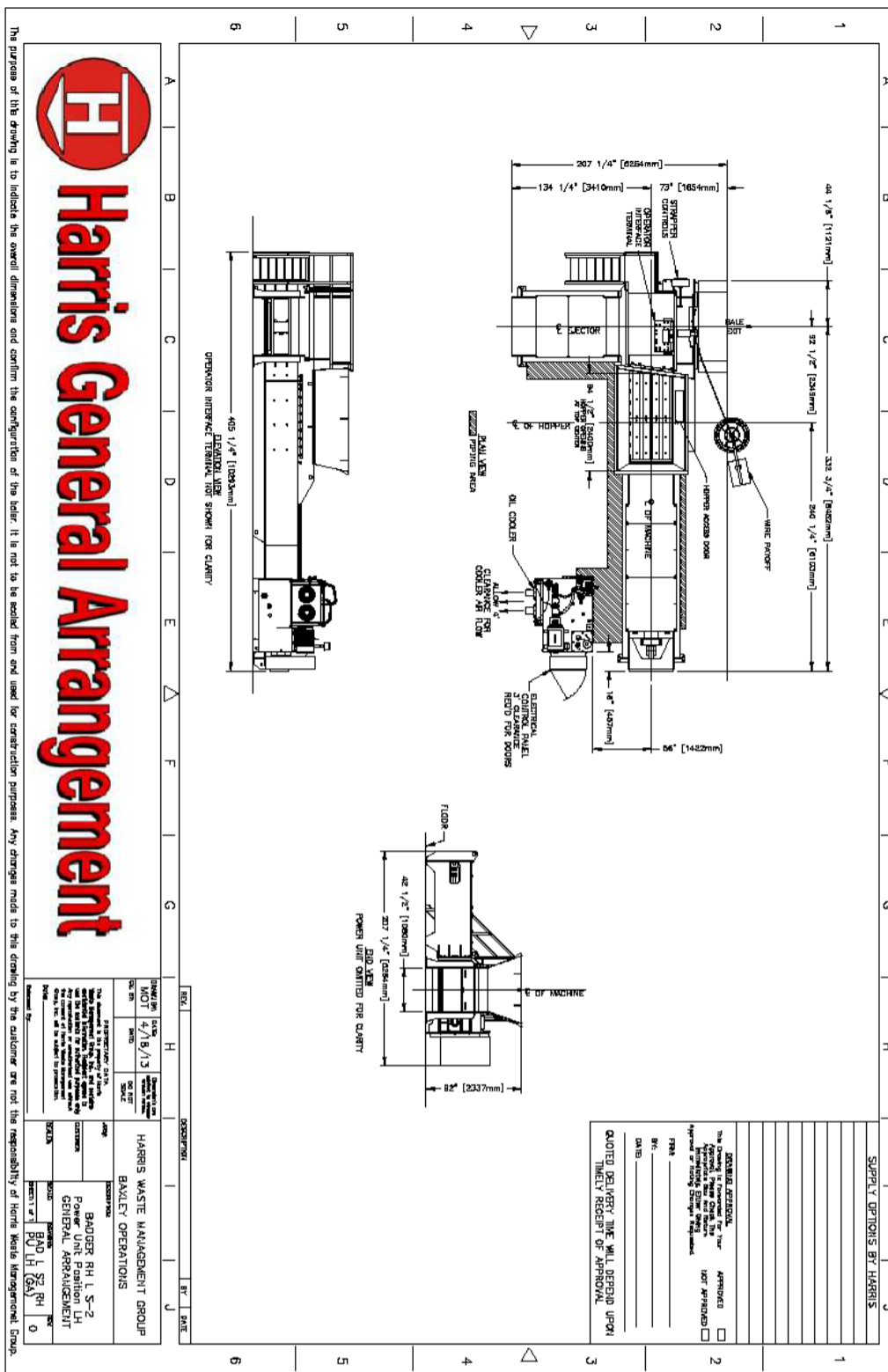
OPTIONS

Reduced Voltage Starting	Hopper Extension
Conveyors	Combination Bale Release and Separation Door (Combo Door)
Climate-Controlled Operator's Cabin	Oversize Bale Release Door
Bale Run out Table	Installation Assistance
Elevation of Platform	

HYDRAULICS

Main Pumps	145 GPM	(549 LPM)	(514 LPM) 50hz
Circulation Pump	42 GPM	(159 LPM)	(128 LPM) 50hz
Strapper Pump	12 gpm	(45 LPM)	(45 LPM) 50hz
System Pressure	3500 psi	(241 BAR)	
Main Cylinder	10 in. bore, 7 in. rod, 82.8 in. stroke	(280mm bore, 200mm rod, 2352mm stroke)	
Main Ram Face Pressure	137 tons of force	(124 tonnes of force)	
Ejector Cylinder	238 psi	(20 bar)	
Ejector Cylinder	8 in. bore, 5.6 in. rod, 73 in. stroke	(200mm bore, 140mm rod, 1854mm stroke)	
Ejector Ram Face Pressure	88 tons of force	(80 tonnes of force)	
Ejector Ram Face Pressure	111 psi	(8 bar)	
Oil Reservoir	400 gallons capacity (Standard)	(1514 liters capacity (Standard))	
Oil Cooler	Air-to-Oil Thermostatically-Controlled		
Oil Heater	3000-Watt Thermostatically-Controlled		
Filtration	10-micron		

Figure 2.3 Harris Baler general arrangement for the Container MRF.



The purpose of this drawing is to indicate the overall dimensions and confirm the configuration of the baler. It is not to be scaled from and used for construction purposes. Any changes made to this drawing by the customer are not the responsibility of Harris Waste Management Group.

End of Addendum 1C

All other terms and conditions remain unchanged.