



# HARRIS MODEL - BADGER 100S-2-11/8

Automatic Two-Ram Baling Press  
 General Specification Number 10000016  
 Revised 10-30-07

## \*PERFORMANCE

Bale Size	46 in. wide x 31 in. high x 61 in. long
Bale Volume	50 cubic feet expanded (approximate)
Cycle Time	13.4 seconds (No Load)
Capacity	12,248 cubic feet per hour (no load)

## GENERAL SPECIFICATIONS

Hopper Opening (Top)	65 in. x 69 in.
Charge Box Opening	42 in. x 60 in.
Strapper	Automatic Wire Tie
Non-ferrous liners	Main frame floor and ram, Abrasion resistant
Approximate Shipping Weight	26 tons (w/out combo door) 28.5 tons (w/combo door)

## \*BALING MATERIAL SPECIFICATIONS

Material	Bale Weight	Density (lbs / cu.ft.)		w/ Combo Door	w/o Combo Door
		Loose	Baled	100 HP Tons / HR	100 HP Tons / HR
BULK OCC	1200-1500 Lbs.	3.0-6.0	24-30	5.8-8.8	6.3-9.6
SOLID WASTE	1850-2400 Lbs.	7.0-12.0	37-48	12.8-20.0	13.6-22.4
NEWSPRINT	1300-1650 Lbs.	6.8-8.0	26-33	10.4-13.6	11.2-15.2
WHOLE ALUMINUM CANS	975-1175 Lbs.	1.5-4.5	19.5-23.5	3.2-6.7	3.4-7.4
STEEL CANS	1450-1900 Lbs.	6.0-9.0	29-38	10.4-14.4	11.2-15.2
PLASTIC	1100-1350 Lbs.	1.2-4.0	22-27	2.6-5.7	2.6-6.0
NON-FERROUS	950-2500 Lbs.	3.0-6.5	19-50	5.8-10.4	6.1-11.2

\*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	171 GPM
Circulation Pump	42 GPM
Strapper Pump	12 GPM
System Pressure	3500 psi
Harris Main Cylinder	11 in. bore, 8 in. rod, 92.63 in. stroke 166 tons of force
Main Ram Face Pressure	289 psi
Ejector Cylinder	8 in. bore, 5.5 in. rod, 73" stroke 88 tons of force
Ejector Ram Face Pressure	111 psi
Oil Reservoir	400-gallon capacity (Standard HP)
Oil Cooler	Air-to-Oil Thermostatically-Controlled
Oil Heater	3000-Watt Thermostatically-Controlled
Filtration	10-micron

### **Hydraulic Power Unit**

Motors	Main (1) 100HP 460/3/60, 1750 RPM, ODP Cooling Fan (2) ¼ HP 460/3/60, 1140 RPM, TEFC
Starters	Across-the-line motor starters with overload protection (reduced voltage starting available as an option)
Location	3 Standard power unit positions to choose from (refer to layout sheet attached). Optional power unit locations positions at additional cost.

### **Electrical**

Functions	Automatic or manual baling cycles. Pushbuttons and joystick mounted on operator's console. Self-diagnostics display. Multiple baling and strapping modes.
Controls	UL and CUL listed Operator Interface Terminal (OIT), 20 material selection and setup with color touch screen display/phone modem. Solid-state programmable controller with operator console
Location	Operator control console mounted over compression chamber
Enclosures	NEMA 12 rated (Not rated for outdoor operation)
Photo Eyes	Adjustable Multi-level material control
Conveyor Controls	(1) 10HP (Standard)

### **Construction**

Main Frame and Compression Chamber	Constructed of heavy steel plate and reinforcing ribs. Wear surfaces are replaceable abrasion resistant plate. Back wall is reinforced solid steel plate. Flooring constructed of tongue and groove abrasion-resistant wear plates.
Rams	Both the gathering and eject rams are heavy steel weldments with abrasion-resistant liner plates.
Piping	ASTM A-106 Schedule 160
Fixed Knife	Harris' patented "Smart-knife" adjusting system. No shims are required.

### **Tying Unit**

Model Number	L & P Wire-Tie System 11 or 12 gauge or equivalent Other major brands available. Pricing available upon request.
--------------	---

### **Testing**

Factory Test	Machine is fully assembled and tested prior to shipping
--------------	---

### **Startup Service**

Services provided by your distributor or HWMG	Qualified startup technicians are required. Pricing is available upon request.
---	--

### **Purchaser To Provide**

Hydraulic Oil	Approximately 500 Gallons
Electric Power	Provide to Main Control Panel
Concrete Foundation Floor	Refer to foundation load drawing for details
Unloading Equipment	Personnel, equipment and tools required to unload assemble and install baler. Spreader bars are required for lifting equipment
Wire	Correct wire for strapping
Baling Material	Adequate and appropriate materials for processing during the start-up/training period
Safety	Refer to Safety and Installation Guidelines attached.,
Maintenance	Tools and spare parts for performing maintenance, adjustments and troubleshooting

## **Acceptable and Non-Acceptable Materials**

This baler is intended to process the following materials. Any materials other than these could severely damage the machine and will void the warranty.

### **ACCEPTABLE**

- Empty Aluminum Cans
- Empty Tin Cans, buckets or barrels, 55 gallons or less

### **THE FOLLOWING MATERIALS ARE BASED ON SHEARING A SINGLE LAMINATION ONLY:**

- High-grade paper (conditioned)
- Corrugated Cardboard
- Solid Waste (Exclusions below)
- Drywall
- Wooden Pallets
- Empty PET (Plastic) Bottles
- "White goods" without motors and transmissions
- Newsprint (conditioned)
- Aluminum Sheeting, less than 16-gauge thick
- Aluminum Siding and aluminum cable less than 1/2" diameter
- Aluminum Extrusions less than 3/16" thick and less than 1/2 sq. in. in cross-section
- Copper less than 1/2 sq. in. in cross-section
- Radiators(automobile only, made of aluminum or brass)
- Steel Cable less than 1/2" in diameter
- Non-magnetic ferrous material with a thickness no greater than 1/16" nor greater than 1/4 sq. inch in cross-section
- Rags
- Ferrous material with a tensile strength of less than 50,000 Lbs/sq. inch, a thickness of no more than 1/16" and a cross-section of no more than 1/4 sq. in.

### **NON-ACCEPTABLE**

- Pressurized cylinders or cans of any description
- Large pieces of masonry, steel or other such non-compressibles
- Ferrous metals greater than 1/16" thickness or 1/4" diameter or 1/4" cross section

### **SOLID WASTE EXCLUSIONS**

- Masonry or concrete greater than 1 square inch in cross-section or 6" in length
- Glass, masonry, and other such abrasive non-compressibles can cause excessive wear or damage and can interfere with baler functions such as shearing or the operation of the door

***Limited Warranty: All Harris Waste Management Group, Inc. Manufactured Products  
This machine is covered under Harris WARRANTY (HWMG, Inc. 990101W-STD) which is attached.***

### **NOTES:**

- 1) Some bridging may occur in the hopper depending upon the material being processed and how the material is being presented to the hopper. Wet solid waste may tend to extrude the plug bale if the baler has no baling door. Some materials may require pre-conditioning. Consult your Harris representative for recommendations.
- 2) The knife edges and the vertical blade clearance must be maintained within the limits described in the Operator/Service manual.
- 3) Bales must be broken apart and loose prior to rebaling.

**SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE**



## INSTALLATION SAFETY GUIDELINES

---

- All operators and support personnel should be trained in the safe operation of the baler, including proper material feeding techniques in accordance with the Harris Operator/Service Manual and ANSI Z245.5 standard – Baling Equipment – Safety Requirements for Installation, Maintenance and Operation.
- All operators and employees must be instructed as to the location and use of all emergency stop devices associated with the baler and all ancillary equipment.
- All emergency stops on baler, in-feed conveyor and other ancillary equipment are to be interlocked so that any emergency stop will shut down the baler, in-feed conveyor and any ancillary equipment. Emergency stop devices must be installed on both sides of the in-feed section of the conveyor.
- All electrical power for baler, in-feed conveyor and other ancillary equipment must be from a single source with a single electrical disconnect to insure all equipment can be locked out at a single location in accordance with OSHA 1910.147.
- The operator must have an unobstructed view of the baler in-feed and baler discharge area from the operator's console.
- Entry to the hopper or hopper extension must be in accordance with OSHA standards by means of access doors, and fixed or mobile platforms. **Never use the in-feed conveyor as a means to access the hopper or hopper extension.**
- Proper guarding between the hopper or hopper extension and conveyor must be provided in compliance to OSHA/ANSI guarding standards.
- Conveyor should be located so that material discharged into the hopper does not cause bridging.
- Conveyor belt width should not be wider than the baler charging box opening in the direction of entry to avoid possible bridging.
- The maximum size of material should be no greater than the size of the baler charging box to minimize bridging.
- Obstructions, protrusions, and transitions in the hopper should be avoided to minimize bridging.
- Insure that all decals are in place. A decal location chart is provided in the Harris Operator/Service Manual.