



MODEL - HRB CENTURION EHD T100

*Automatic Two-Ram Baling Press
General Specification Number 15000004
Revised 6/21/11*

| Model | | HRB Centurion EHD T100 | |
|--|-----------------|----------------------------|-----------------|
| Horsepower | (2) 100 hp | | |
| Total Flow | 236 GPM | | |
| Dry Cycle Time | 9.5 sec | | |
| Dry Cycle Displacement | 42,300 CF/HR | | |
| Bale Size | 45" x 30" x 63" | | |
| *Production | | Density lb/ft ³ | Typical Tons/hr |
| Bulk OCC | 3.0-6.0 | 20-35 | 40 |
| Solid Waste | 7.0-12.0 | 35-60 | 66 |
| Newsprint | 6.8-8.0 | 28-42 | 49 |
| Whole aluminum cans | 1.5-4.5 | 10-25 | 31 |
| Steel Cans | 6.0-9.0 | 30-45 | 59 |
| Plastic | 1.0-4.0 | 13-25 | 36 |
| Non-Ferrous | 3.0-6.5 | 20-40 | 55 |
| Bale Density and Weights | | Density lb/ft ³ | Weight lb |
| Bulk OCC | up to 33 | 1250-1700 | |
| Solid Waste | up to 47 | 1800-2700 | |
| Newsprint | up to 38 | 1400-1800 | |
| Whole aluminum cans | up to 28 | 1100-1350 | |
| Steel Cans | up to 51 | 1550-2500 | |
| Plastic | up to 32 | 1200-1800 | |
| Non-Ferrous | up to 54 | 1100-2750 | |
| Pressure Specifications | | | |
| Main Cylinder Bore | 12.5" Bore | | |
| Main Cylinder Stroke | 148" | | |
| Main Cylinder Force | 300 Tons | | |
| Normal Operating Pressure | 5000 PSI | | |
| Ejector Cylinder Bore | 9" | | |
| Ejector Cylinder Force | 159 Tons | | |
| Main Ram Face Pressure | 357 PSI | | |
| Ejector Ram Face Pressure | 289 PSI | | |
| Dimensional Specifications | | | |
| Hopper Opening | 86" x 105" | | |
| Charge Box Opening | 58.5" x 101" | | |
| Charge Box Volume | 162 CF | | |
| Est. Wt. (Including Power Unit) | 57 Tons | | |
| *Performance and production rates are subject to material input density, feed rates, and other variables of production outside the control of HWMG. This information is for guidance and represents approximate values. It does not contain warranties or contractual representations of any kind. | | | |

Features and Benefits

Efficient Hydrodynamics (EHD)

300 tons of force

High efficiency main ram cylinder with integral manifold and valves

High Speed 9.5 Second dry cycle time

Compact energy efficient hydraulics and power unit

Standard TEFC motors with energy monitoring

Compact 750 gallon reservoir

High efficiency cylinder requires 70% less flow for equivalent ram speed

30hp Independent cooling and filtration recirculation

5 micron independent cooling and filtration recirculation system

Electronic controlled pumps to control the acceleration and deceleration of the main ram

Construction

2" Thick heavy duty bale chamber and end wall.

Heavy duty uni-body frame construction

1/2" Thick AR 500 platen floor liner and 1/2" thick AR strip liners on top. Half as many plug welds to remove during reline.

3/4" Thick AR 500 replaceable top wear liners behind knife and hold down areas

One piece side construction, no welded joints

Honeycomb reinforced baling chamber

Anchor plates incorporated into baler structure

Heavy duty rear cylinder support

The Harris Smart Knife System™

Heavy duty separation and oversized bale Harris Combo Door™ with replaceable bolted guides

Shimless platen hold -down adjustment

High strength cylinder tube, induction hardened cylinder rod and TFE piston seal

Interchangeable choice (by customer) of serrated or flat shear knife

Penetrating main ram, 60% penetration into the bale chamber

Auto tier available in 11 or 12 gauge high tensile wire

Electrical and Controls

24v DC controls and IP67 quick connection plugs with Ethernet connectivity

10" color touch screen display with simplified operator controls

CCTV camera and display for hopper

Multi-material controller with:

Ethernet connection for on line service and diagnostics

10" touch screen color display

Advanced operator and maintenance diagnostic display screens

Bale Watch 2™ Performance monitoring and production reporting

Bale lamination measurement and control programs

Full automatic operation on majority of materials

Wye Delta reduced voltage main motor starting

Options

Bale table

Reversible lower wiper blade on platen (recommended for non ferrous metal applications)

Accent 470 wire tier

Extension hopper with infrared upper photo eye

Operator cab with climate control

10' Elevated operator platform

208/230/415/575 Voltage

Motor soft starters

Network Ethernet adaptor

2nd conveyor starter

Different color enamel

Sonac sensors (in place of infrared photo eye sensors)

Wireless modem (in place of phone modem)

Remote overhead message and alarm color display (6" high characters)

Safety

Category 3 safety circuit, utilizing safety monitoring relays, dual redundant safety interlock switches, emergency stops and safety rated control relays

Dual key interlock access into hopper

A double pole magnetic interlock switch is also provided on the door for diversity and redundancy

Hinged wire tier guards incorporate magnetic safety interlock switches

Wire tier guards incorporate magnetic safety interlock switches which are continuously checked by a safety monitoring relay

Harris Standard Warranty

Electrical

| | |
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| Functions | Automatic or manual baling cycles. Pushbuttons and joysticks and OIT are mounted on operators console. Digital pressure and position indication. Full self diagnostics. Multiple baling and strapping modes. |
| Controls | Solid-state programmable controller with a color graphic display in the operator console. |
| Location Enclosures | Operator control console mounted over compression chamber NEMA 12 rated (Not rated for outdoor operation) |

Construction

| | |
|------------------------------------|--|
| Main Frame and Compression Chamber | Constructed of heavy steel plate and reinforcing ribs. Floor is reinforced with 11"beams. Critical components are machined to insure a proper fit. Wear surfaces are covered with replaceable abrasion resistant liners. Backwall are reinforced with a honeycomb matrix of solid plate. |
| Platens | Both the gathering and eject platens are heavy steel weldments with AR 500 wear liners on top and sides. Base has two level AR 500 wear liners. Option for replaceable platen lower wiper blade for non-ferrous applications. Knife is reversible. |
| Piping | ASTM A-106 Schedule 160 and XXS |
| Fixed Knife | Shim-less knife adjustment. Two types of knives are available, vertical serrated and flat. |
| Liners | AR 500 abrasion resistant wear liners |

Testing

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| Factory Test | Machine is fully assembled and tested prior to shipping |
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Startup Service

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| Services provided by your distributor or HWMG | Qualified startup technicians are required. Pricing is available upon request. |
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Purchaser To Provide

| | |
|---------------------------|---|
| Hydraulic Oil | Approximately 800 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 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
- 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.

Harris Waste Management Group, Inc. - Cordele Operations ♦ P O Box 998 ♦ Cordele, GA 31015 ♦ 1-800-710-4994
Harris Waste Management Group, Inc. - Baxley Operations ♦ P O Box 406 ♦ Baxley, GA 31515 ♦ 1-800-447-3526