SPECIFICATIONS

2250 PACKER/CUTTER AND 2250 PACKER/CUTTER CE BALERS

Baler Dimensions and Weights

Baler Length, Height, Width, and Weight

Length

Maximum baler length with roller bale chute in raised position ..................................................... 8298 mm (326.7 in)

Height

Top of folded hand railing ................................................................................................................ 2870 mm (113.0 in)
Top of raised hand railing ............................................................................................................... 3270 mm (128.7 in)

Width (overall)

Operating, single axle with tires ..................................................................................................... 2549 mm (100.4 in)
Operating, tandem axle with tires ................................................................................................... 2810 mm (110.6 in)
Minimum, single axle with no tires ................................................................................................... 2100 mm (82.7 in)
Minimum, tandem axles with no tires ............................................................................................... 2100 mm (82.7 in)

Weight (approximate)

Single axle baler (empty) with packer/cutter ................................................................................... 7033 kg (15 505 lb)
Single axle baler (empty) tongue with packer/cutter ......................................................................... 1213 kg (2673 lb)
Tandem axle baler (empty) with packer/cutter ................................................................................ 7632 kg (16 825 lb)
Tandem axle baler (empty) tongue with packer/cutter ...................................................................... 1298 kg (2862 lb)

Bale Chamber Height, Width, and Bale Length

Height .......................................................................................................................................................... 800 mm (31.5 in)
Width ........................................................................................................................................................... 875 mm (34.4 in)
Adjustable bale length ..................................................................................................................... up to 2743 mm (108 in)

Power Systems - Mechanical, Hydraulic, and Electrical

Main Drive System

PTO speed and IDL types

PTO speed .................................................................................................................................................. 1000 rpm
Type 2 - Category 6-7 IDL (PTO to intermediate shaft) ........................................................... ISO (ASABE) Type 2, 35 mm (1-3/8 in), 21 tooth
Type 3 - Category 6-7 IDL (PTO to intermediate shaft) ........................................................... ISO (ASABE) Type 3, 45 mm (1-3/4 in), 20 tooth
IDL (intermediate shaft to clutches) ........................................................................................................ ISO (ASABE) Category 6-7
# SPECIFICATIONS

## Flywheel rotation, dimensions, weight, and protection

<table>
<thead>
<tr>
<th>Specification</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rotation direction (looking from the front of the baler toward the rear)</td>
<td>counter clockwise</td>
</tr>
<tr>
<td>Diameter</td>
<td>750 mm (29.5 in)</td>
</tr>
<tr>
<td>Width</td>
<td>110 mm (4.3 in)</td>
</tr>
<tr>
<td>Weight</td>
<td>163 kg (359.4 lb)</td>
</tr>
<tr>
<td>Flywheel brake</td>
<td>manual lever, direct acting</td>
</tr>
<tr>
<td>Clutches</td>
<td>overrunning and slip</td>
</tr>
<tr>
<td>Shearbolt and nut</td>
<td>3/8-16 x 2-1/2 in grade 5 shearbolt, 3/8-16 grade G hex flange top lock nut</td>
</tr>
<tr>
<td>Shearbolt torque</td>
<td>42 Nm (31 lbf ft)</td>
</tr>
</tbody>
</table>

## Main gearbox

<table>
<thead>
<tr>
<th>Specification</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type</td>
<td>enclosed double reduction</td>
</tr>
<tr>
<td>Gears</td>
<td>spiral bevel gear (1st set), spur gear (2nd set)</td>
</tr>
<tr>
<td>Bearings for main gearbox</td>
<td>tapered roller and ball bearings</td>
</tr>
<tr>
<td>Lubrication</td>
<td>oil bath</td>
</tr>
<tr>
<td>Temperature sensor alarm setting</td>
<td>100 degrees C (212 degrees F)</td>
</tr>
<tr>
<td>Connecting rod front end bearings</td>
<td>2 sealed spherical roller bearing sets per connecting rod front end</td>
</tr>
<tr>
<td>Connecting rod front end bearing lubrication</td>
<td>grease</td>
</tr>
</tbody>
</table>

## Pickup Drive System

<table>
<thead>
<tr>
<th>Specification</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Protection, power transmission, drive, and bearings</td>
<td></td>
</tr>
<tr>
<td>Tine bar protection</td>
<td>slip and overrunning clutches on right-hand side</td>
</tr>
<tr>
<td>Power transmission</td>
<td>RC60 roller chain</td>
</tr>
<tr>
<td>Tine bar drive</td>
<td>cam and drive arms on right-hand and left-hand sides of pickup</td>
</tr>
<tr>
<td>Tine bar bearings</td>
<td>sealed, grease lubricated ball bearings</td>
</tr>
</tbody>
</table>

## Packer/Cutter Drive System

<table>
<thead>
<tr>
<th>Specification</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Protection and power transmission</td>
<td></td>
</tr>
<tr>
<td>Power to packer/cutter drive</td>
<td>RC100H roller chain</td>
</tr>
<tr>
<td>Packer cutter drive protection</td>
<td>packer/cutter splined slip clutch on right-hand side</td>
</tr>
<tr>
<td>Crank and bearings assembly</td>
<td>4 crank arms, 6 tapered roller bearing sets in 3 oil filled bearing boxes</td>
</tr>
</tbody>
</table>

## Stuffer/Knotter/Needle Drive System

<table>
<thead>
<tr>
<th>Specification</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Protection and power transmission</td>
<td></td>
</tr>
<tr>
<td>Main drive sprocket shearbolt and nut</td>
<td>1/2-13 x 2-3/4 in grade 8 shearbolt, 1/2-13 grade G hex flange top lock nut</td>
</tr>
<tr>
<td>Main drive sprocket shearbolt torque</td>
<td>145 Nm (105 lbf ft)</td>
</tr>
<tr>
<td>Needle protection linkage</td>
<td>automatic, link to needle carriage</td>
</tr>
<tr>
<td>Knotter/needle lockout</td>
<td>manual lever, direct acting</td>
</tr>
<tr>
<td>Power to stuffer, knotters, and needles</td>
<td>RC100 roller chain</td>
</tr>
</tbody>
</table>

## Plunger Drive System

<table>
<thead>
<tr>
<th>Specification</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Protection and power transmission</td>
<td></td>
</tr>
</tbody>
</table>
SPECIFICATIONS

Plunger protection................................................................................................................. flywheel brake, manual, direct acting
Power to plunger...................................................................................................................... through connecting rods
Front and rear rollers and bearings........................................................................................ 4 rollers with tapered roller bearings
Side rollers and bearings......................................................................................................... 2 rollers with sealed ball bearings
Connecting rod rear end bearings .......................................................... 2 sealed spherical roller bearing sets per connecting rod rear end
Connecting rod rear end bearing lubrication ............................................................................... grease

Hydraulic Power Systems - On Board
Bale density hydraulics
  Type of valve system .............................................................................................................. open center
  Pump type and location ........................................................................................................... gear pump, direct drive from main gearbox
  System pressure relief valve ................................................................................................. release pressure, 200 bar (2900 psi)
  Temperature sensor alarm setting .......................................................................................... 107 degree C (225 degrees F)

Knotter blower (if equipped) hydraulics
  Pump type and location ........................................................................................................... gear pump piggybacked on baler hydraulic pump

Hydraulic Power Systems - From Tractor
Remote Circuit
  Pickup lift............................................................................................................................. 1 double acting cylinder controlled from tractor remote
  Ejector ............................................................................................................................... 1 double acting cylinder with control lever
  Bale chute lift (if equipped) ............................................................................................... 1 double acting cylinder with control lever
  Tandem steering axle (if equipped) lock ............................................................................. 1 single acting cylinder controlled from console
  Packer cutter knives engage and disengage ........................................................................ 1 double acting cylinder controlled from console

Electric Power Connections - From Tractor
  Power to solenoids, SBC, SBM ......................................................................................... 12 volt DC, 3 pin cab plug with switched, unswitched, and ground
  Power to work, service, and rear lamps ............................................................................... ISO or ASABE, 7 pin connector (can require a conversion harness)

Shearbolts, Nuts, and Torques

Main Drive System at Flywheel
  Shearbolt and nut ................................................. 3/8-16 x 2-1/2 in grade 5 shearbolt, 3/8-16 grade G hex flange top lock nut
  Shearbolt torque .................................................................................................................. 42 Nm (31 lbf ft)

Stuffer/Knotter/Needles at Main Sprocket
  Shearbolt and nut ................................................. 1/2-13 x 2-3/4 in grade 8 shearbolt, 1/2-13 grade G hex flange top lock nut
  Shearbolt torque .................................................................................................................. 145 Nm (105 lbf ft)
## SPECIFICATIONS

### Bale Making Systems

#### Pickup System

**Components and dimensions**

<table>
<thead>
<tr>
<th>Component</th>
<th>Measurement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Width overall, with pickup wheels</td>
<td>2994 mm (117.9 in)</td>
</tr>
<tr>
<td>Width overall, less pickup wheels</td>
<td>2597 mm (102.2 in)</td>
</tr>
<tr>
<td>Width inside</td>
<td>2260 mm (89.0 in)</td>
</tr>
<tr>
<td>Height control</td>
<td>2 pickup wheels and adjustable control rod</td>
</tr>
<tr>
<td>Lift mechanism</td>
<td>1 double acting hydraulic cylinder</td>
</tr>
<tr>
<td>Flotation</td>
<td>compression spring pickup lift</td>
</tr>
<tr>
<td>Tine bar protection</td>
<td>slip and overrunning clutches on right-hand side</td>
</tr>
<tr>
<td>Tine bar power transmission</td>
<td>RC60 roller chain</td>
</tr>
<tr>
<td>Tine bar drive</td>
<td>cam and drive arms on right-hand and left-hand sides of pickup</td>
</tr>
<tr>
<td>Tine bar bearings</td>
<td>sealed, grease lubricated ball bearings</td>
</tr>
<tr>
<td>Tine bar, number of individual bars</td>
<td>8 tine bars with center carrier</td>
</tr>
<tr>
<td>Tine spacing, tine to tine</td>
<td>66 mm (2.6 in)</td>
</tr>
<tr>
<td>Overall width outside tine to outside tine</td>
<td>2046 mm (80.6 in)</td>
</tr>
<tr>
<td>Tines, total number</td>
<td>64</td>
</tr>
</tbody>
</table>

#### Packer/Cutter System

**Weight (approximate)**: 193 kg (425 lb)

**Drive for packer/cutter (drives through the packer/cutter slip clutch)**

<table>
<thead>
<tr>
<th>Protection</th>
<th>packer/cutter slip clutch</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chain</td>
<td>RC100H roller chain</td>
</tr>
</tbody>
</table>

**Packer cutter crank assembly**

<table>
<thead>
<tr>
<th>Weight</th>
<th>183.7 Kg (405 lbs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Packer cutter crank assembly</td>
<td>12 bolt on packer control arms, 12 bolt on hardened packer fingers</td>
</tr>
</tbody>
</table>

**Knifebed, knives, knife engagement system, and protection**

| Knifebed pan width                          | 802 mm (31.6 in)         |
| Knifebed width, outside knife to outside knife | 580 mm (22.8 in)     |
| Knives, total number                        | 6 knives                 |
| Knife spacing with all knives in location   | 116 mm (4.6 in)          |
| Knife engagement method                     | hydraulic cylinder       |
| Knife protection                            | 1 spring per knife       |

**Crop length (approximate)**

| 6 knives                                    | 116 mm (4.6 in)          |

#### Stuffer System

**Protection, components, and operation**

| Stuffer latch lock                          | manual lever, direct acting |
| Shearbolt on main drive sprocket            | 1/2-13 x 2-3/4 in shearbolt and 1/2-13 nut |
| Chain                                       | RC100 roller chain        |
| Lift mechanism (into bale chamber)          | 6 stuffer fingers         |
Windrow size compensation ................................................................. automatic stuffer sensor door engages stuffer clutch

**Plunger System**

Stroke, speed, rollers, and bearings

- Length of stroke .............................................................................. 740 mm (29.1 in)
- Speed ............................................................................................... 47 strokes/min
- Front and rear rollers and bearings ............................................... 4 rollers with tapered roller bearings
- Side rollers and bearings ................................................................ 2 rollers with sealed ball bearings
- Connecting rod rear end bearings ................................................. 2 sealed spherical roller bearing sets per connecting rod rear end
- Connecting rod rear end bearing lubrication ................................. grease

**Bale Tying Systems**

Twine

- Types ............................................................................................. high quality split film polypropylene or sisal twine only
- Minimum knot strength ................................................................. 1557 N (350 lbf)
- Active use capacity ........................................................................ 20 balls
- Total storage capacity ................................................................. 30 balls

Knotters

- Quantity .......................................................................................... 4 double knot type
- Knotter spacing ............................................................................ 176 mm (6.9 in)

Needles

- Quantity .......................................................................................... 4 needles

Protection

- Shearbolt on main drive sprocket .................................................. 1/2-13 x 2-3/4 in shearbolt and 1/2-13 nut
- Knotter/needle lockout ................................................................. manual lever, direct acting
- Needle protection linkage .............................................................. automatic, link to needle carriage

**Bale Chamber Tension System**

Control, actuation, and system supply

- Control ........................................................................................... console operated hydraulics
- Actuation ......................................................................................... spool type solenoid valve
- System supply ................................................................................. open center on board powered hydraulics

**Ejector System**

Components and Operation

- Number of teeth ............................................................................. 8 teeth
- Selectable number of teeth .......................................................... 2, 4, 6, or 8 teeth engaged
- Slide type ......................................................................................... ball bearing rollers
- Power .............................................................................................. hydraulic cylinder
- Cylinder diameter .......................................................................... 64 mm (2.5 in)
- Stroke ............................................................................................. 610 mm (24.0 in)
- Valve ............................................................................................... enable valve/control valve
- Operation ....................................................................................... lever at rear of baler
SPECIFICATIONS

Roller Bale Chute System (If Equipped)

Length (2 Position Adjustable)
- Roller bale chute extended maximum length: 1990 mm (78.3 in)
- Roller bale chute extended minimum length: 1640 mm (64.6 in)
- Roller bale chute normal maximum operating length: 1850 mm (72.8 in)
- Roller bale chute normal minimum operating length: 1500 mm (59.1 in)

Number of rollers: 6 rollers
Roller diameter: 152 mm (6 in)

Lift mechanism: hydraulic power lift

Bounce control, brass friction disc, diameter: 75 mm (3 in)

Lamps
- Work lamps: 3 number 862 halogen bulbs
- Service lamps: 1 number 1156 halogen bulb, 1 number 1141 bulb, and 3 number 862 halogen bulbs
- Rear lamps: 2 amber flashing and turn signal lamps, 2 red tail lamps

Knotter Lubrication Pump - Lubricant, Capacity, and Points

Power System: SBC (Square Baler Controller) system
Enclosure rating: IP 6K9K - protected from water sprayed in all directions
Maximum operating pressure: 20 bars (290 psi)
Knotter pump pressure relief valve: release pressure, 100 bars (1450 psi)
Temperature range: -25 C to +70 degree C (-13 F to +158 degree F)

Reservoir capacity, lubricant, and output
- Reservoir capacity: 2000 cu cm (67.6 fl oz)
- Lubricant: SAE 80W-140, SAE 85W-140, or API GL-5
- Pump output: 2.8 cu cm/min (0.1 fl oz/min)

Connection and lubrication points
- Outlet connection: 1/8 inch NPT (female)
- Number of lubrication points (6 points per knotter): 24 points

Lubricants and Capacities

Gearbox, main
- Lubricant: SAE 80W-140, or SAE 85W-140, API GL-5
- Quantity: 20.3 liters (21.4 qt), or 18.1 Kg (40.0 lb)

Packer/cutter crank bearings
- Lubricant: SAE 85W-140, or SAE 85W-140 API GL-5
- Quantity: 225 ml (7.6 fl oz), or 0.45 kg (1 lb) per bearing box

Knotter Lubrication System
- Lubricant: SAE 80W-140, SAE 85W-140, or API GL-5
- Reservoir capacity: 2000 cu cm (67.6 fl oz)

Roller chains: clean engine oil
Lubrication to use at lubrication fittings: number 2 multi-purpose lithium grease
IDL (Implement Driveline) and CV (Constant Velocity) splines and joints: number 2 multi-purpose lithium grease
Connecting rod spherical roller bearings: number 2 multi-purpose lithium grease
Plunger roller bearings: number 2 multi-purpose lithium grease
Wheel bearings: heavy duty wheel bearing grease

**Hydraulic Fluid and Capacities**

Hydraulic fluid type and capacities

- Fluid type: ISO 68 hydraulic oil
- System quantity, approximate: 56.7 liters (60 qt)
- Reservoir quantity, approximate: 49.2 liters (52 qt)

**Tires, Brake Systems (If Equipped), and Maximum Speeds**

**Tires**

- Single axle baler tires
  - Tire size: 600/50 x 22.5, 12 ply
  - Tire pressure: 2.1 bar (30 psi)
  - Lug nut size: M18 x 1.5
  - Lug nut torque (lightly oiled lugs, SAE 30): 350 Nm (260 lbf ft)

- Tandem axle baler tires
  - Tire size: 500/50 x 17, 16 ply
  - Tire pressure: 2.1 bar (30 psi)
  - Lug nut size: M18 x 1.5
  - Lug nut torque (lightly oiled lugs, SAE 30): 350 Nm (260 lbf ft)

- Pickup tires
  - Tire size: 4.8 x 8.0, 8 ply pneumatic with inner tube
  - Tire pressure: 2.76 bar (40 psi)

**Brake Systems (If Equipped)**

- Parking brake system: manual control, mechanical actuation
- Service brake system
  - Hydraulic or air operated: actuated with tractor brakes
  - Single axle drum size: 400 x 80 mm (15.7 x 3.1 in)
  - Tandem axle drum size: 300 x 100 mm (11.8 x 3.94 in)
- Baler disconnect brake system, hydraulic: automatic electronic control, hydraulic actuation
SPECIFICATIONS

Maximum Speeds for this Baler

Single axle balers
  Maximum speed with a single axle and no brakes ................................................................. 40 kph (25 mph)
  Maximum speed with a single axle and brakes ................................................................. 40 kph (25 mph)

Tandem axle balers
  Maximum speed with tandem axles and no brakes ....................................................... 40 kph (25 mph)
  Maximum speed with tandem axles and brakes .......................................................... 60 kph (37 mph)

NOTE: Do not exceed the maximum legal speeds for this baler on public roads.

Tractor Requirements

Horsepower
  Baler
    Minimum........................................................................................................................... 112+ kw (150+ PTO hp)
    Recommended ................................................................................................................. 134+ kw (180+ PTO hp)

Weight (minimum)
  Towing a baler only ........................................................................................................ 9589 kg (21 736 lb)
  Towing a baler and an accumulator ............................................................................... 10 493 kg (23 134 lb)

PTO speed .............................................................................................................................................................. 1000 rpm

PTO type ........ ISO (ASABE) Type 2, 35 mm (1-3/8 in), 21 tooth, or ISO (ASABE) Type 3, 45 mm (1-3/4 in), 20 tooth

Hydraulic cylinder power from remote circuit
  Pickup lift (all balers) ........................................................................................................ 1 double acting
  Tandem axle (if equipped) steering lock ........................................................................ 1 single acting
  Packer cutter knife bed .................................................................................................. 1 double acting

Electrical system .................................................................................................................. 12V DC, 3 pin cab plug with switched, unswitched, and ground
  Lamps ........................................................................ ISO or ASABE with 7 pin electrical connector (can require a conversion harness)

Noise Levels

The level of airborne noise generated by this baler and measured at the baler's outside surfaces is not more than the following value:
  Noise level ................................................................................................................................................. 98 dB(A)

NOTE: The noise level was determined with a baler that was in operation, but not under a load. The noise level generated by this baler will vary with crop conditions and with different tractors.