



# MACPRESSE EUROPA

[WWW.MACPRESSE.COM](http://WWW.MACPRESSE.COM)

## MACPRESSE: A GLOBAL ITALIAN SUCCESS STORY





HEADQUARTER



SERVICE & MAINTENANCE

## MACPRESSE PRODUCTS, OUR DISTINCTIVE VALUES

### PRODUCTION EFFICIENCY

Cutting efficiency and production optimisation (m<sup>3</sup>/h), high output specific weight.

### REMOTE SOFTWARE SUPPORT

Integrated troubleshooting modem.

### ENERGY SAVING

First class Bosch-Rexroth hydraulic pumps.

### MACPRESSE TYING

Highly customisable system using plastic wire, steel wire or double steel wire.

### HIGH WEAR RESISTANCE

Patented HARDOX steel liners.

### HIGH EFFICIENCY MOTORS

High efficiency IE3 motors, reduced electricity consumption compared with traditional motors.



# MACPRESSE

## TIMELINE



**1961**

Meccanica  
Agricola  
Cartaria



**1970**

FIRST  
AUTOMATIC  
PRESS



**1991**

New facilities  
11.000 m<sup>2</sup>  
COVERED SPACE



**2010**

Steel structural  
work PRODUCTION  
SITE 3.000 m<sup>2</sup>

MID  
**900**

Established in Brescia,  
in a small workshop  
where the **FIRST  
AGTRICULTURA  
MACHINERY WAS  
MANUFACTURED**



**1968**

FIRST PRESS  
for baling paper



**1974**

MILAN  
FACTORY



**1996**

Expansion of facilities  
17.000 m<sup>2</sup> COVERED  
SPACE

**FOUNDED BY THE SCOTUZZI FAMILY  
IN 1805, MACPRESSE IS NOW  
DOING BUSINESS IN MORE THAN  
50 COUNTRIES WORLDWIDE.**

# MACPRESSE QUALITY PROCESS

LIFE CYCLE OF MACPRESSE PRODUCTS, FROM DESIGN TO ON-SITE ASSEMBLY

STEP 1  
DESIGN



STEP 2  
COMPUTER NUMERICAL CONTROL (CNC)



STEP 3  
STRUCTURAL STEEL CONSTRUCTION



STEP 4  
PRODUCTION AND ASSEMBLY



STEP 5  
PAINTING



STEP 6  
TESTING



STEP 7  
STORAGE



STEP 8  
DELIVERY



STEP 9  
ON-SITE ASSEMBLY



STEP 10  
COMMISSIONING/  
TRAINING



STEP 11  
LOCAL TECHNICAL IN  
40 COUNTRIES



STEP 12  
SPARE PARTS  
INVENTORY

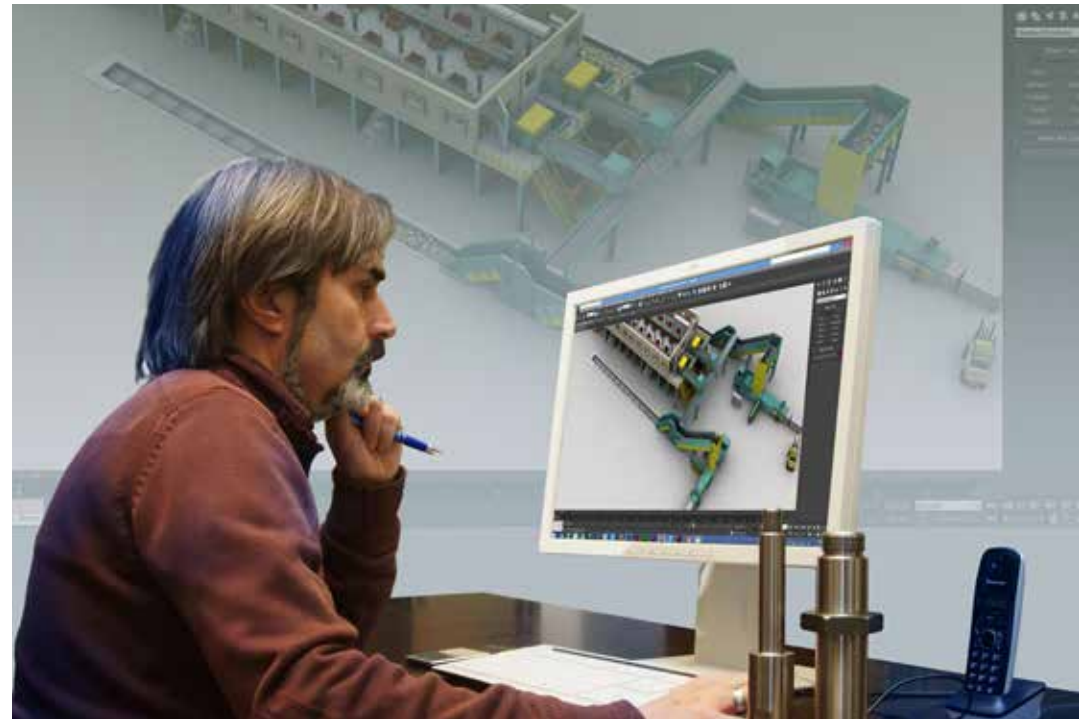




## WORKING WITH MACPRESSE RESEARCH

**ALL NEW EQUIPMENT IS DESIGNED UTILIZING THE COMPANY'S MANY DECADES OF EXPERIENCE AND ENGINEERING EXPERTISE. MACPRESSE IS ATTENTIVE TO MARKET NEEDS AND CUSTOMER INPUT.**

MACPRESSE IS A GLOBAL LEADER IN EQUIPMENT DESIGN FOR THE TREATMENT OF WASTE AND RECYCLABLES.



## DESIGN

**DESIGNED AND MANUFACTURED ENTIRELY IN MILAN (ITALY), AT THE MACPRESSE FACTORIES**

- TECHNOLOGICALLY ADVANCED
- BUILT WITH EXTRA HEAVY CONSTRUCTION
- DESIGNED FOR LONG LIFE
- MADE WITH ATTENTION TO EVERY DETAIL WITH AUTOCAD DESIGN AND CNC MACHINERY
- MADE WITH THE BEST AVAILABLE COMPONENTS AND MATERIALS

WORKING WITH MACPRESSE

# COMPUTER NUMERICAL CONTROL (CNC)

OUR RESULTING RESEARCH HAS ALLOWED US TO CREATE A TEAM OF ENGINEERS AND PROFESSIONALS FROM ALL PARTS OF THE WORLD WITH SUPERB TRAINING AND HIGHLY TECHNICAL EXPERIENCES. OUR COLLECTIVE KNOWLEDGE ALLOWS US TO MAKE EVERY MACPRESSE MACHINE WITH DETAILED ATTENTION TO ALL CONSTRUCTION FEATURES USING AUTOCAD DESIGN AND CNC MACHINERY.





WORKING WITH MACPRESSE

# STRUCTURAL STEEL CONSTRUCTION



**WE ARE CONSTANTLY EVALUATING NEW DESIGNS AND METHODS TO DEVELOP INNOVATIVE SYSTEMS AND EQUIPMENT DESIGNED TO EFFICIENTLY PROCESS AND TREAT VARIOUS KINDS OF WASTE AND RECYCLABLES.**

THE SMALLEST DETAILS OF EVERY NEW PRODUCT ARE STUDIED, BRINGING TOGETHER THE COMPANY'S MANY YEARS OF EXPERIENCE, ENGINEERING EXCELLENCE AND CONTINUOUS AWARENESS OF THE NEEDS OF THE DEVELOPING MARKET, WITH SPECIAL ATTENTION TO THE PARTICULAR REQUIREMENTS OF EACH COUNTRY IN WHICH WE OPERATE.

REPLACEABLE BOLT-IN LINERS MADE OF HARDOX WEAR-RESISTANT STEEL, EXTENDS USEABLE LIFE OF THE BALERS. THE SPECIAL LINERS ARE BOLTED IN THE EXTRUSION CHANNELS AND COMPACTION CHAMBER IN CONTACT WITH RAW MATERIALS. THIS IS A TREND SET BY MACPRESSE.



WORKING WITH MACPRESSE

# PRODUCTION AND ASSEMBLY



**WE ARE CONSTANTLY EVALUATING NEW DESIGNS AND METHODS TO DEVELOP INNOVATIVE SYSTEMS AND EQUIPMENT DESIGNED TO EFFICIENTLY PROCESS AND TREAT VARIOUS KINDS OF WASTE AND RECYCLABLES.**



# WORKING WITH MACPRESSE PAINTING

## USE OF WATER-BASED PAINT WITH LOW ENVIRONMENTAL IMPACT



WORKING WITH MACPRESSE

# DRY TEST AND QUALITY CONTROL

**OUR QUALITY GUARANTEE IS BASED ON A PROPRIETARY PROCESS DESIGNED IN-HOUSE THAT REQUIRES EXACTING TEST ON ALL MECHANICAL COMPONENTS, THEREBY ENSURING PROPER OPERATION BEFORE AND AFTER INSTALLATION.**

Prior to releasing any Macpresse equipment to our customers, a comprehensive review is made on all hydraulic and mechanical pressures.



**Rexroth**  
Bosch Group

**SIEMENS**



MACPRESSE REQUIRES OUR SUPPLIERS TO BE OF THE HIGHEST QUALITY AND GUARANTEE:

BOSCH REXROTH (FOR HYDRAULIC COMPONENTS), SIEMENS (FOR ELECTRONIC COMPONENTS) AND HARDOX (FOR ALL WEAR-RESISTANT LINERS).





# WORKING WITH MACPRESSE STORAGE & DELIVERY



## OVER 50 YEARS

MACPRESSE HAS A PROVEN REPUTATION FOR DESIGNING AND MANUFACTURING TECHNOLOGICALLY INNOVATIVE AND RELIABLE EQUIPMENT.

OUR PRESSES CAN BE USED IN DIFFERENT ENVIRONMENTS THANKS TO THE AVAILABILITY OF BOTH SMALL PRESSES, WHICH ARE IDEAL FOR LOGISTICS CENTRES, AND LARGE PRESSES WHICH ARE PERFECT FOR LANDFILL SITES.

**WE DESIGN CUSTOM-MADE SYSTEMS AND SOLUTIONS, OFFERING COMPREHENSIVE CONSULTANCY FOR OUR CUSTOMERS.**

WE AT MACPRESSE VIEW OUR CUSTOMERS AS AN ESSENTIAL RESOURCE, WE LISTEN TO THEM TO LEARN ABOUT THEIR RELEVANT NEEDS AND POTENTIAL INDUSTRY CHANGES. THIS IS ESSENTIAL TO ACHIEVE OUR GOAL IN PROVIDING SEAMLESS INTEGRATION PROCESS AND ASSIST WITH IMPROVED DAY-TO-DAY PLANT OPERATIONS.

WORKING WITH MACPRESSE

# ON-SITE ASSEMBLY, TRAINING & START-UP

**PRIOR TO RELEASING ANY MACPRESSE EQUIPMENT TO OUR CUSTOMERS, A COMPREHENSIVE REVIEW IS MADE ON ALL HYDRAULIC AND MECHANICAL PRESSURES. WE ALSO TEST THE COMPUTER SYSTEM MANAGEMENT AND SOFTWARE OPERATION.**

START-UP AND TRAINING FOR OUR CUSTOMERS



ASSEMBLY PHASES AT CUSTOMER'S FACILITIES



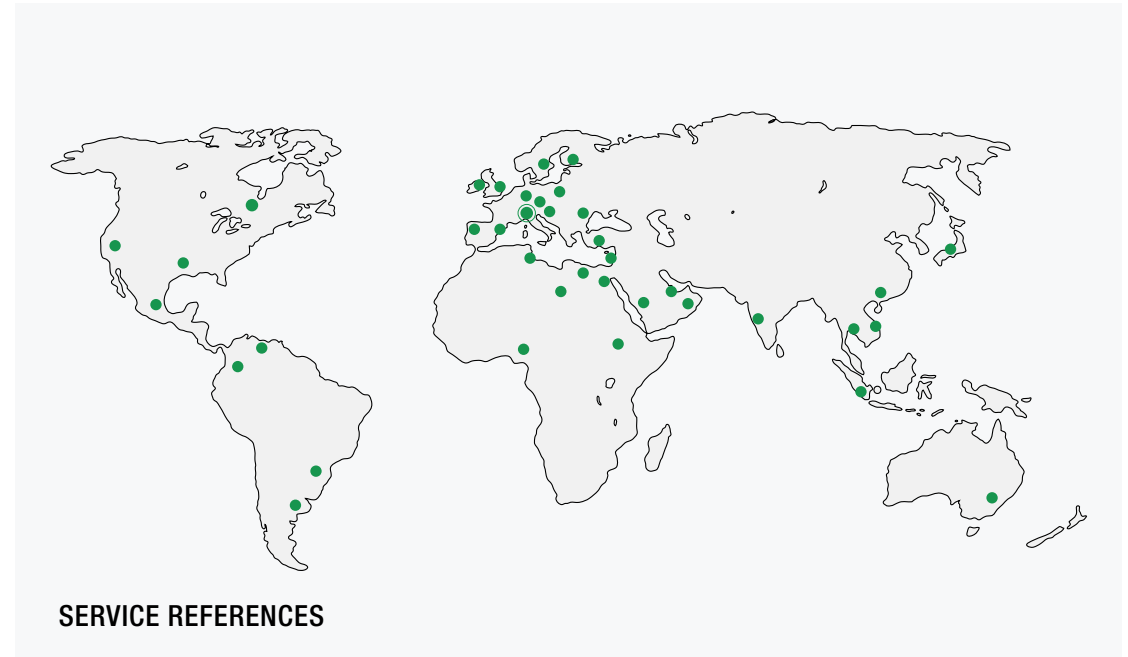
START-UP AND TRAINING



# WORKING WITH MACPRESSE GLOBAL SUPPORT

**MACPRESSE IS PRESENT THROUGHOUT THE WORLD THANKS TO ITS SKILLS AND EXCELLENCE IN MANUFACTURING WASTE MATERIAL RECYCLING AND PROCESSING PLANTS**

OUR CUSTOMERS CAN RELY ON AFTER-SALES SUPPORT THROUGHOUT THE 5 CONTINENTS. WE DESIGN CUSTOMISED SOLUTIONS AND THANKS TO OUR TEAM OF SKILLED TECHNICIANS THE AFTER-SALES NETWORK CAN GUARANTEE MINIMUM MACHINE DOWNTIMES.



**MACPRESSE SPARE PARTS STORES ARE PRESENT IN OVER 50 COUNTRIES WHERE WE EXPORT. WE PROVIDE TRACKING AND CODING OF ALL THE SPARE PARTS TO GUARANTEE THAT STOCK IS ALWAYS AVAILABLE. WE MAINTAIN OVER 3 MILLION EUROS OF SPARE PARTS STOCK TO SUPPORT CUSTOMERS IN 5 CONTINENTS.**

# MACPRESSE PRODUCT RANGE

THE COMPLETE MACPRESSE PRODUCT RANGE:  
BALERS FOR RECYCLABLE, BALERS FOR WASTE, CONVEYOR, SHREDDER, PLANTS.

PRODUCT 1  
SMALL DIMENSIONS  
BALER



PRODUCT 2  
MEDIUM DIMENSIONS  
BALER



PRODUCT 3  
BALER FOR  
RECYCLABLE



PRODUCT 4  
BALER FOR  
WASTE



PRODUCT 5  
CONVEYOR



PRODUCT 6  
SHREDDER



PRODUCT 7  
PLANTS





# MAC 102 A SMALL BALER WITH BIG PERFORMANCE



**MUNICIPAL SOLID  
WASTE PROCESSING**



**RECYCLING SECONDARY  
RAW MATERIAL**



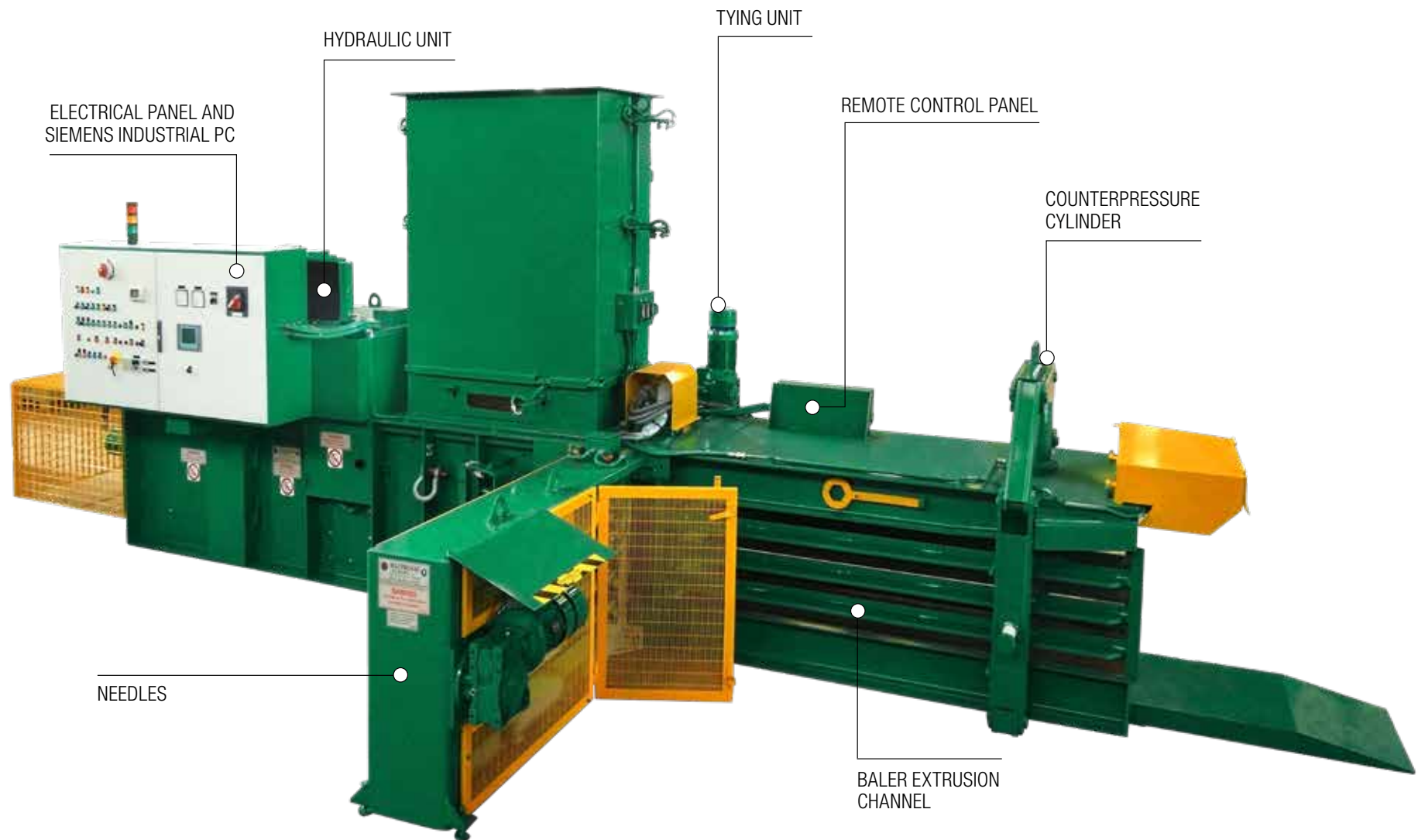
**RENEWABLE ENERGY  
AND BIOMASS**



**PAPER INDUSTRY**

# MAC 102

## GENERAL DESCRIPTION





# MATERIALS PROCESSED AND PERFORMANCE



**PET**

INFEED DENSITY

EUROPE 25/30 kg/m<sup>3</sup>

USA 1.56/1.87 lb/ft<sup>3</sup>



**OCC**

70/80 kg/m<sup>3</sup>

4.37/4.99 lb/ft<sup>3</sup>



**MIXED PAPER**

100/120 kg/m<sup>3</sup>

6.24/7.49 lb/ft<sup>3</sup>

Mac 102

EUROPE

PET 2 TON/H

OCC 5 TON/H

MIX PAPER 6 TON/H

USA

PET 2.2 TON (US)/H

OCC 5.5 TON (US)/H

MIX PAPER 6.6 TON (US)/H

MODEL  
MAC 102





# 30 HP

MOTOR POWER

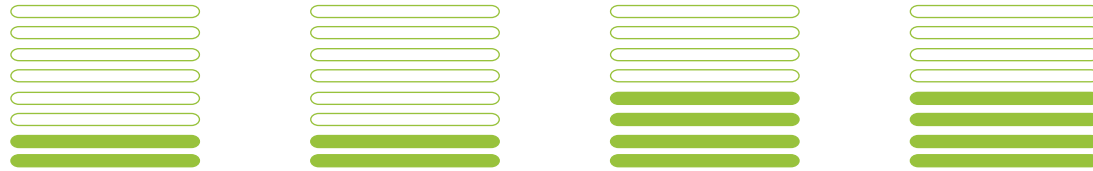
# CUTTING AND THRUST POWER

# 60 TON / 132 000 LB

## NO LOAD PERFORMANCE

Note: Performance rates, bale weights and bale densities are subject to moisture content, material pre-bale densities, feed rates and other variables in baling.

EUROPE	1,0 m <sup>3</sup>	272 m <sup>3</sup> /h	4,5	13 sec
USA	35.3 ft <sup>3</sup>	9 605 ft <sup>3</sup> /h	4.5	13 sec



LOADING VOLUME    VOLUMETRIC PRODUCTION    CYCLES PER MINUTE    CYCLE TIME

## GENERAL SPECIFICATIONS

	EUROPE (mm)	USA
OVERALL LENGTH	7780	25'6"
MAXIMUM WIDTH	4 150 (at tier station)	13'7"
OVERALL HEIGHT	2 945 (at flange hopper)	9'8"
FEED OPENING	1 350 x 750	53" x 29' 1/2"
BALE DIMENSIONS W x H	800 x 800	31" 1/2 x 31" 1/2
BALER WEIGHT WITHOUT FLUFFER	10 700 Kg (without oil)	23 590 lbs
BALER WEIGHT WITH FLUFFER	13 200 Kg (without oil)	29 100 lbs
NUMBERS OF WIRES	4	4

## MODEL

# MAC 102

EUROPE  
**PET 2 TON/H**  
**OCC 5 TON/H**  
**MIX PAPER 6 TON/H**

USA  
**PET 2.2 TON (US)/H**  
**OCC 5.5 TON (US)/H**  
**MIX PAPER 6.6 TON (US)/H**

## TECHNICAL DATA

### MAIN MOTOR POWER

22 kw

### MAIN HYDRAULIC PUMP

Double vane pump

### PUMP FLOW CAPACITY

184 L/min  
 48.6 US Gal/min

### OPERATING CONTROL

Siemens S7 1500 programmable controller

### RAM FORCE

60 000 kg  
 132 000 lbs

### RAM FORCE PRESSURE

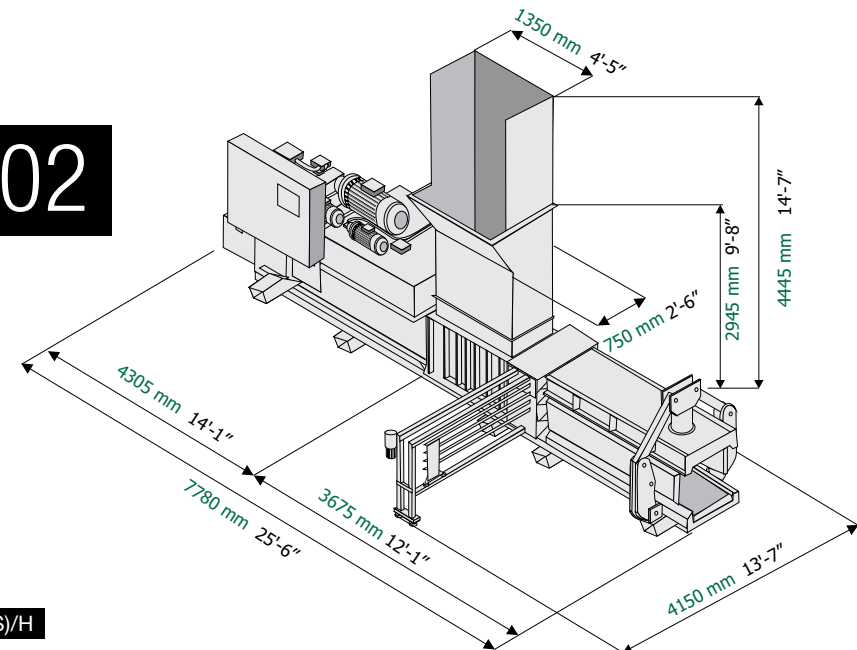
9.3 kg/ cm<sup>2</sup>  
 133 Psi

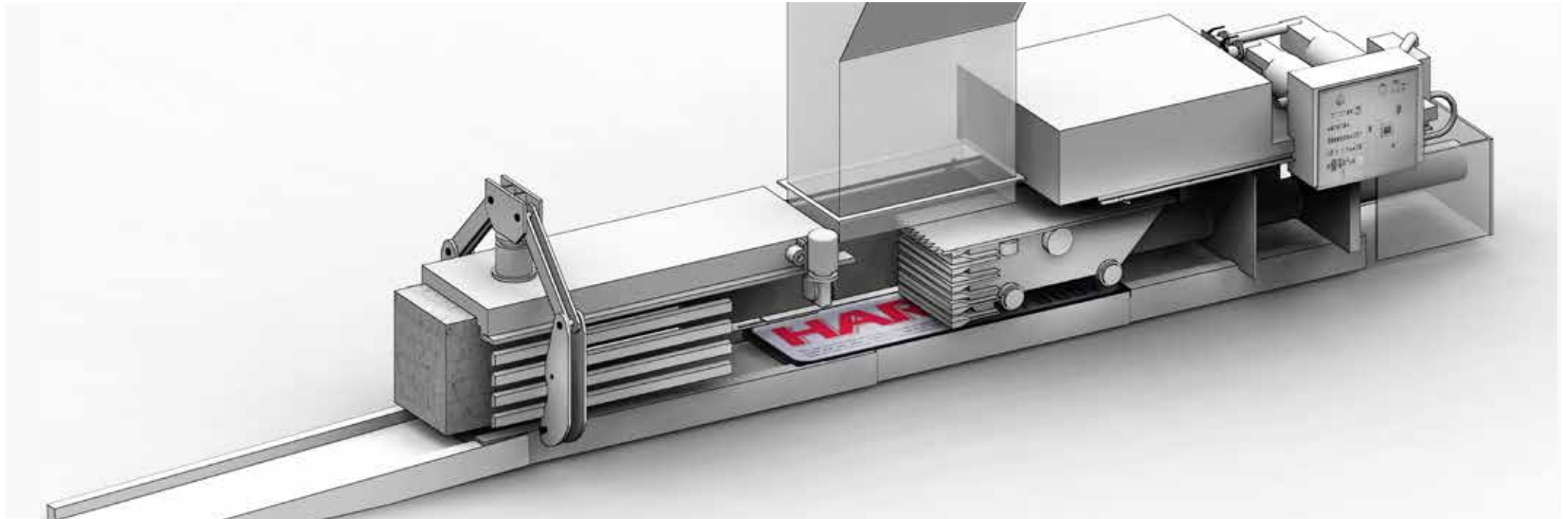
### OIL RESERVOIR CAPACITY

1 300 L  
 343 US Gal

### COOLING SYSTEM

Thermostatically controlled air to oil heat exchanger





**WEAR RESISTANT**

**CORE VALUE**



LONG SERVICE LIFE



ROBUSTNESS



EASY MAINTENANCE

## HARDOX STEEL LINERS



BOLT-IN WEAR LINER MADE OF HARDOX WEAR-RESISTANT STEEL, EXTENDS EQUIPMENT LIFE. BOLT-IN, REPLACEABLE WEAR LINERS ARE LOCATED ON FLOOR OF MAIN RAM.

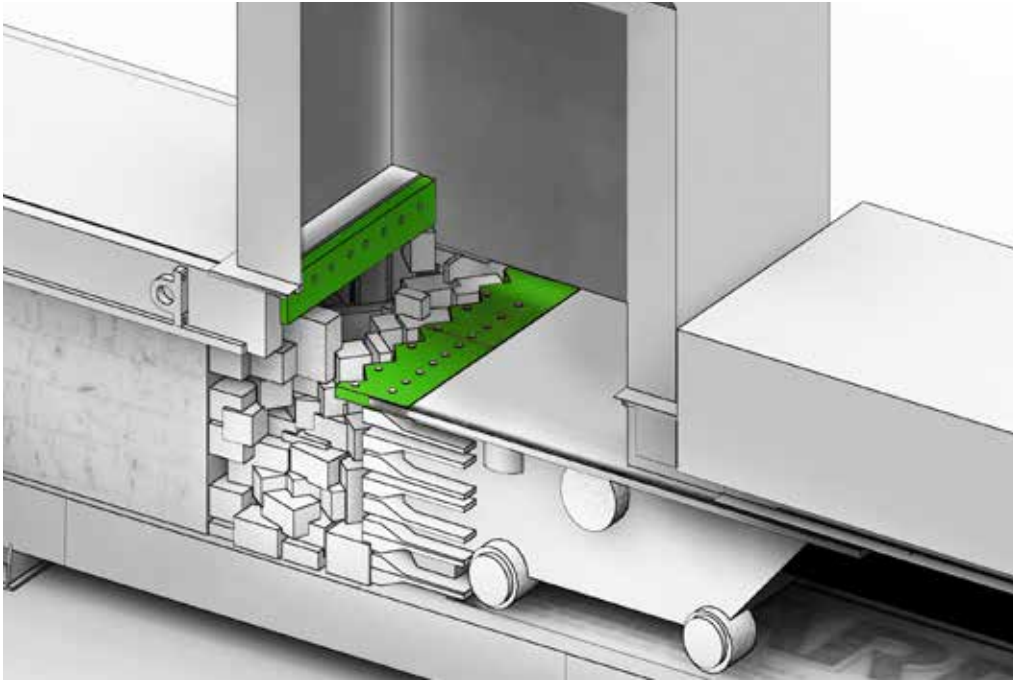
This wear resistant system protects the baler from abrasion and corrosion.

1. RESISTANCE TO WEAR AND CHEMICAL AGENTS
2. RAPID REPLACEMENT (PATENTED BOLT-IN SYSTEM)
3. MINIMIZE BALER DOWNTIME

# 400%

**LONGER LASTING**  
THAN STANDARD STEEL



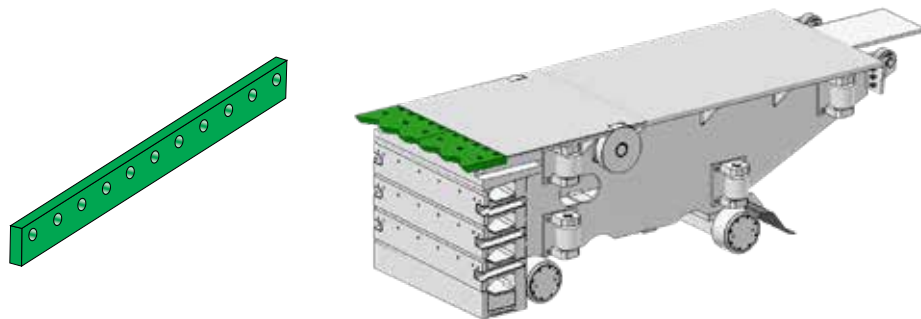


## CUTTING SYSTEM

CORE VALUE

### HIGH EFFICIENCY BLADE

BLADES DESIGNED BY MACPRESSE TO OPTIMIZE CUTTING OF EXCESS MATERIAL IN THE HOPPER. THE BLADES ARE TEMPERED TO ENSURE A LONGER SERVICE LIFE.



FAST INTERCHANGEABILITY



LOW ENERGY CONSUMPTION



LONG SERVICE LIFE

### COUNTER-PRESSURE SYSTEM



HYDRAULIC QUICK RELEASE CIRCUIT FOR FAST ZERO-SETTING OF COUNTERPRESSURE SHOULD A FOREIGN OBJECT ACCIDENTALLY FALL IN THE HOPPER.



## HYDRAULICS SYSTEM

CORE VALUE



RELIABILITY



LOW ENERGY  
CONSUMPTION



EASY  
MAINTENANCE

## SMART SYSTEM ADAPTABLE TO MATERIAL

PUMPS POSITIONED OUTSIDE OF OIL TANK FOR A BETTER PERFORMANCE AND EASIER MAINTENANCE.

# 30%

## ENERGY SAVINGS

COMPARED TO  
TRADITIONAL  
ELECTRIC MOTORS

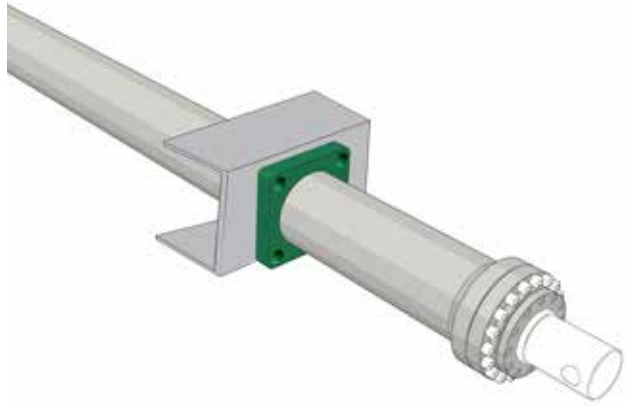
THE INSTALLATION OF VANE PUMP HIGH-LOW PRESSURE PROVIDES A BETTER PERFORMANCE WITH REDUCED ELECTRICAL CONSUMPTION. HIGH EFFICIENCY IE3 MOTORS ARE USED WITH AN ENERGY SAVINGS OF 30% COMPARED WITH TRADITIONAL ELECTRIC MOTORS.





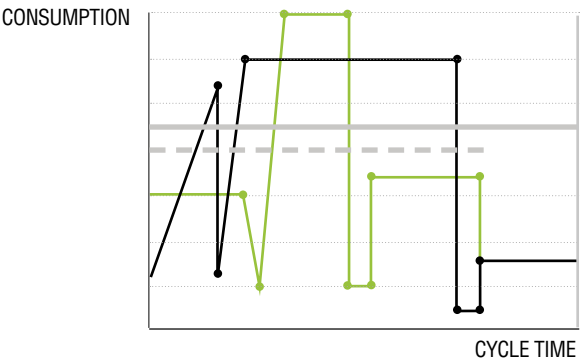


CLEANING AND MAINTENANCE INSPECTION DOORS

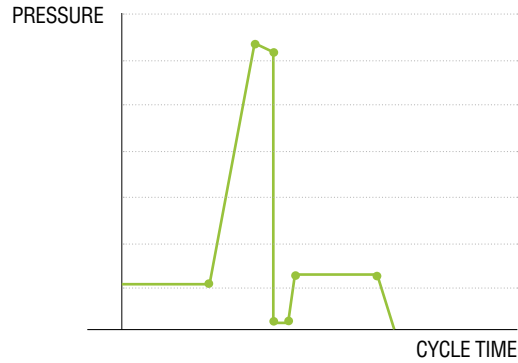


SUPPORT FOR MAIN CYLINDER

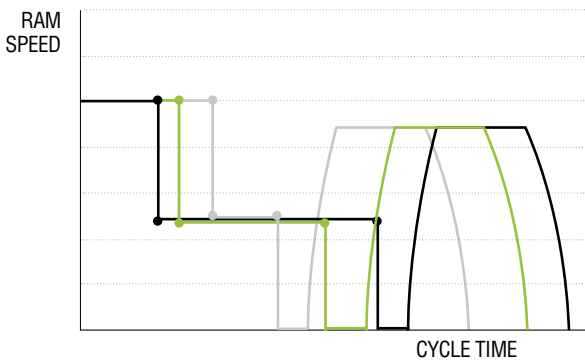
CONSUMPTION - CYCLE TIME DIAGRAM



PRESSURE - CYCLE TIME DIAGRAM



RAM SPEED - CYCLE TIME DIAGRAM



— CONSUMPTION TREND PRESS WITH PRE-COMPACTOR    — CONSUMPTION TREND PRESS WITHOUT PRE-COMPACTOR    — CONSUMPTION MEDIUM WITH PRE-COMPACTOR    - - CONSUMPTION MEDIUM WITHOUT PRE-COMPACTOR

— LIGHT MATERIAL    — MEDIUM MATERIAL    — HEAVY MATERIAL



MAIN ELECTRIC PANEL CONTROL

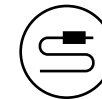


SCART PLUGS AND PROTECTED CABLES ARE INSTALLED.

## ELECTRICAL COMPONENTS

CORE VALUE

SIEMENS



HIGH CABLE RESISTANCE



OPERATOR SAFETY



EASY MAINTENANCE

## CONNECTION OF ELECTRICAL COMPONENTS

Electrical connections are made using SCART leads. Electrical cables are protected by rodent-proof and fire-resistant sheaths.



# TYING MACHINE

## CORE VALUE



RELIABILITY



ROBUSTNESS



FLEXIBILITY



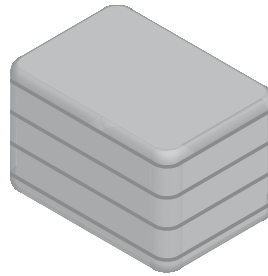
EASY  
MAINTENANCE

## FLEXIBILITY OF USE AND REDUCED OPERATING COSTS

ELECTRO-MECHANICAL HORIZONTAL TYING SYSTEM DESIGNED FOR TYING BOTH PLASTIC AND STEEL WIRES

This system simplifies the cleaning process for the tying unit, providing increased safety for the operator. The maintenance and cleaning of the tying unit is done at floor level; replacement of baling wire is at floor level, no pit needed.

### TYING METHOD



4 WIRES



NEEDLES



TYING UNIT



STEEL WIRE



PLASTIC WIRE

# MULTI-MATERIALS BALES

## BALES INTEGRITY



# TRANSPORT EFFICIENCY

## ROAD TRANSPORT



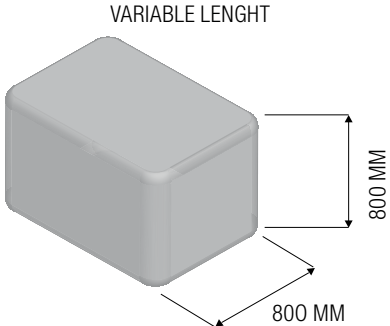
ROAD  
TRANSPORT



RAIL  
TRANSPORT



SEA  
TRANSPORT



**DIMENSIONS OF BALES ARE SUITABLE FOR OPTIMIZING LOADING OPERATIONS OF THE MOST COMMON LAND, SEA AND RAILROAD METHODS OF TRANSPORTATION.**



# MAC 106/2 - 107/2 DESIGNED FOR MIDSIZE RECYCLING PLANTS, SRF & ENGINEERED FUEL



MUNICIPAL SOLID  
WASTE PROCESSING



RECYCLING SECONDARY  
RAW MATERIAL



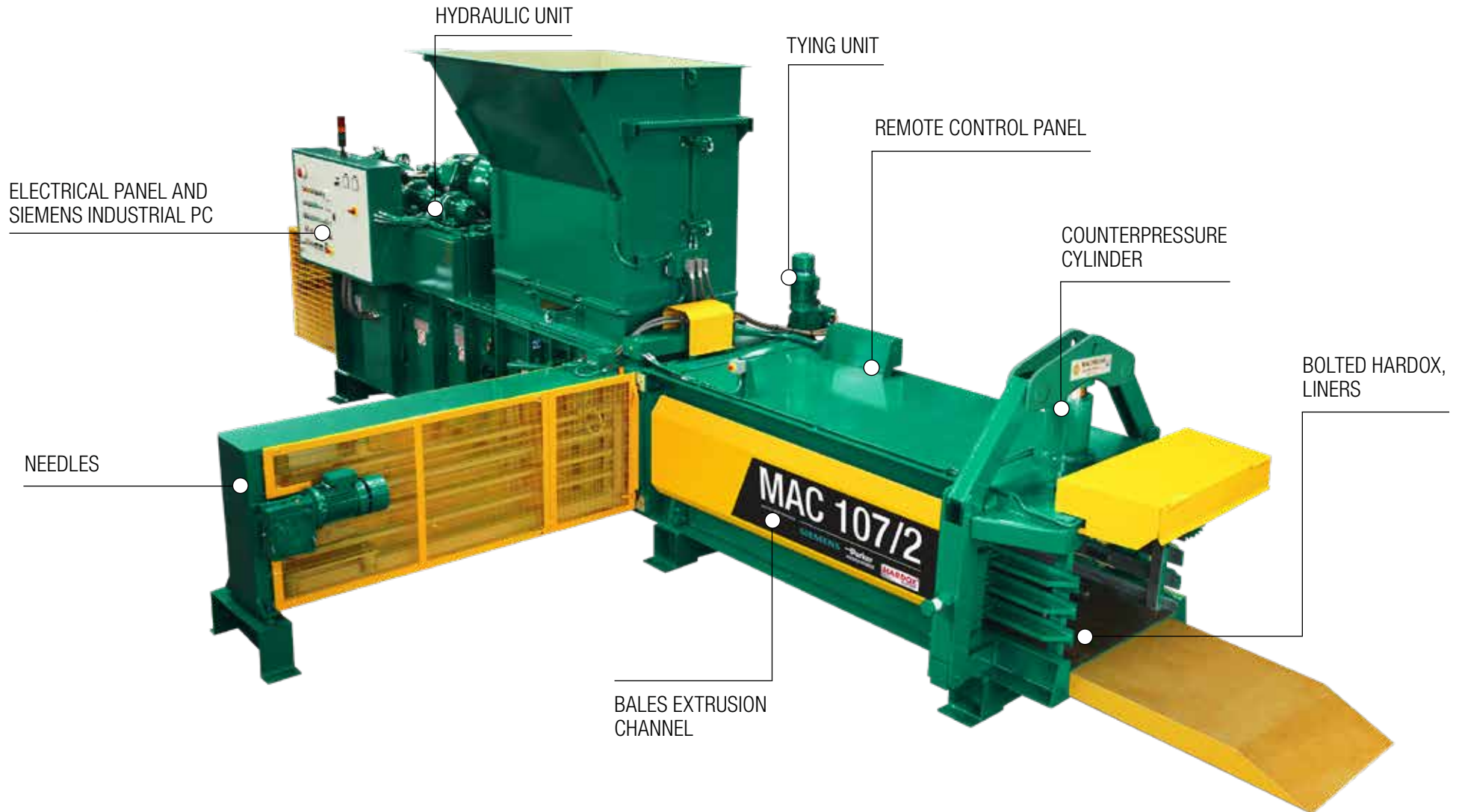
RENEWABLE ENERGY &  
ENGINEERED FUELS



PAPER INDUSTRY

# MAC 106/2 - 107/2

## GENERAL DESCRIPTION





# MATERIALS PROCESSED AND PERFORMANCE



**PET**



**OCC**



**MIXED PAPER**



**RDF/SRF**

INFEEED DENSITY



EUROPE

25/30 kg/m<sup>3</sup>

70/80 kg/m<sup>3</sup>

100/120 kg/m<sup>3</sup>

150/200 kg/m<sup>3</sup>

USA

1.56/1.87 lb/ft<sup>3</sup>

4.37/5 lb/ft<sup>3</sup>

6.24/7.5 lb/ft<sup>3</sup>

9.36/12.5 lb/ft<sup>3</sup>

Mac 106/2

EUROPE

PET 6 TON/H

OCC 12 TON/H

MIX PAPER 20 TON/H

RDF 24 TON/H

USA

PET 6.6 TON (US)/H

OCC 13.2 TON (US)/H

MIX PAPER 22 TON (US)/H

RDF 26.4 TON (US)/H

Mac 107/2

EUROPE

PET 7 TON/H

OCC 13.5 TON/H

MIX PAPER 22 TON/H

RDF 26.5 TON/H

USA

PET 7.7 TON (US)/H

OCC 14.8 TON (US)/H

MIX PAPER 24.2 TON (US)/H

RDF 29.1 TON (US)/H

MODEL  
MAC 106/2





# 60 HP

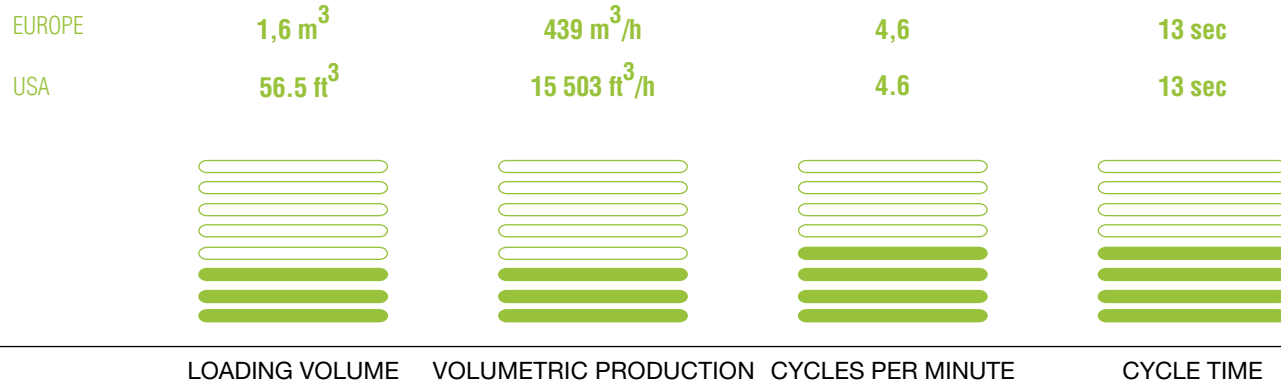
MOTOR POWER

# CUTTING AND THRUST POWER

# 75 TON / 165 500 LB

### NO LOAD PERFORMANCE

Note: Performance rates, bale weights and bale densities are subject to moisture content, material pre-bale densities, feed rates and other variables in baling.



### TECHNICAL DATA

#### MAIN MOTOR POWER

45 kw

#### MAIN HYDRAULIC PUMP

Double vane pump

#### PUMP FLOW CAPACITY

309 L/min  
81.6 US Gal/min

#### OPERATING CONTROL

Siemens S7 1500 programmable controller

#### RAM FORCE

75 000 kg  
165 500 lbs

#### RAM FORCE PRESSURE

9 kg/ cm<sup>2</sup>  
129 PSI

#### OIL RESERVOIR CAPACITY

1 400 L  
370 US Gal

#### COOLING SYSTEM

Thermostatically controlled air to oil heat exchanger

### GENERAL SPECIFICATIONS

EUROPE (mm) USA

OVERALL LENGTH	9 950	32'8"
MAXIMUM WIDTH	5 050 (at tier station)	16'7"
OVERALL HEIGHT	3 860 (at flange hopper)	12'7"
FEED OPENING	1 800 x 1 020	71" X 40"
BALE DIMENSIONS W x H	1 100 x 750	43 <sup>1</sup> / <sub>3</sub> X 29 <sup>1</sup> / <sub>2</sub>
BALER WEIGHT WITHOUT FLUFFER	21 000 KG (without oil)	46 297 lb
BALER WEIGHT WITH FLUFFER	25 500 KG (without oil)	56 217 lb
NUMBERS OF WIRES	4	4

## MODEL

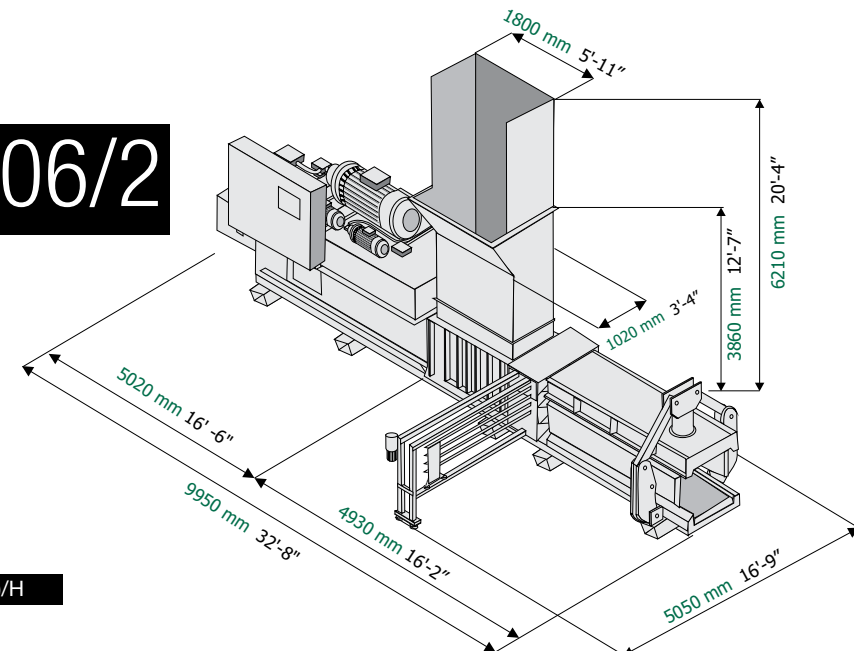
# MAC 106/2

#### EUROPE

PET 6 TON/H  
OCC 12 TON/H  
MIX PAPER 20 TON/H  
RDF 24 TON/H

#### USA

PET 6.6 TON (US)/H  
OCC 13.2 TON (US)/H  
MIX PAPER 22 TON (US)/H  
RDF 26.4 TON (US)/H



MODEL  
MAC 107/2





# 100 HP

MOTOR POWER

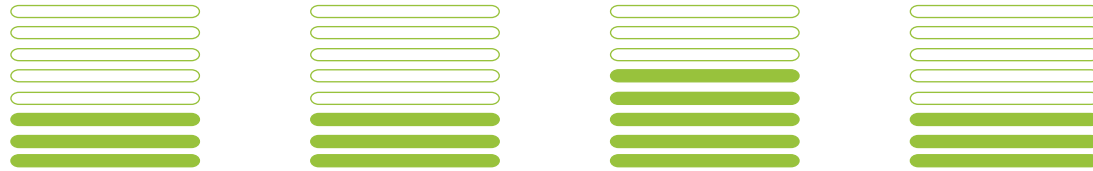
## CUTTING AND THRUST POWER

# 95 TON / 209 450 LB

### NO LOAD PERFORMANCE

Note: Performance rates, bale weights and bale densities are subject to moisture content, material pre-bale densities, feed rates and other variables in baling.

EUROPE	1,6 m <sup>3</sup>	478 m <sup>3</sup> /h	5	12 sec
USA	56.5 ft <sup>3</sup>	16 880 ft <sup>3</sup> /h	5	12 sec



LOADING VOLUME    VOLUMETRIC PRODUCTION    CYCLES PER MINUTE    CYCLE TIME

### GENERAL SPECIFICATIONS

	EUROPE (mm)	USA
OVERALL LENGTH	9 950	32'8"
MAXIMUM WIDTH	5 050 (at tier station)	16'7"
OVERALL HEIGHT	3 860 (at flange hopper)	12'7"
FEED OPENING	1 800 x 1 020	71" x 40"
BALE DIMENSIONS W x H	1 100 x 750	43 <sup>1</sup> / <sub>3</sub> x 29 <sup>1</sup> / <sub>2</sub>
BALER WEIGHT WITHOUT FLUFFER	22 000 Kg (without oil)	48 501 lb
BALER WEIGHT WITH FLUFFER	26 500 Kg (without oil)	58 422 lb
NUMBERS OF WIRES	4	4

## MODEL MAC 107/2

EUROPE  
 PET 7 TON/H  
 OCC 13.5 TON/H  
 MIX PAPER 22 TON/H  
 RDF 26.5 TON/H

USA  
 PET 7.7 TON (US)/H  
 OCC 14.8 TON (US)/H  
 MIX PAPER 24.2 TON (US)/H  
 RDF 29.1 TON (US)/H

### TECHNICAL DATA

#### MAIN MOTOR POWER

75 kw

#### MAIN HYDRAULIC PUMP

Double vane pump

#### PUMP FLOW CAPACITY

434 L/min  
114 US Gal/min

#### OPERATING CONTROL

Siemens S7 1500 programmable controller

#### RAM FORCE

95 000 kg  
209 450 lbs

#### RAM FORCE PRESSURE

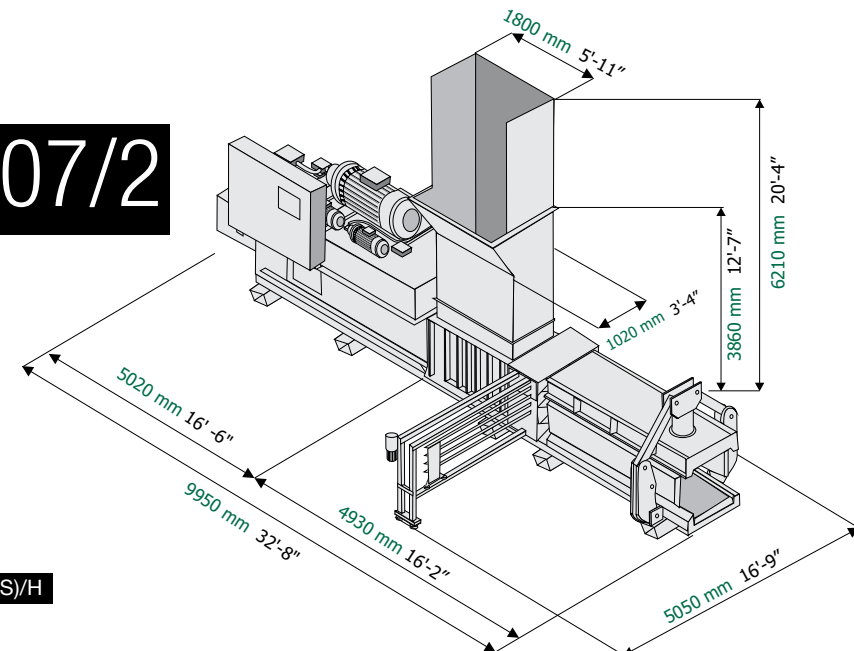
11.5 kg/cm<sup>2</sup>  
163.5 PSI

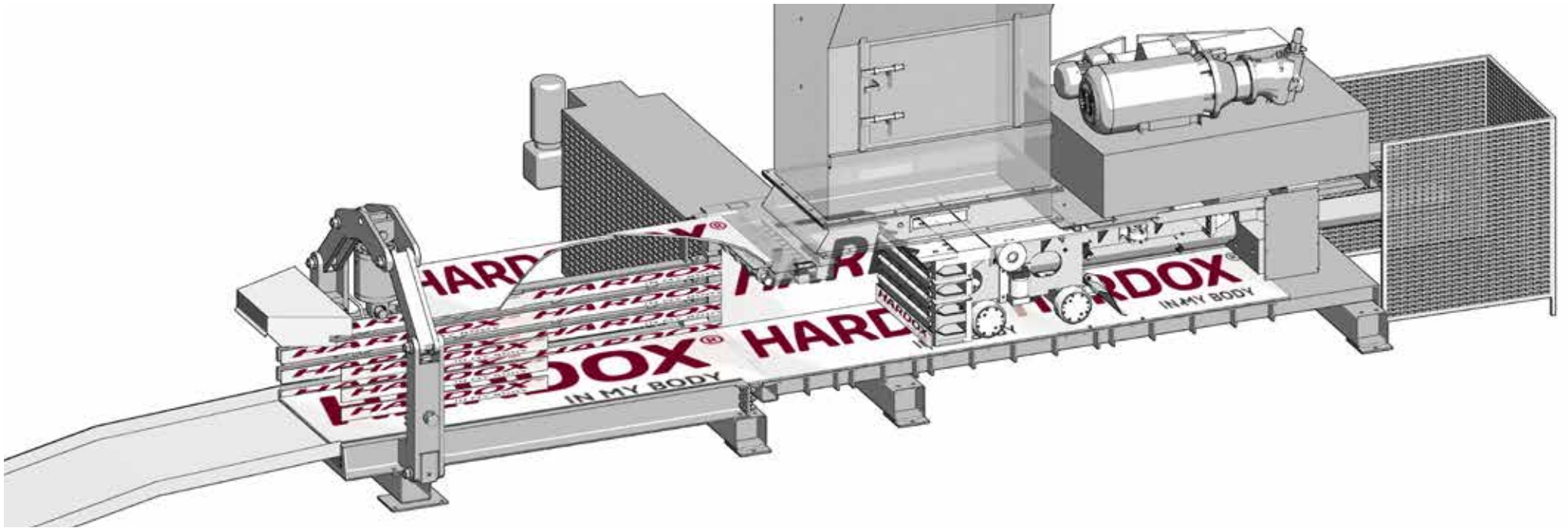
#### OIL RESERVOIR CAPACITY

1 400 L  
370 US Gal

#### COOLING SYSTEM

Thermostatically controlled air to oil heat exchanger





**WEAR RESISTANT**

**CORE VALUE**



LONG SERVICE LIFE



ROBUSTNESS



EASY MAINTENANCE

## HARDOX STEEL LINERS



HARDOX STEEL LINERS REPLACEMENT

THIS WEAR RESISTANT SYSTEM PROTECTS THE BALER FROM ABRASION AND CORROSION.

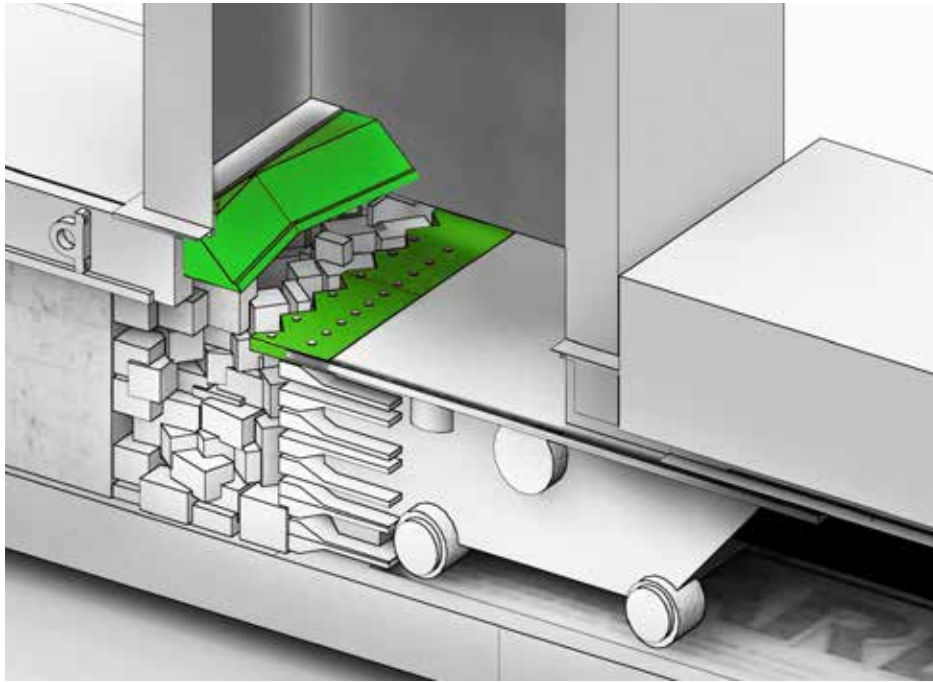
Replaceable liners made of HARDOX wear-resistant steel alloy that extends working life of the equipment. The wear liners are bolted in the extrusion chamber and in the compaction box and can be easily replaced.

1. RESISTANCE TO WEAR AND CHEMICAL AGENTS
2. RAPID REPLACEMENT  
(PATENTED ATTACHMENT SYSTEM)
3. MINIMIZE BALER DOWNTIME

# 400%

LONGER LASTING  
THAN STANDARD STEEL





## COUNTER-PRESSURE SYSTEM

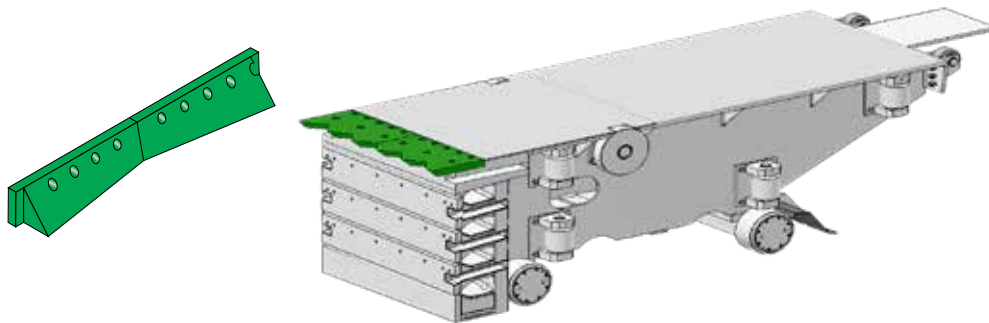
HYDRAULIC QUICK RELEASE CIRCUIT FOR FAST ZERO-SETTING OF COUNTERPRESSURE SHOULD A FOREIGN OBJECT ACCIDENTALLY FALL IN THE HOPPER.

## CUTTING SYSTEM

CORE VALUE

## HIGH EFFICIENCY BLADE

THE BLADES HAVE BEEN DESIGNED BY MACPRESSED TO OPTIMIZE THE CUTTING OF EXCESS MATERIAL IN THE HOPPER; THE BLADES ARE TEMPERED TO GUARANTEE A GREATER RESISTANCE TO WEAR.



QUICK INTERCHANGEABILITY



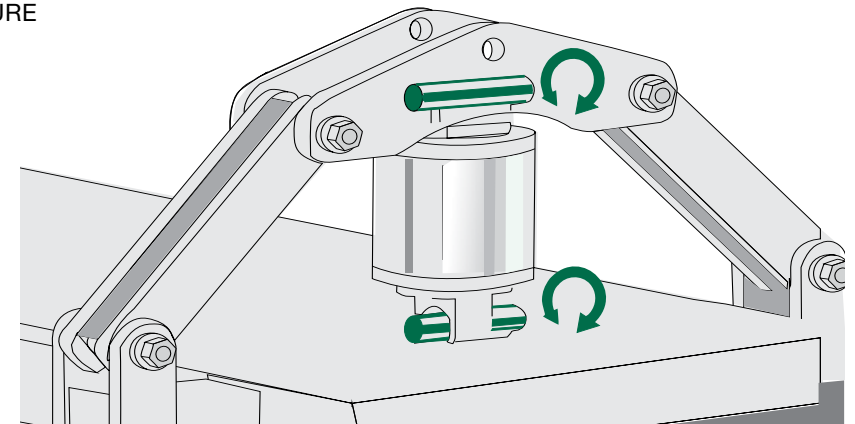
LOW ELECTRICAL CONSUMPTION



LONG SERVICE LIFE

## TILTING COUNTER-PRESSURE CYLINDER

THE SYSTEM IS DESIGNED TO AVOID MECHANICAL STRESS TO THE CYLINDER OF COUNTERPRESSURE





## HYDRAULICS SYSTEM

CORE VALUE



HARSH ENVIRONMENTS



LOW ENERGY CONSUMPTION



EASY MAINTENANCE

## SMART SYSTEM ADAPTABLE TO MATERIAL

PUMPS POSITIONED OUTSIDE OF OIL TANK FOR A BETTER PERFORMANCE AND EASIER MAINTENANCE.

# 30%

## ENERGY SAVINGS

COMPARED TO TRADITIONAL ELECTRIC MOTORS

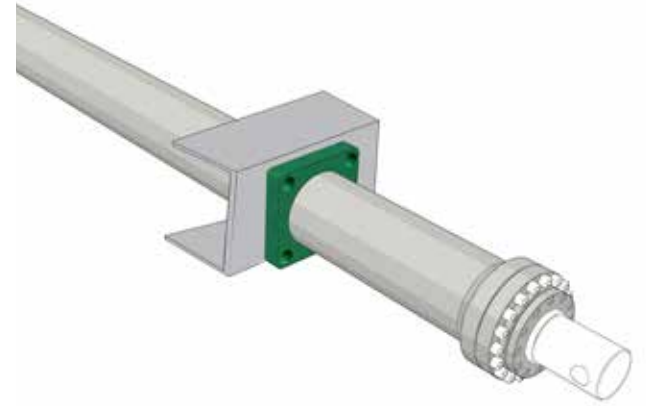
THE INSTALLATION OF VANE PUMP HIGH-LOW PRESSURE PROVIDES A BETTER PERFORMANCE WITH REDUCED ELECTRICAL CONSUMPTION. HIGH EFFICIENCY IE3 MOTORS ARE USED WITH AN ENERGY SAVINGS OF 30% COMPARED WITH TRADITIONAL ELECTRIC MOTORS.







CLEANING AND MAINTENCE INSPECTION DOORS

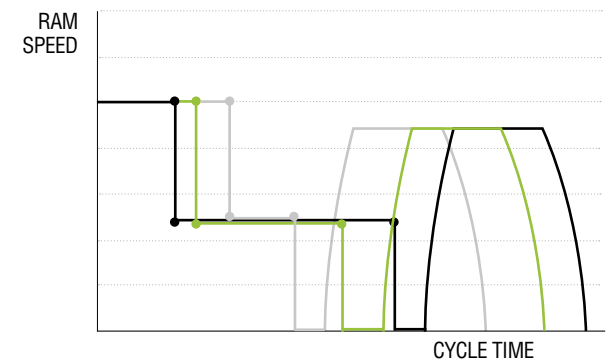
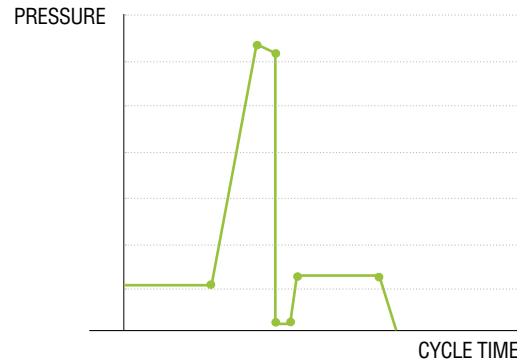
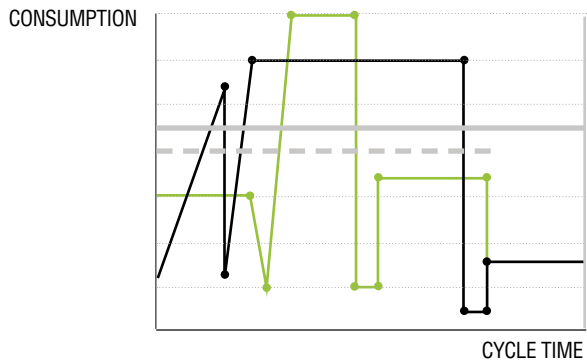


SUPPORT FOR MAIN CYLINDER

### CONSUMPTION - CYCLE TIME DIAGRAM

### PRESSURE - CYCLE TIME DIAGRAM

### RAM SPEED - CYCLE TIME DIAGRAM



— CONSUMPTION TREND PRESS WITH PRE-COMPACTION    — CONSUMPTION TREND PRESS WITHOUT PRE-COMPACTION  
 — CONSUMPTION MEDIUM WITH PRE-COMPACTOR    - - CONSUMPTION MEDIUM WITHOUT PRE-COMPACTOR

— LIGHT MATERIAL    — MEDIUM MATERIAL    — HEAVY MATERIAL



MAIN ELECTRIC PANEL CONTROL

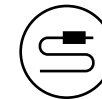


SCART PLUGS AND PROTECTED CABLES ARE INSTALLED.

## ELECTRICAL COMPONENTS

CORE VALUE

SIEMENS



HIGH CABLE RESISTANCE



OPERATOR SAFETY



EASY MAINTENANCE

## CONNECTION OF ELECTRICAL COMPONENTS

Electrical connections are made using SCART leads. Electrical cables are protected by rodent-proof and fire-resistant sheaths.



# TYING UNIT

## CORE VALUE



RELIABILITY



ROBUSTNESS



FLEXIBILITY



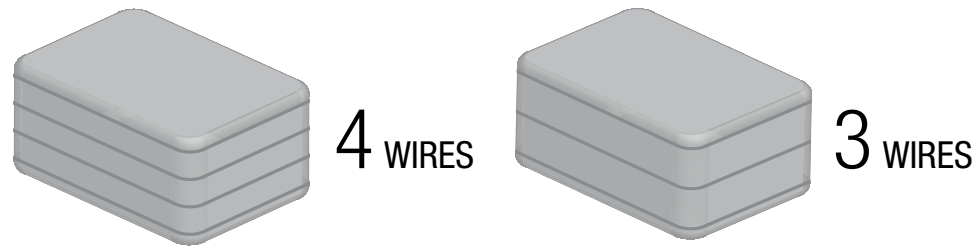
EASY  
MAINTENANCE

## FLEXIBILITY OF USE AND OPTIMISATION OF COSTS

ELECTRO-MECHANICAL HORIZONTAL TYING SYSTEM DESIGNED FOR TYING BOTH PLASTIC AND STEEL WIRES

This system simplifies the cleaning process for the tying unit, providing increased safety for the operator. The maintenance and cleaning of the tying unit is done at floor level; replacement of baling wire is at floor level, no pit needed.

### TYING METHOD



MOBILE TYING UNIT (OPTIONAL, AVAILABLE UPON REQUEST)



PLASTIC REELS



STEEL WIRE REELS



PLASTIC WIRE



TYING UNIT MAINTENANCE

# MULTI-MATERIALS BALES

## BALES INTEGRITY



RIGID PLASTIC



CARDBOARD



RIGID PLASTIC



HDPE



PET



100 LITERS DRUMS

# TRANSPORT EFFICIENCY

## ROAD TRANSPORT



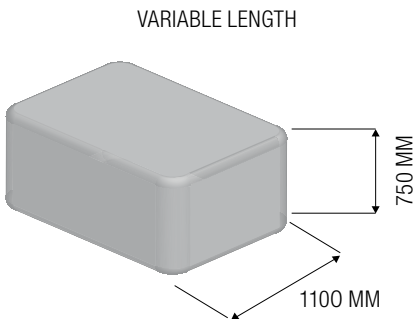
ROAD TRANSPORT



RAIL TRANSPORT



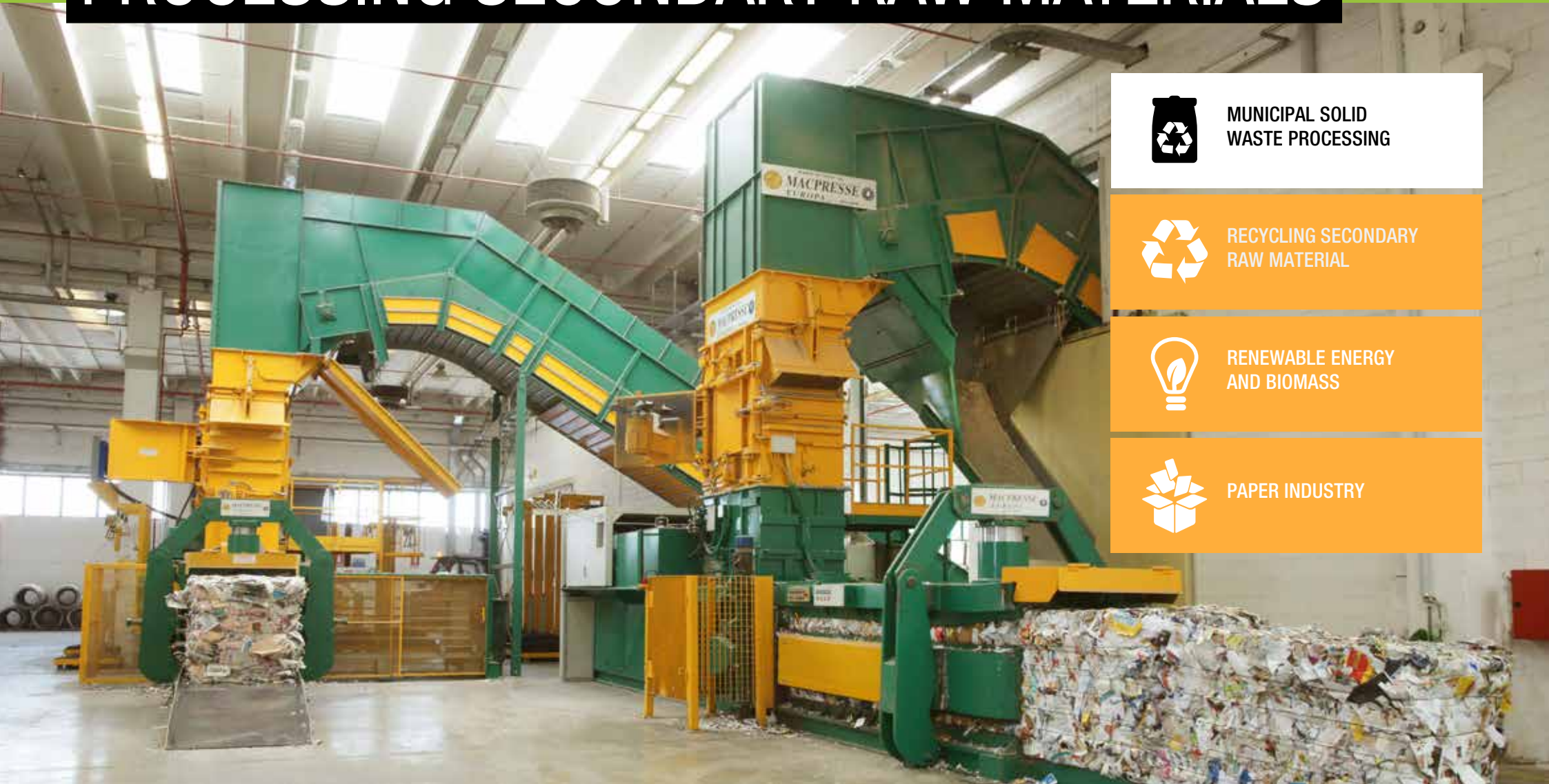
SEA TRANSPORT



**DIMENSIONS OF BALES ARE SUITABLE FOR OPTIMIZING LOADING OPERATIONS OF THE MOST COMMON LAND, SEA AND RAILROAD METHODS OF TRANSPORTATION.**



# SERIES MAC/1 EFFICIENCY OF BALERS FOR PROCESSING SECONDARY RAW MATERIALS



MUNICIPAL SOLID  
WASTE PROCESSING



RECYCLING SECONDARY  
RAW MATERIAL



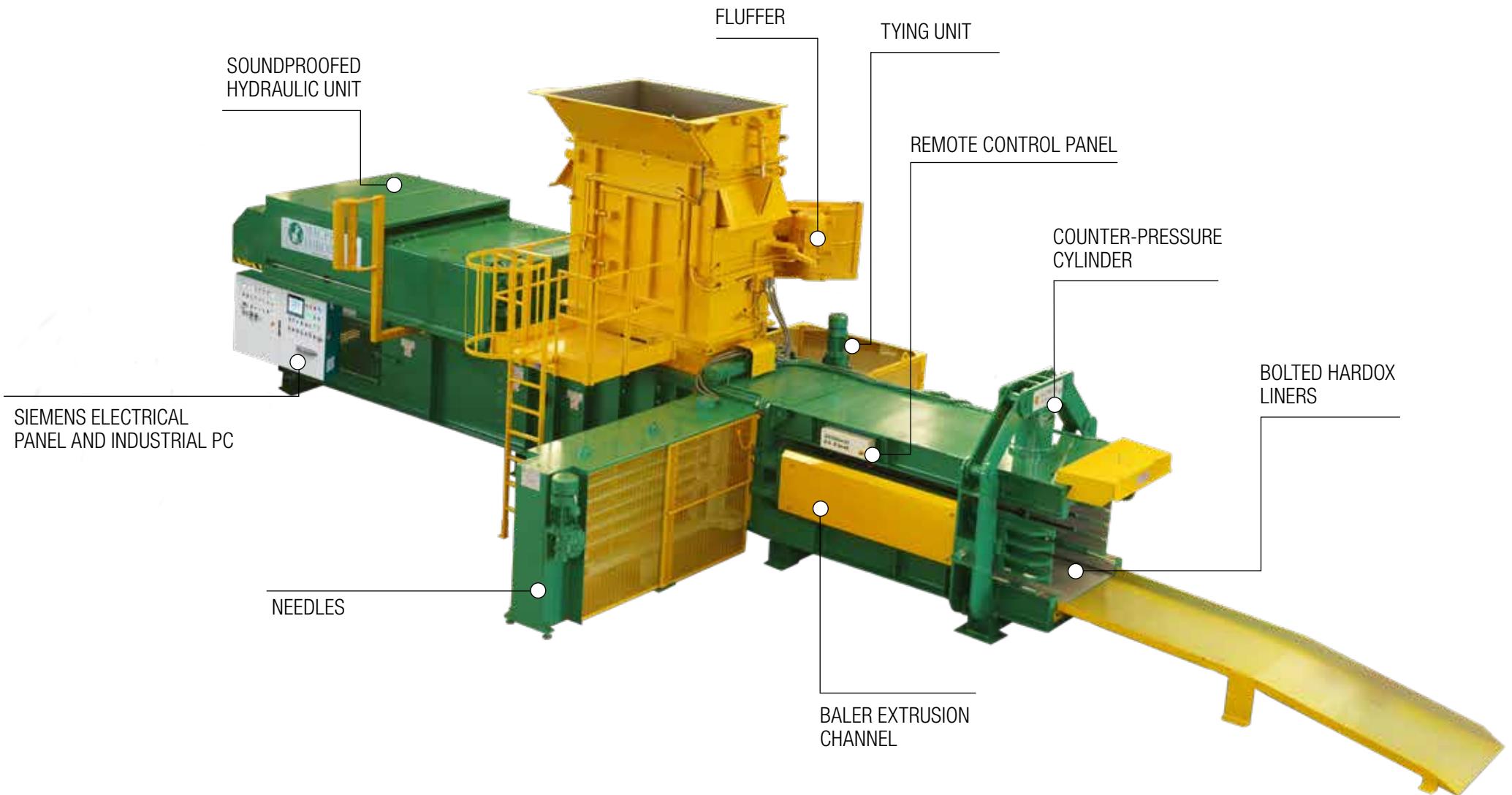
RENEWABLE ENERGY  
AND BIOMASS



PAPER INDUSTRY

# MAC "/1" SERIES

## GENERAL DESCRIPTION





# MATERIALS PROCESSED AND PERFORMANCE



**PET**



**CARDBOARD**



**MIXED PAPER**



**RDF/SRF**

INFEED DENSITY

EUROPE 25/30 kg/m<sup>3</sup>

USA 1.56/1.87 lb/ft<sup>3</sup>

70/80 kg/m<sup>3</sup>

4.37/4.99 lb/ft<sup>3</sup>

100/120 kg/m<sup>3</sup>

6.24/7.49 lb/ft<sup>3</sup>

150/200 kg/m<sup>3</sup>

9.36/12.5 lb/ft<sup>3</sup>

Mac 108/1

EUROPE

PET 8 TON/H  
 CARDBOARD 16 TON/H  
 MIX PAPER 25 TON/H  
 RDF/SRF 30 TON/H

USA

PET 8.8 TON (US)/H  
 CARDBOARD 17.6 TON (US)/H  
 MIX PAPER 27.6 TON (US)/H  
 RDF/SRF 32.5 TON (US)/H

Mac 110/1

EUROPE

PET 10 TON/H  
 CARDBOARD 18 TON/H  
 MIX PAPER 30 TON/H  
 RDF/SRF 35 TON/H

USA

PET 11 TON (US)/H  
 CARDBOARD 20 TON (US)/H  
 MIX PAPER 33.1 TON (US)/H  
 RDF/SRF 37.5 TON (US)/H

Mac 111/1

EUROPE

PET 12 TON/H  
 CARDBOARD 22 TON/H  
 MIX PAPER 35 TON/H  
 RDF/SRF 40 TON/H

USA

PET 13.2 TON (US)/H  
 CARDBOARD 24.3 TON (US)/H  
 MIX PAPER 38.6 TON (US)/H  
 RDF/SRF 43 TON (US)/H

Mac 111AS/1

EUROPE

PET 14 TON/H  
 CARDBOARD 25 TON/H  
 MIX PAPER 40 TON/H  
 RDF/SRF 45 TON/H

USA

PET 15.4 TON (US)/H  
 CARDBOARD 27.6 TON (US)/H  
 MIX PAPER 44.1 TON (US)/H  
 RDF/SRF 48.5 TON (US)/H

Mac 112XL

EUROPE

PET 16,5 TON/H  
 CARDBOARD 28 TON/H  
 MIX PAPER 46 TON/H  
 RDF/SRF 52 TON/H

USA

PET 18.2 TON (US)/H  
 CARDBOARD 30.9 TON (US)/H  
 MIX PAPER 50.7 TON (US)/H  
 RDF/SRF 57.3 TON (US)/H

MODEL  
MAC 108/1





# 100 HP

MOTOR POWER

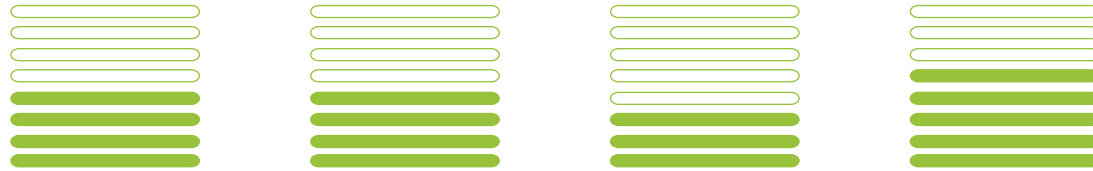
# CUTTING AND THRUST POWER

# 120 TON / 264 500

### NO LOAD PERFORMANCE

Note: Performance rates, bale weights and bale densities are subject to moisture content, material pre-bale densities, feed rates and other variables in baling.

EUROPE	2,6 m <sup>3</sup>	545 m <sup>3</sup> /h	3,5	17 sec
USA	91.8 ft <sup>3</sup>	19 246 ft <sup>3</sup> /h	3.5	17 sec



LOADING VOLUME    VOLUMETRIC PRODUCTION    CYCLES PER MINUTE    CYCLE TIME

### GENERAL SPECIFICATIONS

EUROPE (mm)                      USA

OVERALL LENGTH	13 220	43'4"
MAXIMUM WIDTH	6 010 (at tier station)	19'9"
OVERALL HEIGHT	4 315 (at flange hopper)	14'2"
FEED OPENING	1 800 x 950	71" x 37" <sup>1</sup> / <sub>2</sub>
BALE DIMENSIONS W x H	1 000 x 1 100	39" <sup>1</sup> / <sub>2</sub> x 43" <sup>1</sup> / <sub>3</sub>
BALER WEIGHT WITHOUT FLUFFER	38 650 Kg (without oil)	85 208 lb
BALER WEIGHT WITH FLUFFER	43 450 Kg (without oil)	95 790 lb
NUMBERS OF WIRES	5	5

## MODEL

# MAC 108/1

### EUROPE

PET 8 TON/H  
 CARDBOARD 16 TON/H  
 MIX PAPER 25 TON/H  
 RDF/SRF 30 TON/H

### USA

PET 8.8 TON (US)/H  
 CARDBOARD 17.6 TON (US)/H  
 MIX PAPER 27.6 TON (US)/H  
 RDF/SRF 32.5 TON (US)/H

### TECHNICAL DATA

#### MAIN MOTOR POWER

75 kw

#### MAIN HYDRAULIC PUMP

One "REXROTH" variable flow pump with full regenerative circuit

#### PUMP FLOW CAPACITY

364 L/min  
 96 US Gal/min

#### OPERATING CONTROL

Siemens S7 1500 programmable controller

#### RAM FORCE

120 000 kg  
 264 500 lb

#### RAM FORCE PRESSURE

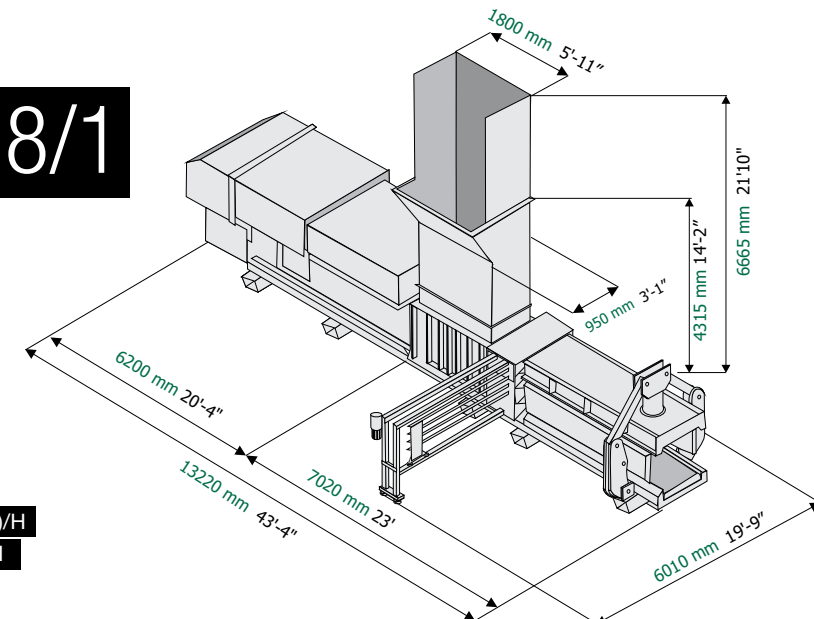
11 kg/cm<sup>2</sup>  
 155 PSI

#### OIL RESERVOIR CAPACITY

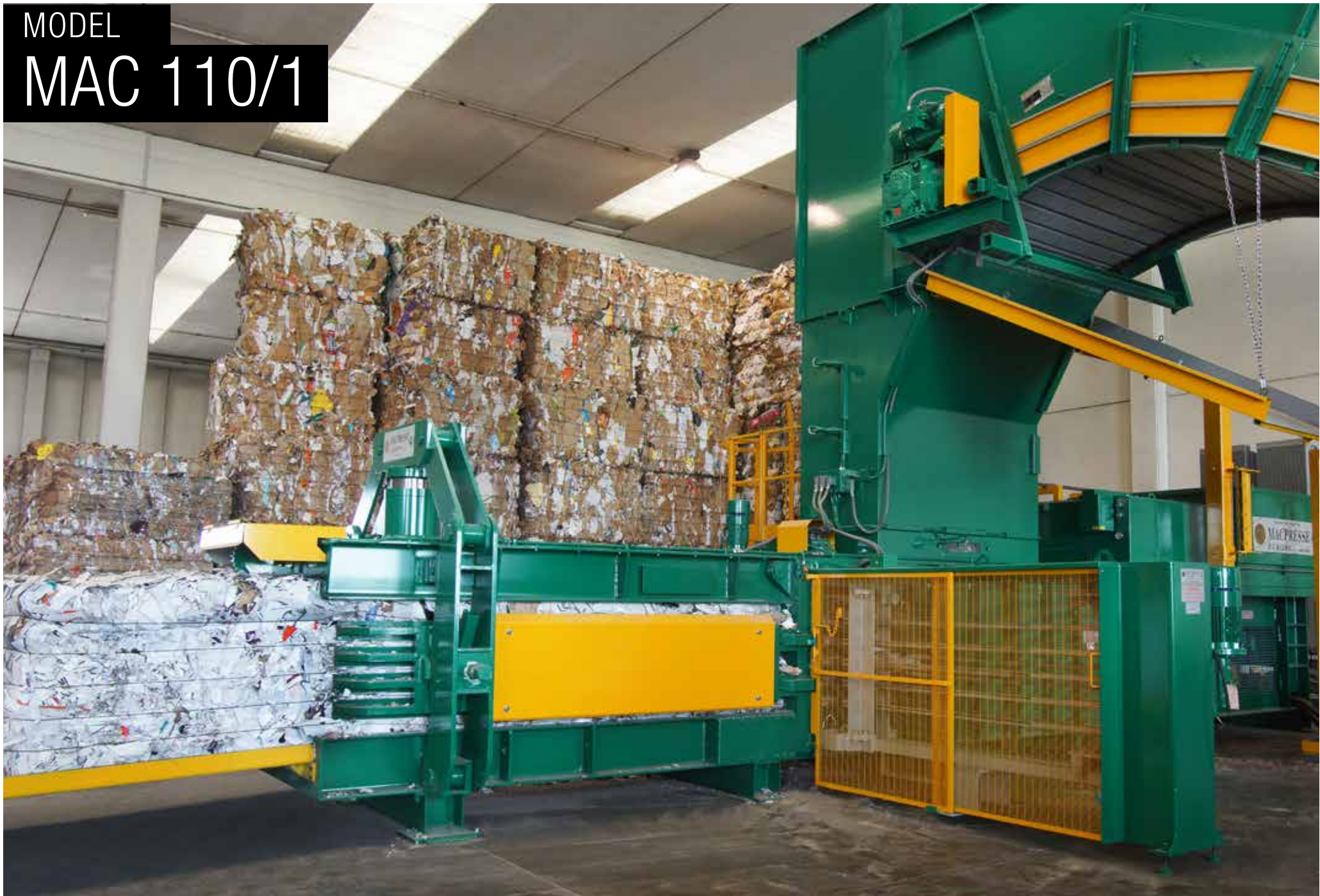
3 100 L  
 820 US Gal

#### COOLING SYSTEM

Thermostatically controlled air to oil heat exchanger



MODEL  
MAC 110/1





# 120 HP

MOTOR POWER

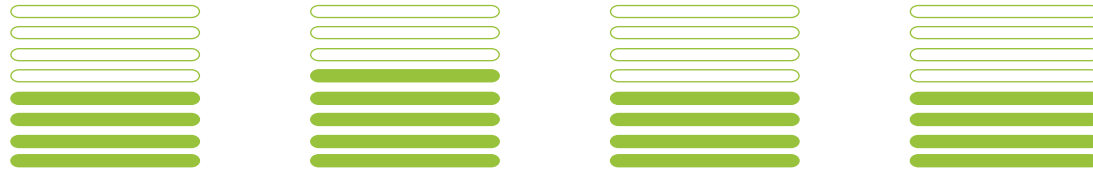
# CUTTING AND THRUST POWER

## 170 TON / 374 800 LB

### NO LOAD PERFORMANCE

Note: Performance rates, bale weights and bale densities are subject to moisture content, material pre-bale densities, feed rates and other variables in baling.

Region	Loading Volume	Volumetric Production	Cycles per Minute	Cycle Time
EUROPE	2,5 m <sup>3</sup>	610 m <sup>3</sup> /h	4	15 sec
USA	88 ft <sup>3</sup>	21 541 ft <sup>3</sup> /h	4	15 sec



LOADING VOLUME    VOLUMETRIC PRODUCTION    CYCLES PER MINUTE    CYCLE TIME

### GENERAL SPECIFICATIONS

	EUROPE (mm)	USA
OVERALL LENGTH	12 960	42'6"
MAXIMUM WIDTH	6 010 (at tier station)	19'9"
OVERALL HEIGHT	4 315 (at flange hopper)	14'2"
FEED OPENING	1 800 x 1 020	71" x 40"
BALE DIMENSIONS W x H	1 100 x 1 100	43" 1/3 x 43" 1/3
BALER WEIGHT WITHOUT FLUFFER	40 900 Kg (without oil)	90 169 lb
BALER WEIGHT WITH FLUFFER	45 900 Kg (without oil)	109 128 lb
NUMBERS OF WIRES	5	5

## MODEL MAC 110/1

EUROPE  
 PET 10 TON/H  
 CARDBOARD 18 TON/H  
 MIX PAPER 30 TON/H  
 RDF/SRF 35 TON/H

USA  
 PET 11 TON (US)/H  
 CARDBOARD 20 TON (US)/H  
 MIX PAPER 33.1 TON (US)/H  
 RDF/SRF 37.5 TON (US)/H

### TECHNICAL DATA

#### MAIN MOTOR POWER

90 kw

#### MAIN HYDRAULIC PUMP

One "REXROTH" variable flow pump with full regenerative circuit

#### PUMP FLOW CAPACITY

580 L/min  
 153 US Gal/min

#### OPERATING CONTROL

Siemens S7 1500 programmable controller

#### RAM FORCE

170 000 kg  
 374 800 lb

#### RAM FORCE PRESSURE

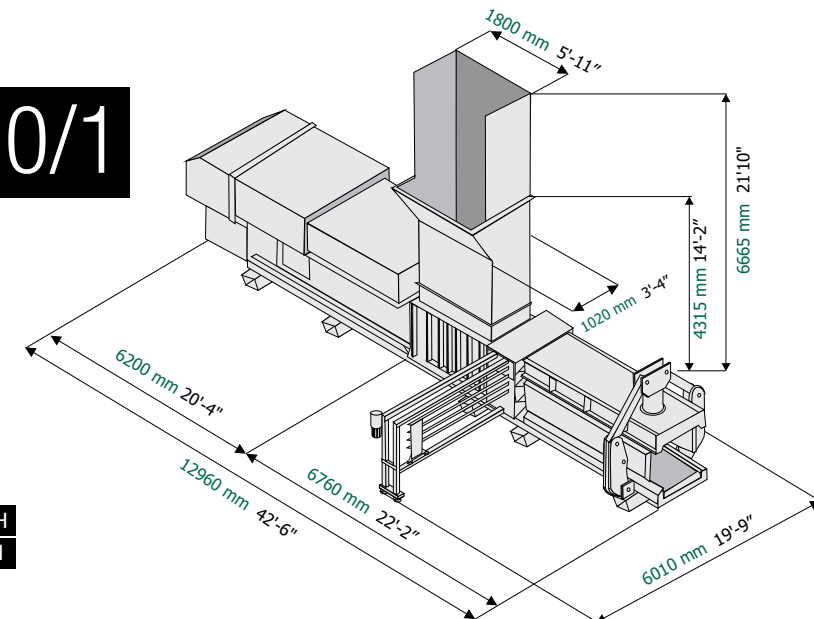
14 kg/cm<sup>2</sup>  
 200 PSI

#### OIL RESERVOIR CAPACITY

3 100 L  
 820 US Gal

#### COOLING SYSTEM

Thermostatically controlled air to oil heat exchanger



MODEL  
MAC 111/1





# 2X75 HP

MOTORS POWER

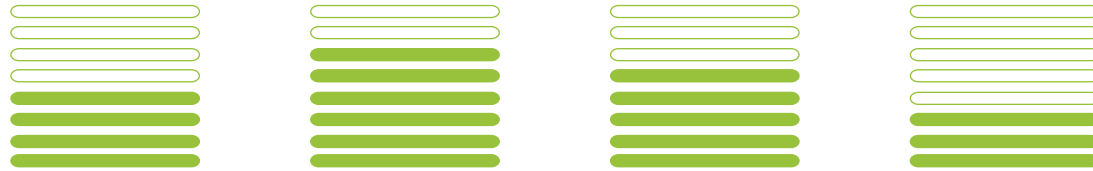
# CUTTING AND THRUST POWER

## 170 TON / 374 800 LB

### NO LOAD PERFORMANCE

Note: Performance rates, bale weights and bale densities are subject to moisture content, material pre-bale densities, feed rates and other variables in baling.

	LOADING VOLUME	VOLUMETRIC PRODUCTION	CYCLES PER MINUTE	CYCLE TIME
EUROPE	2,5 m <sup>3</sup>	686 m <sup>3</sup> /h	4,5	13 sec
USA	88 ft <sup>3</sup>	24 225 ft <sup>3</sup> /h	4,5	13 sec



LOADING VOLUME    VOLUMETRIC PRODUCTION    CYCLES PER MINUTE    CYCLE TIME

### GENERAL SPECIFICATIONS

	EUROPE (mm)	USA
OVERALL LENGTH	12 960	42'6"
MAXIMUM WIDTH	6 010 (at tier station)	19'9"
OVERALL HEIGHT	4 315 (at flange hopper)	14'2"
FEED OPENING	1 800 x 1 020	71" x 40"
BALE DIMENSIONS W x H	1 100 x 1 100	43" 1/3 x 43" 1/3
BALER WEIGHT WITHOUT FLUFFER	41 900 Kg (without oil)	92 373 lb
BALER WEIGHT WITH FLUFFER	46 900 Kg (without oil)	103 396 lb
NUMBERS OF WIRES	5	5

## MODEL

# MAC 111/1

EUROPE  
 PET 12 TON/H  
 CARDBOARD 22 TON/H  
 MIX PAPER 35 TON/H  
 RDF/SRF 40 TON/H

USA  
 PET 13.2 TON (US)/H  
 CARDBOARD 24.3 TON (US)/H  
 MIX PAPER 38.6 TON (US)/H  
 RDF/SRF 43 TON (US)/H

### TECHNICAL DATA

#### MAIN MOTOR POWER

2 x 55 kw

#### MAIN HYDRAULIC PUMP

Two "REXROTH" variable flow pump with full regenerative circuit

#### PUMP FLOW CAPACITY

364 + 364 L/min  
 96 + 96 US Gal/min

#### OPERATING CONTROL

Siemens S7 1500 programmable controller

#### RAM FORCE

170 000 kg  
 374 800 lb

#### RAM FORCE PRESSURE

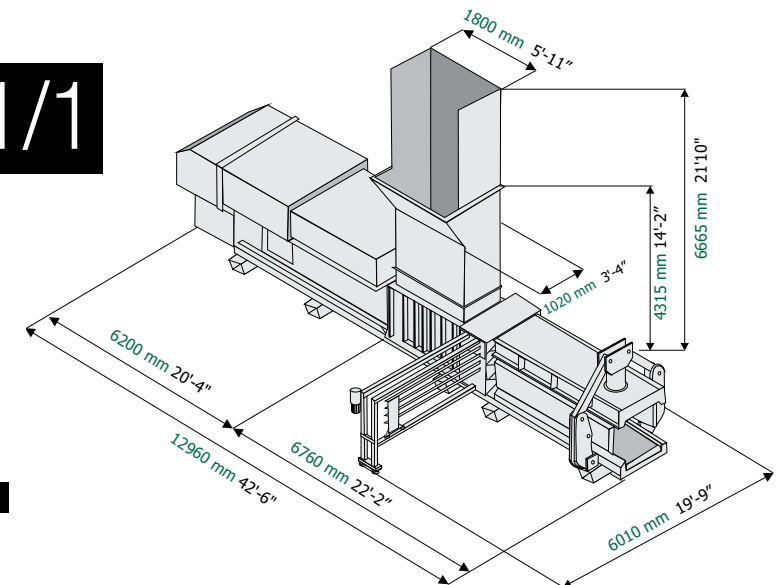
14 kg/cm<sup>2</sup>  
 200 PSI

#### OIL RESERVOIR CAPACITY

3 100 L  
 820 US Gal

#### COOLING SYSTEM

Thermostatically controlled air to oil heat exchangers



MODEL  
MAC 111AS/1





# 2X100 HP

MOTORS POWER

# CUTTING AND THRUST POWER

## 170 TON / 374 800 LB

### NO LOAD PERFORMANCE

Note: Performance rates, bale weights and bale densities are subject to moisture content, material pre-bale densities, feed rates and other variables in baling.

Region	Loading Volume	Volumetric Production	Cycles per Minute	Cycle Time
EUROPE	3,2 m <sup>3</sup>	966 m <sup>3</sup> /h	5	12 sec
USA	113 ft <sup>3</sup>	34 114 ft <sup>3</sup> /h	5	12 sec



LOADING VOLUME    VOLUMETRIC PRODUCTION    CYCLES PER MINUTE    CYCLE TIME

### TECHNICAL DATA

#### MAIN MOTOR POWER

2 x 75 kw

#### MAIN HYDRAULIC PUMP

Two "REXROTH" variable flow pump with full regenerative circuit

#### PUMP FLOW CAPACITY

455 + 455 L/min  
120 + 120 US Gal/min

#### OPERATING CONTROL

Siemens S7 1500 programmable controller

#### RAM FORCE

170 000 kg  
374 800 lbs

#### RAM FORCE PRESSURE

14 kg/cm<sup>2</sup>  
200 PSI

#### OIL RESERVOIR CAPACITY

3 100 L  
820 US Gal

#### COOLING SYSTEM

Thermostatically controlled air to oil heat exchanger

### GENERAL SPECIFICATIONS

	EUROPE (mm)	USA
OVERALL LENGTH	13 965	45'10"
MAXIMUM WIDTH	6 010 (at tier station)	19'9"
OVERALL HEIGHT	4 315 (at flange hopper)	14'2"
FEED OPENING	2 100 x 1 020	83" x 40"
BALE DIMENSIONS W x H	1 100 x 1 100	43" 1/3 x 43" 1/3
BALER WEIGHT WITHOUT FLUFFER	43 200 Kg (without oil)	95 239 lb
BALER WEIGHT WITH FLUFFER	48 500 Kg (without oil)	106 924 lb
NUMBERS OF WIRES	5	5

### MODEL

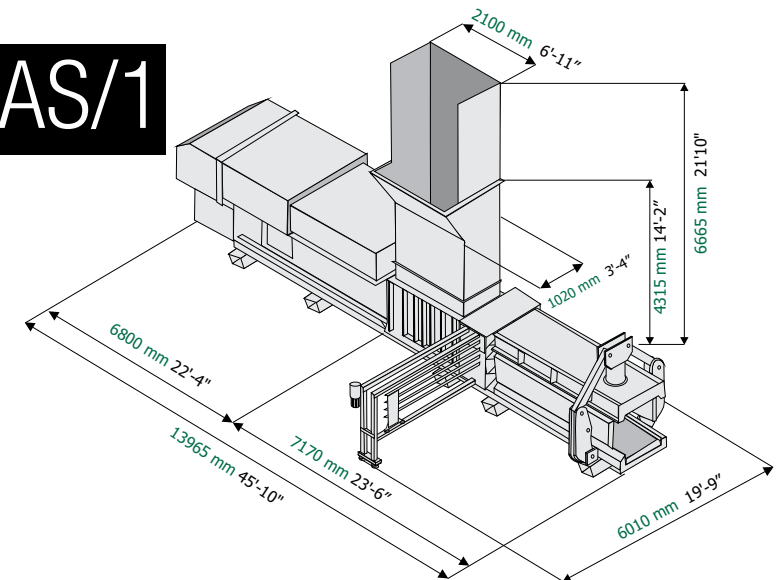
# MAC 111AS/1

#### EUROPE

PET 14 TON/H  
CARDBOARD 25 TON/H  
MIX PAPER 40 TON/H  
RDF/SRF 45 TON/H

#### USA

PET 15.4 TON (US)/H  
CARDBOARD 27.6 TON (US)/H  
MIX PAPER 44.1 TON (US)/H  
RDF/SRF 48.5 TON (US)/H



MODEL  
MAC 112 XL





# 2X120 HP

MOTORS POWER

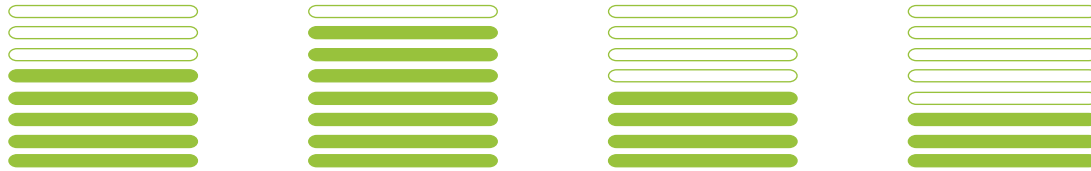
# CUTTING AND THRUST POWER

## 200 TON / 441 000 LB

### NO LOAD PERFORMANCE

Note: Performance rates, bale weights and bale densities are subject to moisture content, material pre-bale densities, feed rates and other variables in baling.

	LOADING VOLUME	VOLUMETRIC PRODUCTION	CYCLES PER MINUTE	CYCLE TIME
EUROPE	2,9 m <sup>3</sup>	783 m <sup>3</sup> /h	4,5	13,5 sec
USA	102.4 ft <sup>3</sup>	27.651 ft <sup>3</sup> /h	4.5	13,5 sec



LOADING VOLUME    VOLUMETRIC PRODUCTION    CYCLES PER MINUTE    CYCLE TIME

### GENERAL SPECIFICATIONS

	EUROPE (mm)	USA
OVERALL LENGTH	13 950	45'9"
MAXIMUM WIDTH	6 125 (at tier station)	19'7"
OVERALL HEIGHT	4 265 (at flange hopper)	13'12"
FEED OPENING	2 100 x 1 020	83" x 40"
BALE DIMENSIONS W x H	1 100 x 1 100	43" 1/3 x 43" 1/3
BALER WEIGHT WITHOUT FLUFFER	55 500 Kg (without oil)	122 356 lb
BALER WEIGHT WITH FLUFFER	60 600 Kg (without oil)	133 600 lb
NUMBERS OF WIRES	5	5

## MODEL

# MAC 112 XL

### EUROPE

PET 16,5 TON/H  
 CARDBOARD 28 TON/H  
 MIX PAPER 46 TON/H  
 RDF/SRF 52 TON/H

### USA

PET 18.2 TON (US)/H  
 CARDBOARD 30.9 TON (US)/H  
 MIX PAPER 50.7 TON (US)/H  
 RDF/SRF 57.3 TON (US)/H

### TECHNICAL DATA

#### MAIN MOTOR POWER

2 x 90 kw

#### MAIN HYDRAULIC PUMP

Two "REXROTH" variable flow pump with full regenerative circuit

#### PUMP FLOW CAPACITY

455 + 580 L/min  
 120 + 153 US Gal/min

#### OPERATING CONTROL

Siemens S7 1500 programmable controller

#### RAM FORCE

200 000 kg  
 441 000 lbs

#### RAM FORCE PRESSURE

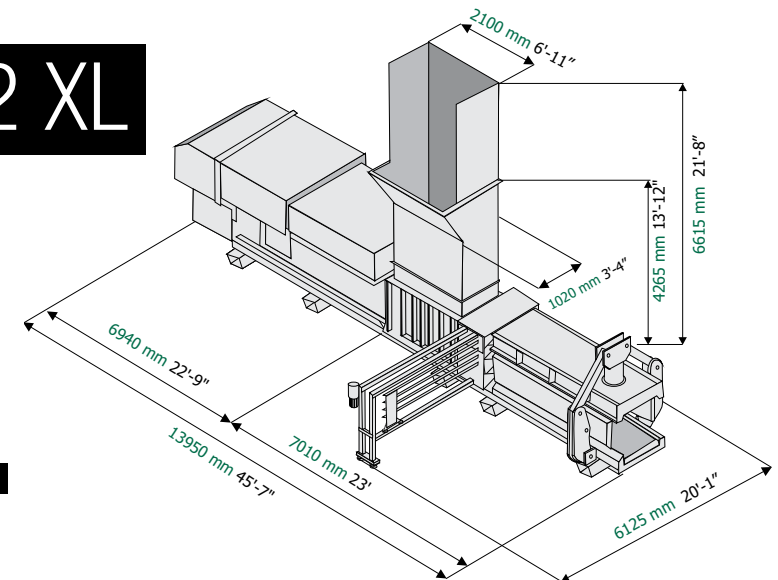
16,5 kg/cm<sup>2</sup>  
 235 PSI

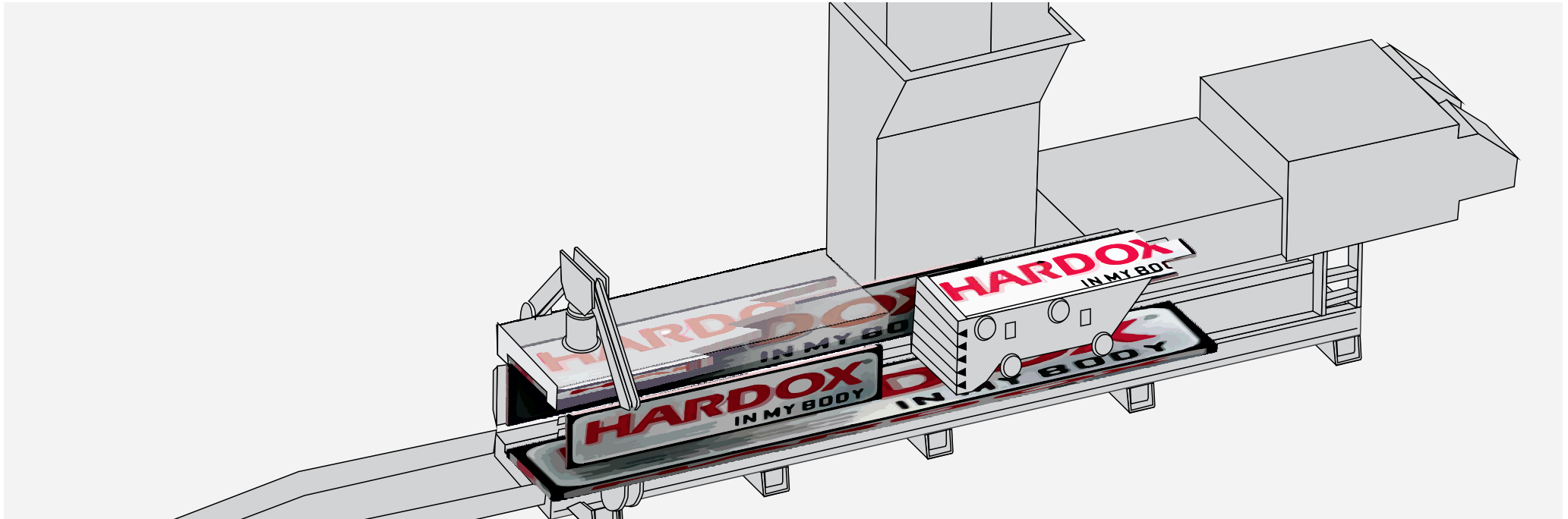
#### OIL RESERVOIR CAPACITY

3 500 L  
 925 US Gal

#### COOLING SYSTEM

Thermostatically controlled air to oil heat exchangers





**WEAR RESISTANT**

**CORE VALUE**



LONG SERVICE LIFE



ROBUSTNESS



EASY MAINTENANCE

## HARDOX STEEL LINERS



HARDOX STEEL LINERS REPLACEMENT

THIS WEAR RESISTANT SYSTEM PROTECTS THE BALER FROM ABRASION AND CORROSION.

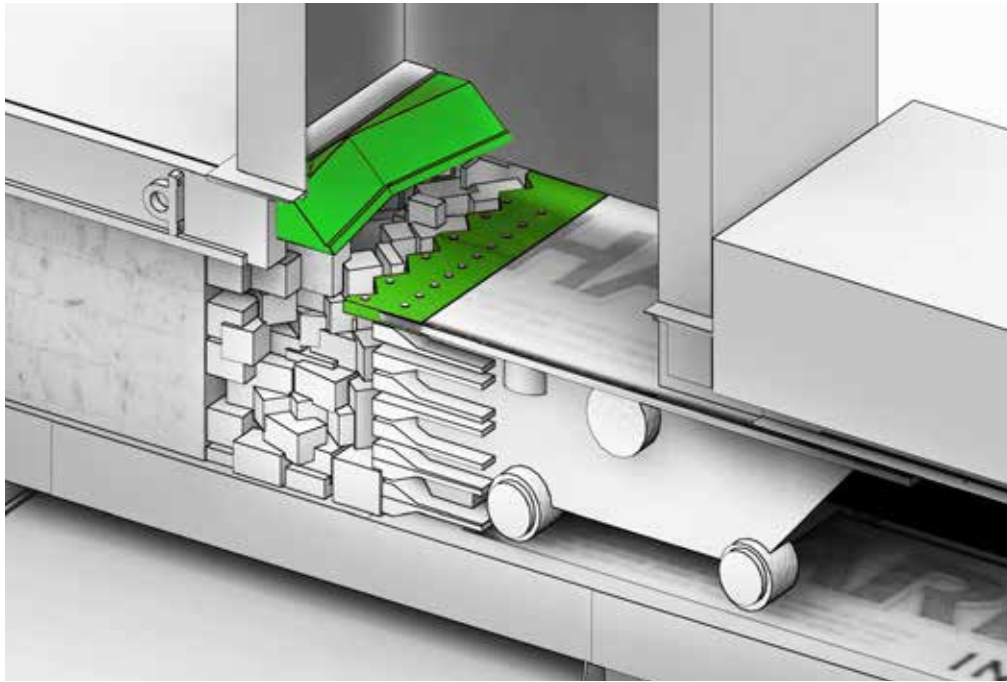
Replaceable liners made of HARDOX wear-resistant steel alloy that extends working life of the equipment. The wear liners are bolted in the extrusion chamber and in the compaction box and can be easily replaced.

1. RESISTANCE TO WEAR AND CHEMICAL AGENTS
2. RAPID REPLACEMENT  
(PATENTED ATTACHMENT SYSTEM)
3. MINIMIZE BALER DOWNTIME

# 400%

LONGER LASTING  
THAN NORMAL STEEL



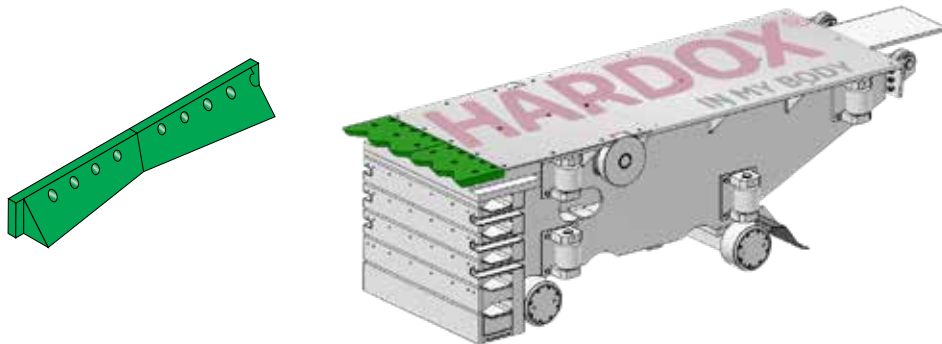


## CUTTING SYSTEM

CORE VALUE

### HIGH EFFICIENCY BLADE

BLADES DESIGNED BY MACPRESSE TO OPTIMISE CUTTING OF EXCESS MATERIAL IN HOPPER. THE BLADE ARE TEMPERED TO ENSURE A LONGER SERVICE LIFE.



ROBUSTNESS



FAST INTERCHANGEABILITY



LOW ENERGY CONSUMPTION

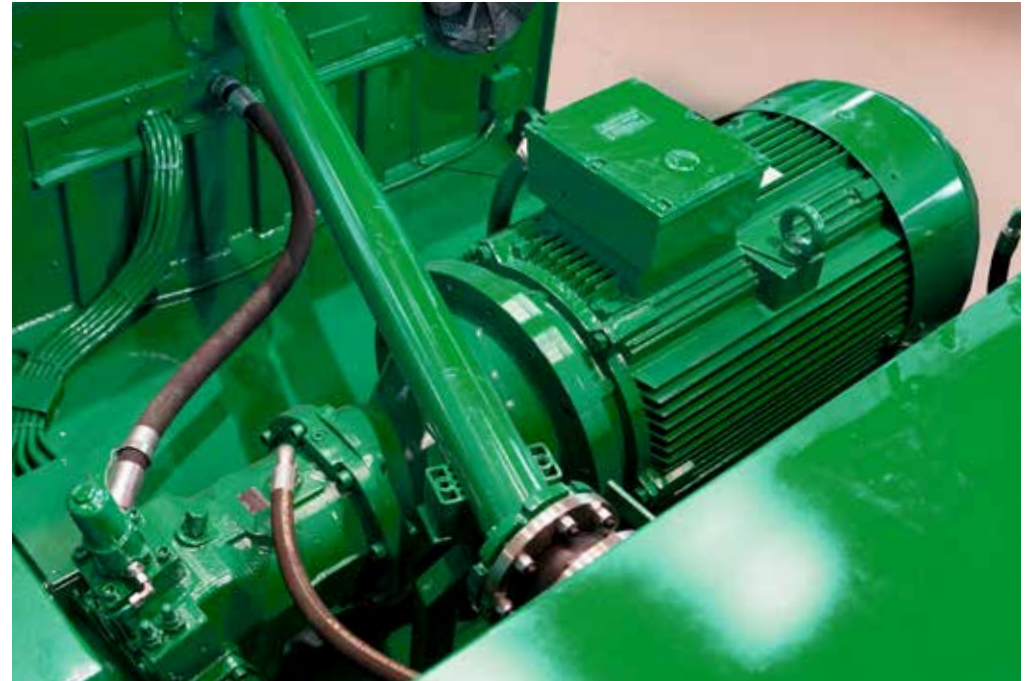


LONG SERVICE LIFE

### COUNTER-PRESSURE SYSTEM



HYDRAULIC QUICK RELEASE CIRCUIT FOR FAST ZERO-SETTING OF COUNTERPRESSURE SHOULD A FOREIGN OBJECT ACCIDENTALLY FALL IN THE HOPPER.



## HYDRAULICS

CORE VALUE



**Rexroth**  
Bosch Group



HARSH ENVIRONMENTS



LOW ENERGY CONSUMPTION



EASY MAINTENANCE

## SMART SYSTEM ADAPTABLE TO MATERIAL

PUMPS POSITIONED OUTSIDE OF OIL TANK FOR A BETTER PERFORMANCE AND EASIER MAINTENANCE.

THE INSTALLATION OF VARIABLE FLOW PUMPS PROVIDES A BETTER PERFORMANCE WITH REDUCED ELECTRICAL CONSUMPTION. HIGH EFFICIENCY IE3 MOTORS ARE USED WITH AN ENERGY SAVINGS OF 30% COMPARED WITH TRADITIONAL MOTORS.

# 30%

## ENERGY SAVINGS

COMPARED WITH TRADITIONAL MOTORS



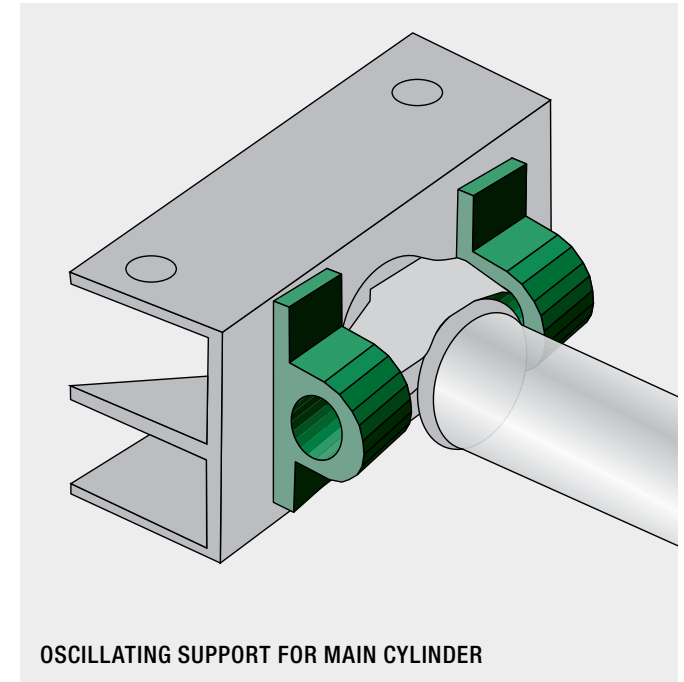




SOUNDPROOFING AND DUST PROTECTION CABINE

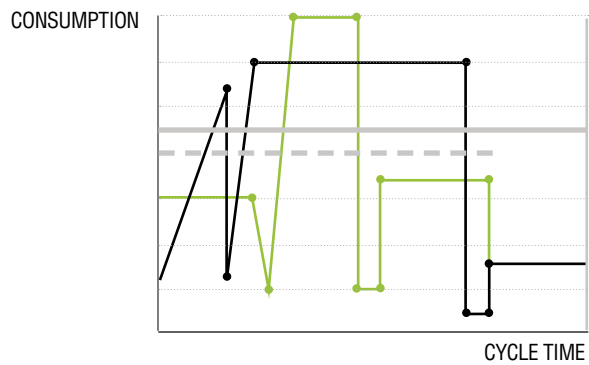


CLEANING AND MAINTENANCE INSPECTION DOOR

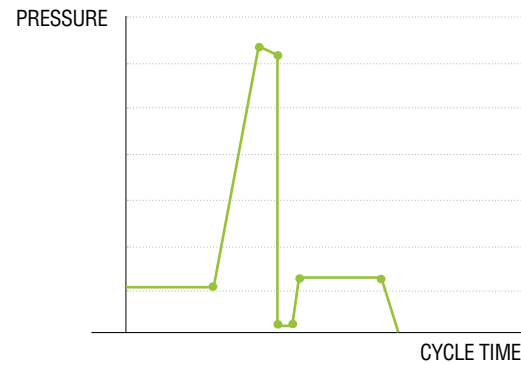


OSCILLATING SUPPORT FOR MAIN CYLINDER

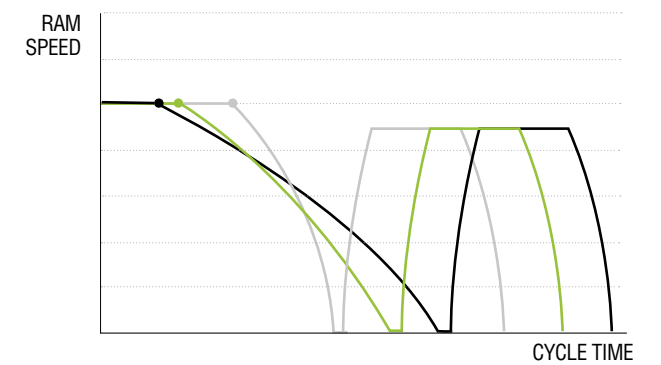
### CONSUMPTION - CYCLE TIME DIAGRAM



### PRESSURE - CYCLE TIME DIAGRAM



### RAM SPEED - CYCLE TIME DIAGRAM



— CONSUMPTION TREND PRESS WITH PRE-COMPACTOR    — CONSUMPTION TREND PRESS WITHOUT PRE-COMPACTOR    — CONSUMPTION MEDIUM WITH PRE-COMPACTOR    - - CONSUMPTION MEDIUM WITHOUT PRE-COMPACTOR

— LIGHT MATERIAL    — MEDIUM MATERIAL    — HEAVY MATERIAL

# TYING UNIT

## CORE VALUE



RELIABILITY



ROBUSTNESS



FLEXIBILITY



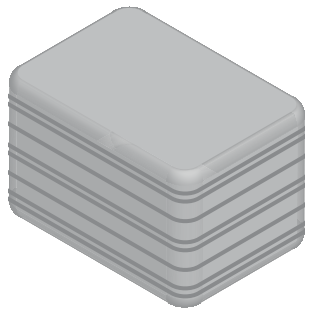
EASY MAINTENANCE

## FLEXIBILITY OF USE AND OPTIMISATION OF COSTS

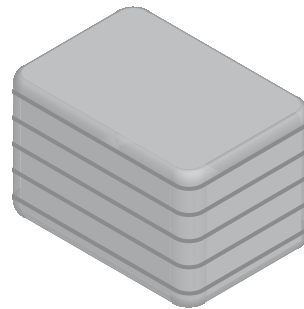
### ELECTROMECHANICAL HORIZONTAL TYING SYSTEM DESIGNED FOR TYING BOTH PLASTIC AND STEEL WIRES

This system simplifies the cleaning process for the tying machine, guaranteeing greater safety for the operator. The maintenance and cleaning of the tying machine is carried out at floor level operations on the steel wire are not required beneath the machine.

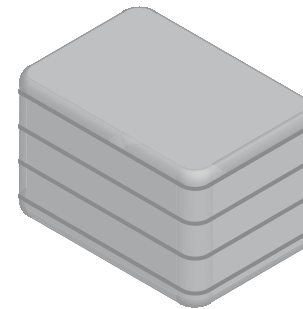
### TYING METHOD



5+3 WIRES



5 WIRES



4 WIRES



5 WIRES



STEEL WIRE REELS



TYING MACHINE MAINTENANCE



MOBILE TYING MACHINE (OPTIONAL)



PLASTIC WIRE



PLASTIC WIRE REELS





MAIN ELECTRIC PANNEL CONTROL



SHEATHS FOR ELECTRIC CABLES PROTECTION



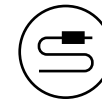
SCART PLUGS

**ELECTRICAL COMPONENTS** CORE VALUE

**CONNECTION OF ELECTRICAL COMPONENTS**

Connections using SCART leads and electrical cables protected by rodent-proof and fire-resistant sheaths

**SIEMENS**



HIGH CABLE RESISTANCE



OPERATOR SAFETY



EASY MAINTENANCE



# MULTIMATERIAL BALES

## BALES INTEGRITY





# PLASTIC BALES & STORAGE

## PLASTIC MATERIALS



EASY  
MAINTENANCE



HIGH DENSITY  
BALES



PLASTIC FILM



PET



WRAPPING PLASTIC BALES



TETRAPACK



CAR BUMPERS



HDPE



# TRANSPORT EFFICIENCY

## RAIL AND ROAD TRANSPORT



ROAD  
TRANSPORT



RAIL  
TRANSPORT



SEA  
TRANSPORT





# SERIES MAC L/1 SPECIFICALLY DESIGNED FOR WASTE



MUNICIPAL SOLID  
WASTE PROCESSING



RECYCLING SECONDARY  
RAW MATERIAL



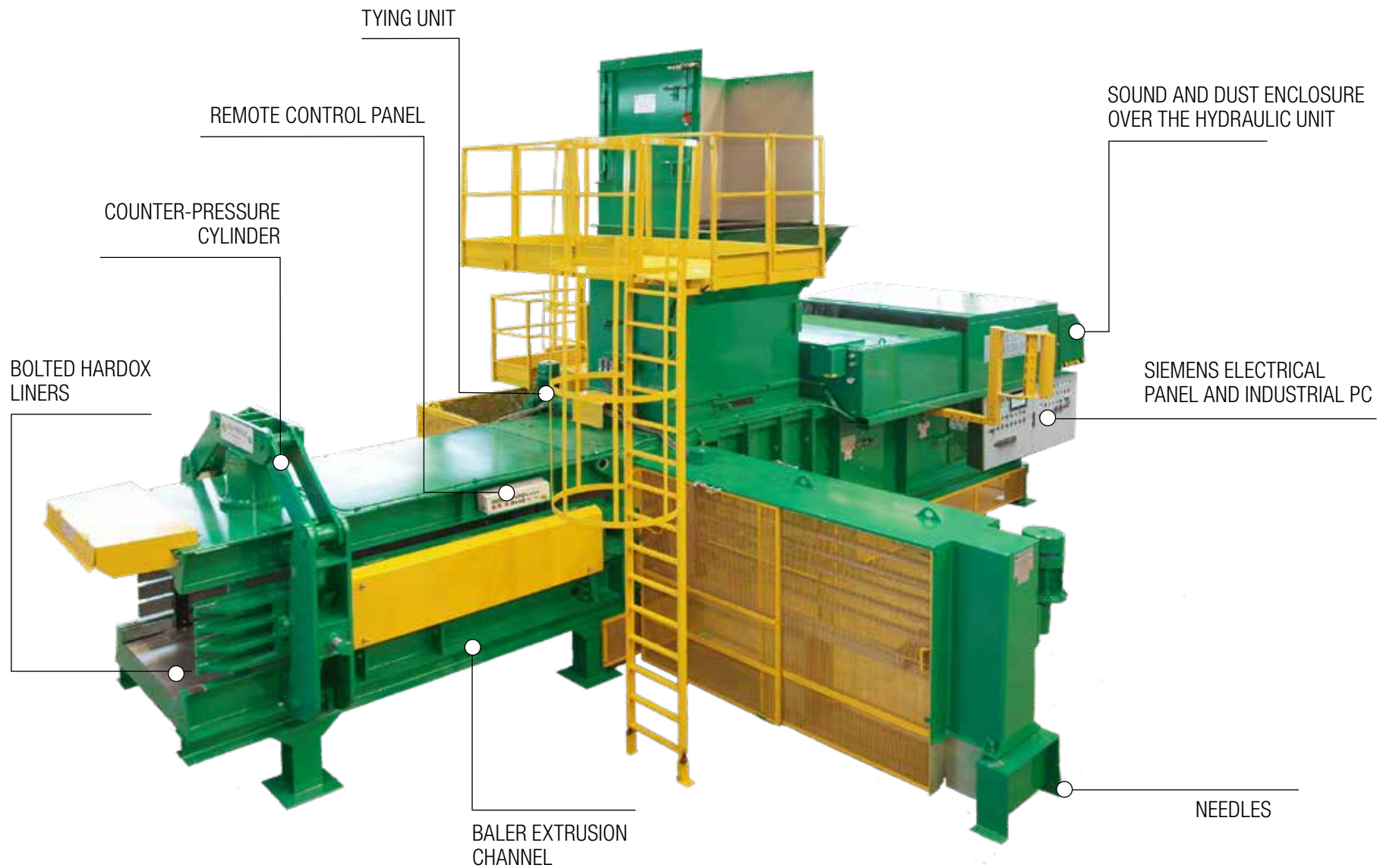
RENEWABLE ENERGY  
AND BIOMASS



PAPER INDUSTRY

# MAC "L/1" SERIES

## GENERAL DESCRIPTION





# MATERIALS PROCESSED AND PRODUCTION



**RDF**



**C&I**



**MSW**

INFEED DENSITY

EUROPE 150/200 kg/m<sup>3</sup>

USA 9.36/12.49 lb/ft<sup>3</sup>

200/300 kg/m<sup>3</sup>

12.49/18.73 lb/ft<sup>3</sup>

300/350 kg/m<sup>3</sup>

18.73/21.85 lb/ft<sup>3</sup>

Mac 108L/1

EUROPE  
RDF 30 TON/H  
C&I 35 TON/H  
MSW 40 TON/H

USA  
RDF 33.1 TON (US)/H  
C&I 38.6 TON (US)/H  
MSW 44.1 TON (US)/H

Mac 110L/1

EUROPE  
RDF 35 TON/H  
C&I 40 TON/H  
MSW 45 TON/H

USA  
RDF 38.6 TON (US)/H  
C&I 44.1 TON (US)/H  
MSW 49.6 TON (US)/H

Mac 111L/1

EUROPE  
RDF 40 TON/H  
C&I 48 TON/H  
MSW 55 TON/H

USA  
RDF 44.1 TON (US)/H  
C&I 52.9 TON (US)/H  
MSW 60.6 TON (US)/H

Mac 112XL

EUROPE  
RDF 52 TON/H  
C&I 60 TON/H  
MSW 68 TON/H

USA  
RDF 57.3 TON (US)/H  
C&I 66.1 TON (US)/H  
MSW 75 TON (US)/H

MODEL  
MAC 108L/1





# 100 HP

MOTOR POWER

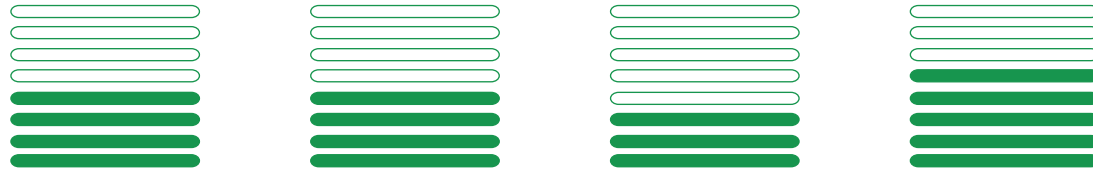
# CUTTING AND THRUST POWER

# 120 TON / 264 500 LB

## NO LOAD PERFORMANCE

Note: Performance rates, bale weights and bale densities are subject to moisture content, material pre-bale densities, feed rates and other variables in baling.

EUROPE	2,6 m <sup>3</sup>	545 m <sup>3</sup> /h	3,5	17 sec
USA	91.8 ft <sup>3</sup>	19 246 ft <sup>3</sup> /h	3.5	17 sec



LOADING VOLUME    VOLUMETRIC PRODUCTION    CYCLES PER MINUTE    CYCLE TIME

## GENERAL SPECIFICATIONS

	EUROPE (mm)	USA
OVERALL LENGTH	13 220	43'4"
MAXIMUM WIDTH	6 010 (at tier station)	19'9"
OVERALL HEIGHT	4 315 (at flange hopper)	14'2"
FEED OPENING	1 800 x 950	71" x 37" <sup>1</sup> / <sub>2</sub>
BALE DIMENSIONS W x H	1 000 x 1 100	39" <sup>1</sup> / <sub>2</sub> x 43" <sup>1</sup> / <sub>3</sub>
BALER WEIGHT WITHOUT FLUFFER	39 650 Kg (without oil)	87 413 lbs
BALER WEIGHT WITH FLUFFER	43 350 Kg (without oil)	95 570 lbs
NUMBERS OF WIRES	5	5

## MODEL

# MAC108L/1

EUROPE
RDF 30 TON/H
C&I 35 TON/H
MSW 40 TON/H

USA
RDF 33.1 TON (US)/H
C&I 38.6 TON (US)/H
MSW 44.1 TON (US)/H

## TECHNICAL DATA

### MAIN MOTOR POWER

75 kw

### MAIN HYDRAULIC PUMP

One "REXROTH" variable flow pump with full regenerative circuit

### PUMP FLOW CAPACITY

364 L/min  
95 US Gal/min

### OPERATING CONTROL

Siemens S7 1500 programmable controller

### RAM FORCE

120 000 Kg  
264 500 Lbs

### RAM FORCE PRESSURE

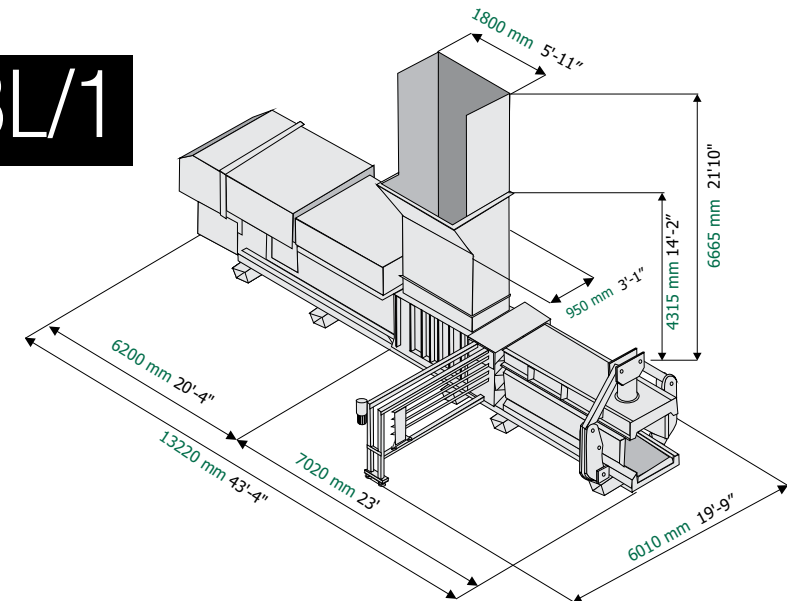
11 kg/cm<sup>2</sup>  
155 Psi

### OIL RESERVOIR CAPACITY

3 100 L  
820 US Gal

### COOLING SYSTEM

Thermostatically controlled air to oil heat exchanger



MODEL  
MAC 110L/1





# 120 HP

MOTOR POWER

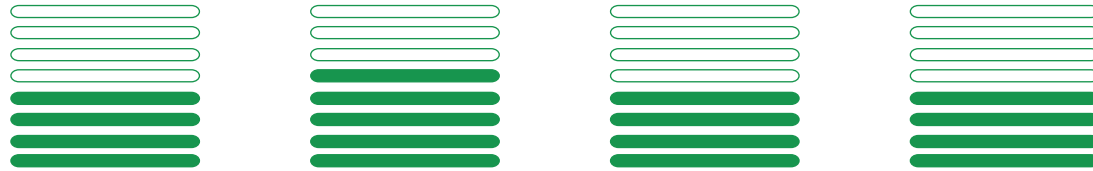
# CUTTING AND THRUST POWER

## 170 TON / 374 800 LB

### NO LOAD PERFORMANCE

Note: Performance rates, bale weights and bale densities are subject to moisture content, material pre-bale densities, feed rates and other variables in baling.

Region	Loading Volume	Volumetric Production	Cycles per Minute	Cycle Time
EUROPE	2,5 m <sup>3</sup>	610 m <sup>3</sup> /h	4	15 sec
USA	88 ft <sup>3</sup>	21 541 ft <sup>3</sup> /h	4	15 sec



LOADING VOLUME    VOLUMETRIC PRODUCTION    CYCLES PER MINUTE    CYCLE TIME

### GENERAL SPECIFICATIONS

	EUROPE (mm)	USA
OVERALL LENGTH	13 965	45'10"
MAXIMUM WIDTH	6 010 (at tier station)	19'9"
OVERALL HEIGHT	4 315 (at flange hopper)	14'2"
FEED OPENING	1 800 x 1 020	71" x 40"
BALE DIMENSIONS W x H	1 100 x 1 100	43 <sup>1</sup> / <sub>3</sub> " x 43 <sup>1</sup> / <sub>3</sub> "
BALER WEIGHT WITHOUT FLUFFER	41 900 Kg (without oil)	92 373 lb
BALER WEIGHT WITH FLUFFER	46 900 Kg (without oil)	103 396 lb
NUMBERS OF WIRES	5	5

## MODEL MAC110L/1

EUROPE  
**RDF 35 TON/H**  
**C&I 40 TON/H**  
**MSW 45 TON/H**

USA  
**RDF 38.6 TON (US)/H**  
**C&I 44.1 TON (US)/H**  
**MSW 49.6 TON (US)/H**

### TECHNICAL DATA

#### MAIN MOTOR POWER

90 kw

#### MAIN HYDRAULIC PUMP

One "REXROTH" variable flow pump with full regenerative circuit

#### PUMP FLOW CAPACITY

580 L/min  
 153 US Gal/min

#### OPERATING CONTROL

Siemens S7 1500 programmable controller

#### RAM FORCE

170 000 Kg  
 374 800 Lbs

#### RAM FORCE PRESSURE

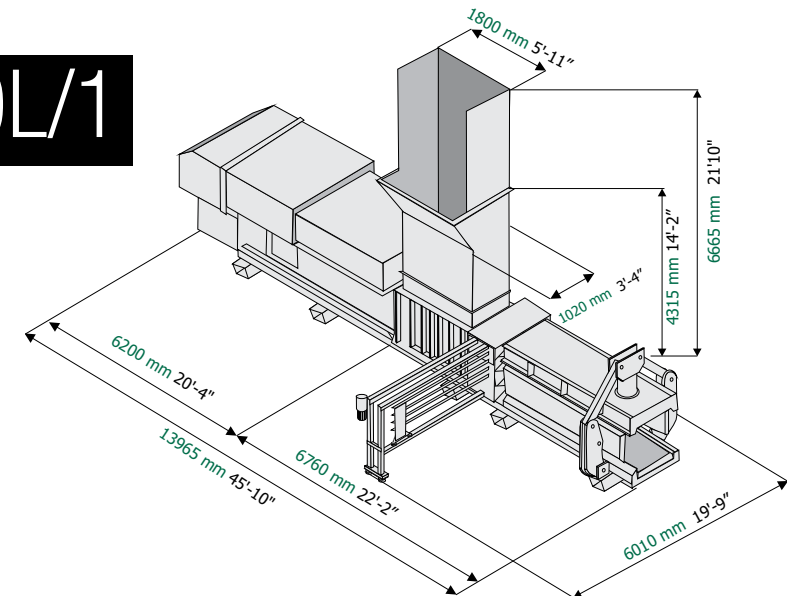
14 kg/cm<sup>2</sup>  
 200 Psi

#### OIL RESERVOIR CAPACITY

3 100 L  
 820 US Gal

#### COOLING SYSTEM

Thermostatically controlled air to oil heat exchanger



MODEL  
MAC 111L/1





# 2X75 HP

MOTORS POWER

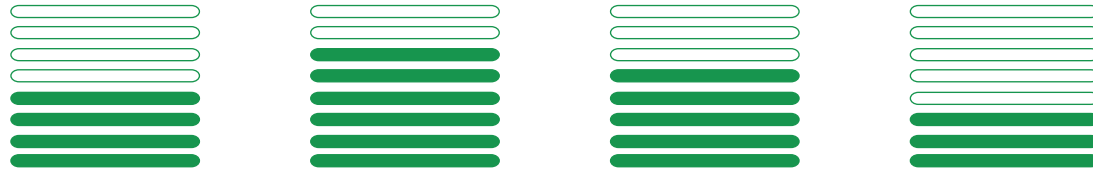
# CUTTING AND THRUST POWER

## 170 TON / 374 800 LB

### NO LOAD PERFORMANCE

Note: Performance rates, bale weights and bale densities are subject to moisture content, material pre-bale densities, feed rates and other variables in baling.

Region	Loading Volume	Volumetric Production	Cycles per Minute	Cycle Time
EUROPE	2,5 m <sup>3</sup>	686 m <sup>3</sup> /h	4,5	13 sec
USA	88 ft <sup>3</sup>	24 225 ft <sup>3</sup> /h	4.5	13 sec



LOADING VOLUME    VOLUMETRIC PRODUCTION    CYCLES PER MINUTE    CYCLE TIME

### GENERAL SPECIFICATIONS

	EUROPE (mm)	USA
OVERALL LENGTH	13 965	45'10"
MAXIMUM WIDTH	6 010 (at tier station)	19'9"
OVERALL HEIGHT	4 315 (at flange hopper)	14'2"
FEED OPENING	1 800 x 1 020	71' 'x 40''
BALE DIMENSIONS W x H	1 100 x 1 100	43'' <sup>1</sup> / <sub>3</sub> x 43'' <sup>1</sup> / <sub>3</sub>
BALER WEIGHT WITHOUT FLUFFER	42 900 Kg (without oil)	94 578 lb
BALER WEIGHT WITH FLUFFER	47 900 Kg (without oil)	105 601 lb
NUMBERS OF WIRES	5	5

## MODEL MAC111L/1

Region	Capacity (TON/H)
EUROPE	RDF 40 TON/H C&I 48 TON/H MSW 55 TON/H
USA	RDF 44.1 TON (US)/H C&I 52.9 TON (US)/H MSW 60.6 TON (US)/H

### TECHNICAL DATA

#### MAIN MOTOR POWER

2 x 55 kw

#### MAIN HYDRAULIC PUMP

Two "REXROTH" variable flow pump with full regenerative circuit

#### PUMP FLOW CAPACITY

364 + 364 L/min  
96 + 96 US Gal/min

#### OPERATING CONTROL

Siemens S7 1500 programmable controller

#### RAM FORCE

170 000 Kg  
374 800 Lbs

#### RAM FORCE PRESSURE

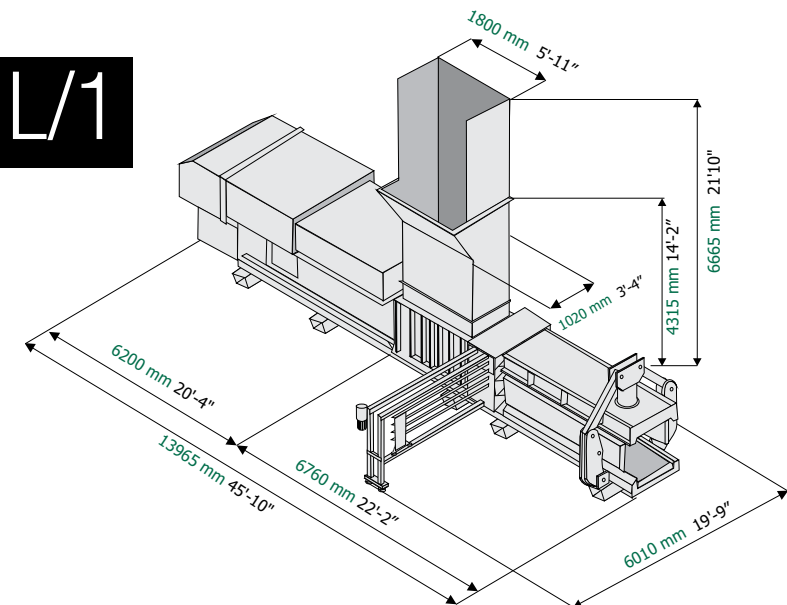
14 kg/cm<sup>2</sup>  
200 Psi

#### OIL RESERVOIR CAPACITY

3 100 L  
820 US Gal

#### COOLING SYSTEM

Thermostatically controlled air to oil heat exchangers



MODELLO  
MAC 112 XL





# 2X120 HP

MOTORS POWER

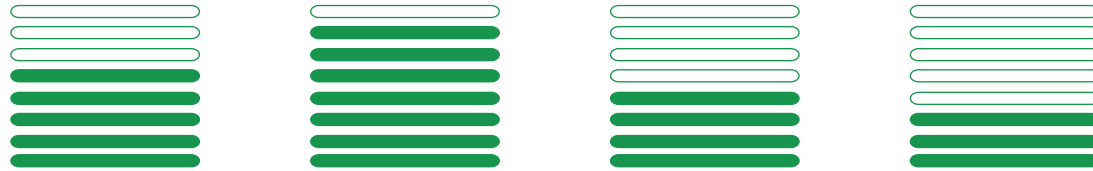
# CUTTING AND THRUST POWER

## 200 TON / 441 000 LB

### NO LOAD PERFORMANCE

Note: Performance rates, bale weights and bale densities are subject to moisture content, material pre-bale densities, feed rates and other variables in baling.

Region	Loading Volume	Volumetric Production	Cycles per Minute	Cycle Time
EUROPE	2,9 m <sup>3</sup>	783 m <sup>3</sup> /h	4,5	13,5 sec
USA	102.4 ft <sup>3</sup>	27.651 ft <sup>3</sup> /h	4.5	13.5 sec



LOADING VOLUME    VOLUMETRIC PRODUCTION    CYCLES PER MINUTE    CYCLE TIME

### GENERAL SPECIFICATIONS

	EUROPE (mm)	USA
OVERALL LENGTH	13 950	45'9"
MAXIMUM WIDTH	6 125 (at tier station)	19'7"
OVERALL HEIGHT	4 265 (at flange hopper)	13'12"
FEED OPENING	2 100 x 1 020	83" x 40"
BALE DIMENSIONS W x H	1 100 x 1 100	43" 1/3 x 43" 1/3
BALER WEIGHT WITHOUT FLUFFER	55 500 Kg (without oil)	122 356 lb
BALER WEIGHT WITH FLUFFER	60 600 Kg (without oil)	133 600 lb
NUMBERS OF WIRES	5	5

## MODEL

# MAC 112 XL

EUROPE  
 RDF 52 TON/H  
 C&I 60 TON/H  
 MSW 68 TON/H

USA  
 RDF 57.3 TON (US)/H  
 C&I 66.1 TON (US)/H  
 MSW 75 TON (US)/H

### TECHNICAL DATA

#### MAIN MOTOR POWER

2 x 90 kw

#### MAIN HYDRAULIC PUMP

Two "REXROTH" variable flow pump with full regenerative circuit

#### PUMP FLOW CAPACITY

455 + 580 L/min  
 120 + 153 US Gal/min

#### OPERATING CONTROL

Siemens S7 1500 programmable controller

#### RAM FORCE

200 000 kg  
 441 000 lbs

#### RAM FORCE PRESSURE

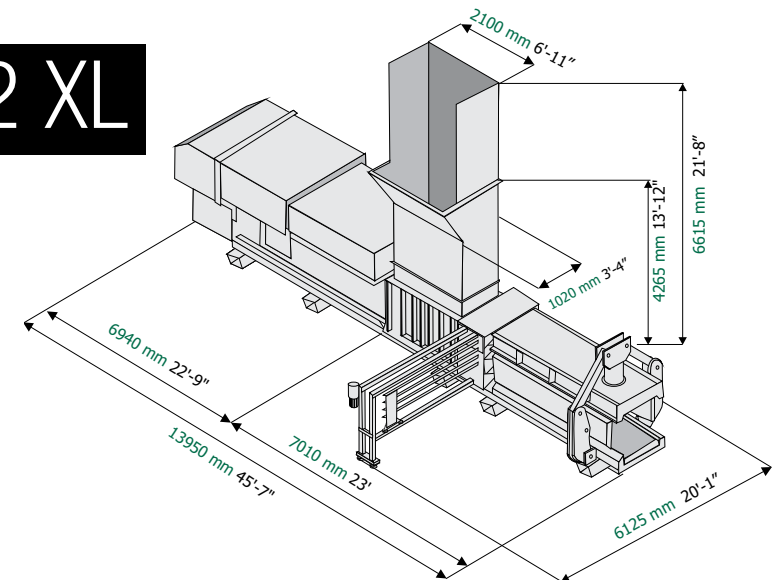
16,5 kg/cm<sup>2</sup>  
 235 PSI

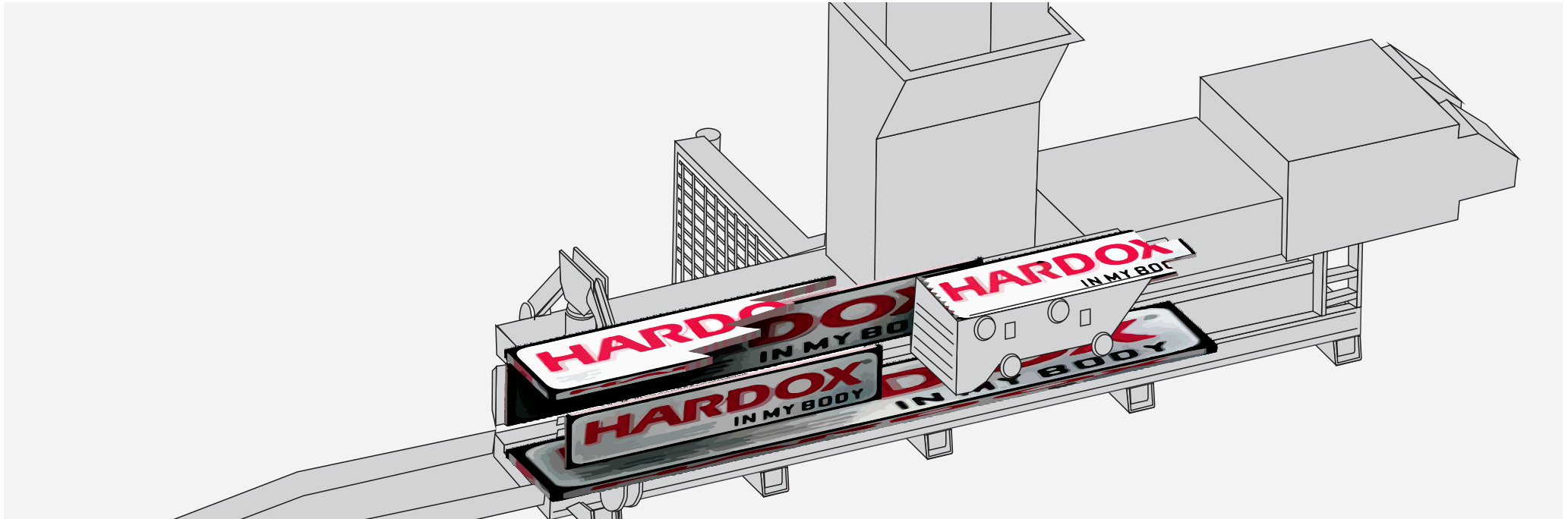
#### OIL RESERVOIR CAPACITY

3 500 L  
 925 US Gal

#### COOLING SYSTEM

Thermostatically controlled air to oil heat exchangers





**WEAR RESISTANT**

**CORE VALUE**



LONG SERVICE LIFE



ROBUSTNESS



EASY MAINTENANCE

## HARDOX STEEL LINERS



THIS WEAR RESISTANT SYSTEM PROTECTS THE BALER FROM ABRASION AND CORROSION.

Replaceable liners made of HARDOX wear-resistant steel alloy that extends working life of the equipment. The wear liners are bolted in the extrusion chamber and in the compaction box and can be easily replaced.

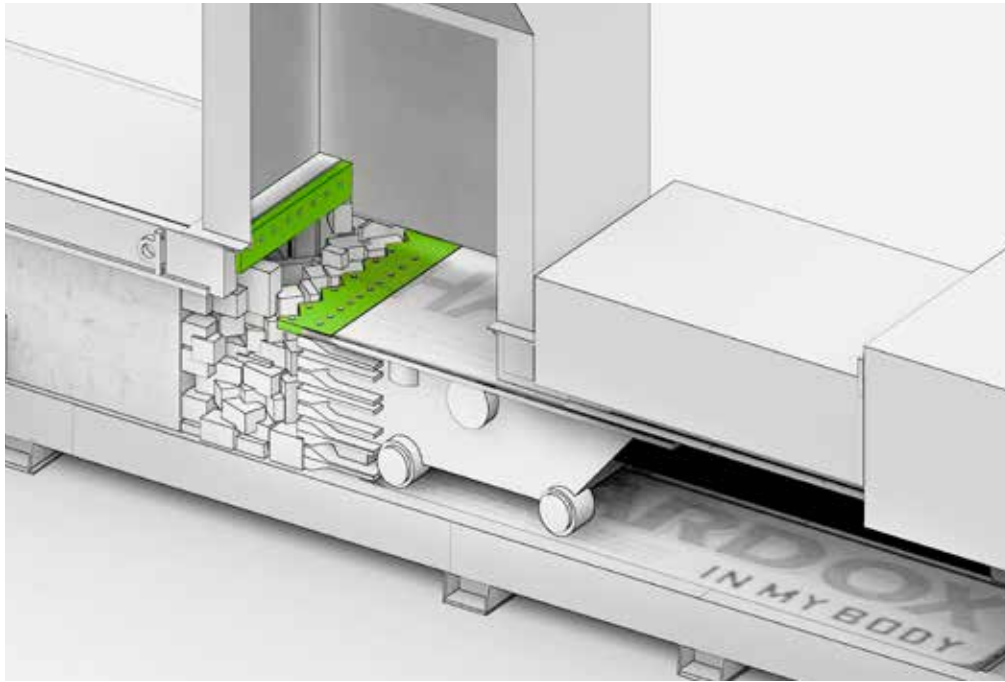
THIS WEAR-RESISTANT SYSTEM PROTECTS THE BALER FROM ABRASION AND CORROSION.

- 1 RESISTANT TO WEAR AND ABRASIVE MATERIALS
- 2 QUICK REPLACEMENT (PATENTED FASTENING)
- 3 MINIMUM BALER DOWNTIME

# 400%

LONGER LASTING  
THAN NORMAL STEEL



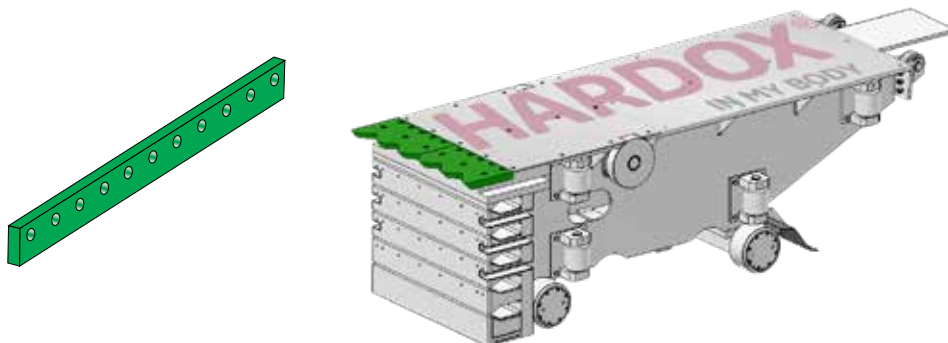


## CUTTING SYSTEM

CORE VALUE

### CUTTING BLADES DESIGNED FOR WASTE

BLADES DESIGNED BY MACPRESSE TO OPTIMIZE CUTTING OF EXCESS MATERIAL IN HOPPER. THE BLADES ARE TEMPERED TO ENSURE A LONGER SERVICE LIFE.



QUICK MAINTENANCE



LOW ENERGY CONSUMPTION

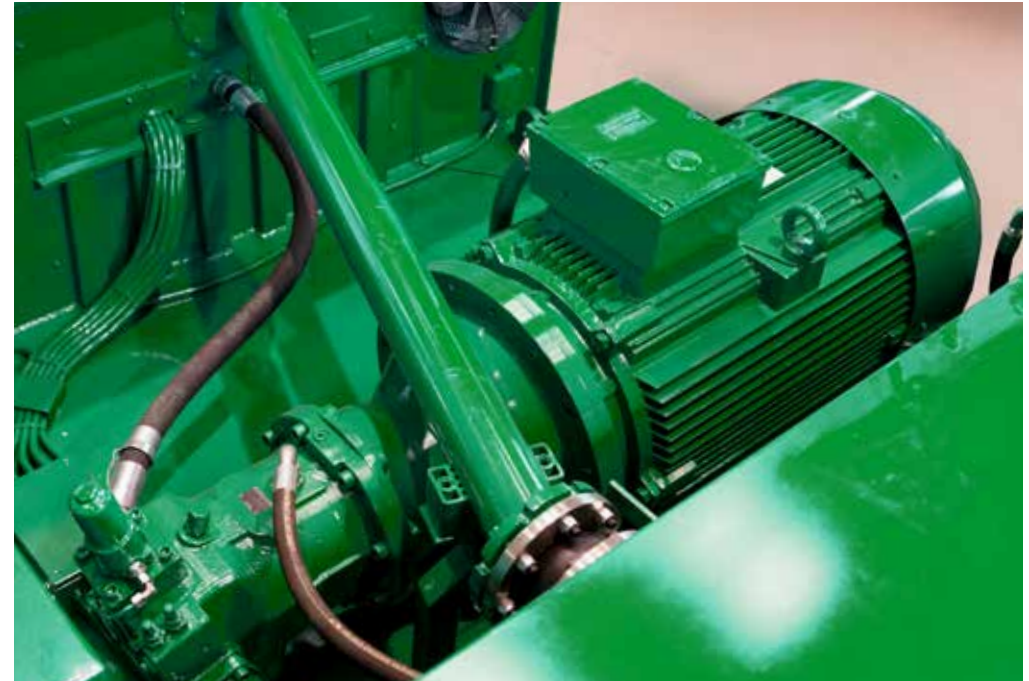


LONG SERVICE LIFE

### COUNTER PRESSURE SYSTEM



HYDRAULIC QUICK RELEASE CIRCUIT FOR FAST ZERO-SETTING OF COUNTERPRESSURE SHOULD A FOREIGN OBJECT ACCIDENTALLY FALL IN THE HOPPER.



## HYDRAULICS

CORE VALUE



**Rexroth**  
Bosch Group



HARSH ENVIRONMENTS



LOW ENERGY CONSUMPTION



EASY MAINTENANCE

## SMART SYSTEM ADAPTABLE TO MATERIAL

PUMPS POSITIONED OUTSIDE OF OIL TANK FOR A BETTER PERFORMANCE AND EASIER MAINTENANCE.

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# 30%

## ENERGY SAVINGS

COMPARED WITH TRADITIONAL MOTORS



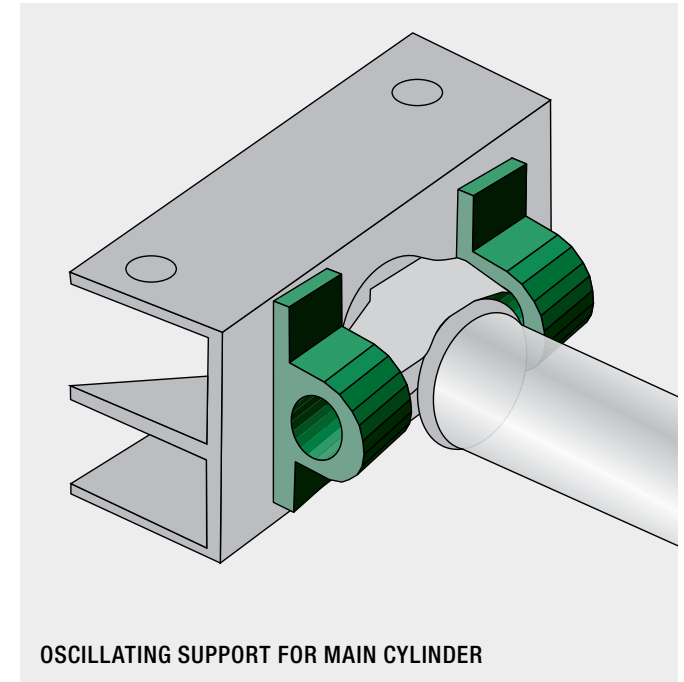




SOUNDPROOFING AND DUST PROTECTION CABINE

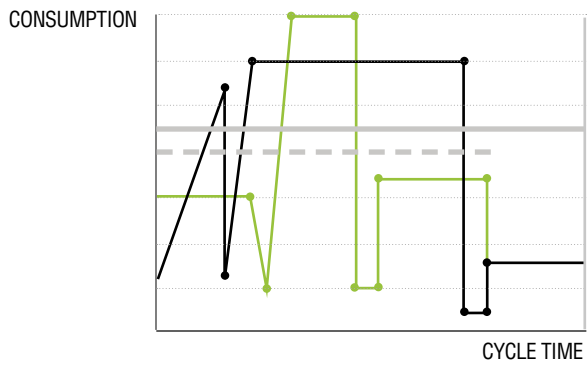


CLEANING AND MAINTENANCE INSPECTION DOOR

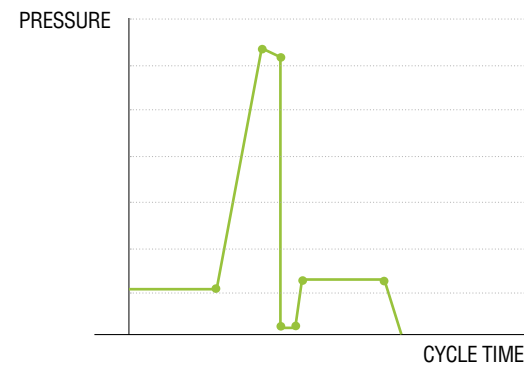


OSCILLATING SUPPORT FOR MAIN CYLINDER

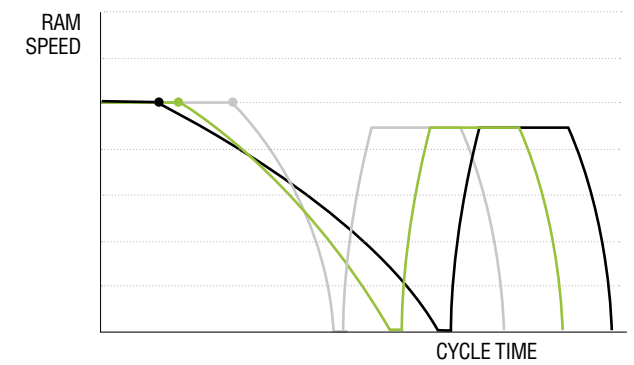
### CONSUMPTION - CYCLE TIME DIAGRAM



### PRESSURE - CYCLE TIME DIAGRAM



### RAM SPEED - CYCLE TIME DIAGRAM



— CONSUMPTION TREND PRESS WITH PRE-COMPACTOR    — CONSUMPTION TREND PRESS WITHOUT PRE-COMPACTOR    — CONSUMPTION MEDIUM WITH PRE-COMPACTOR    - - CONSUMPTION MEDIUM WITHOUT PRE-COMPACTOR

— LIGHT MATERIAL    — MEDIUM MATERIAL    — HEAVY MATERIAL

# TYING UNIT

## CORE VALUE



RELIABILITY



ROBUSTNESS



FLEXIBILITY



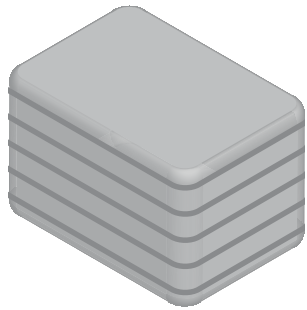
EASY MAINTENANCE

## FLEXIBILITY OF USE AND REDUCED OPERATING COSTS

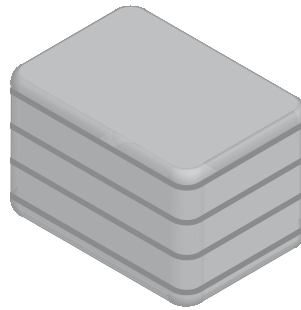
### ELECTROMECHANICAL HORIZONTAL TYING SYSTEM FOR TYING BOTH PLASTIC AND STEEL WIRES

This system simplifies the cleaning process for the tying machine, ensuring greater safety for the operator. The maintenance and cleaning of the tying unit is all performed at floor level. There is no need for a maintenance pit below the floor.

### TYING METHOD



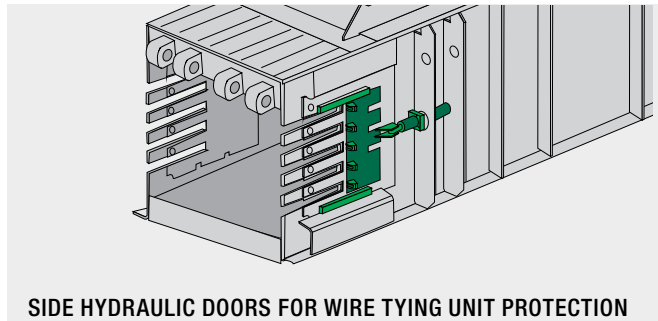
5 WIRES



4 WIRES



ROTATING TYING UNIT (STANDARD ON ALL MSW SERIES)



SIDE HYDRAULIC DOORS FOR WIRE TYING UNIT PROTECTION



PLASTIC WIRE



STEEL WIRE REELS



PLASTIC WIRE REELS





MAIN ELECTRIC PANNEL CONTROL



SCART CONNECTIONS MOUNTED ON HOPPER



SCART SOCKETS

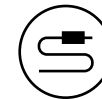
## ELECTRICAL COMPONENTS

CORE VALUE

### CONNECTION OF ELECTRICAL COMPONENTS

Connections use SCART leads and electrical cables protected by rodent-proof and fire-resistant sheaths

**SIEMENS**



HIGH CABLE RESISTANCE



OPERATOR SAFETY



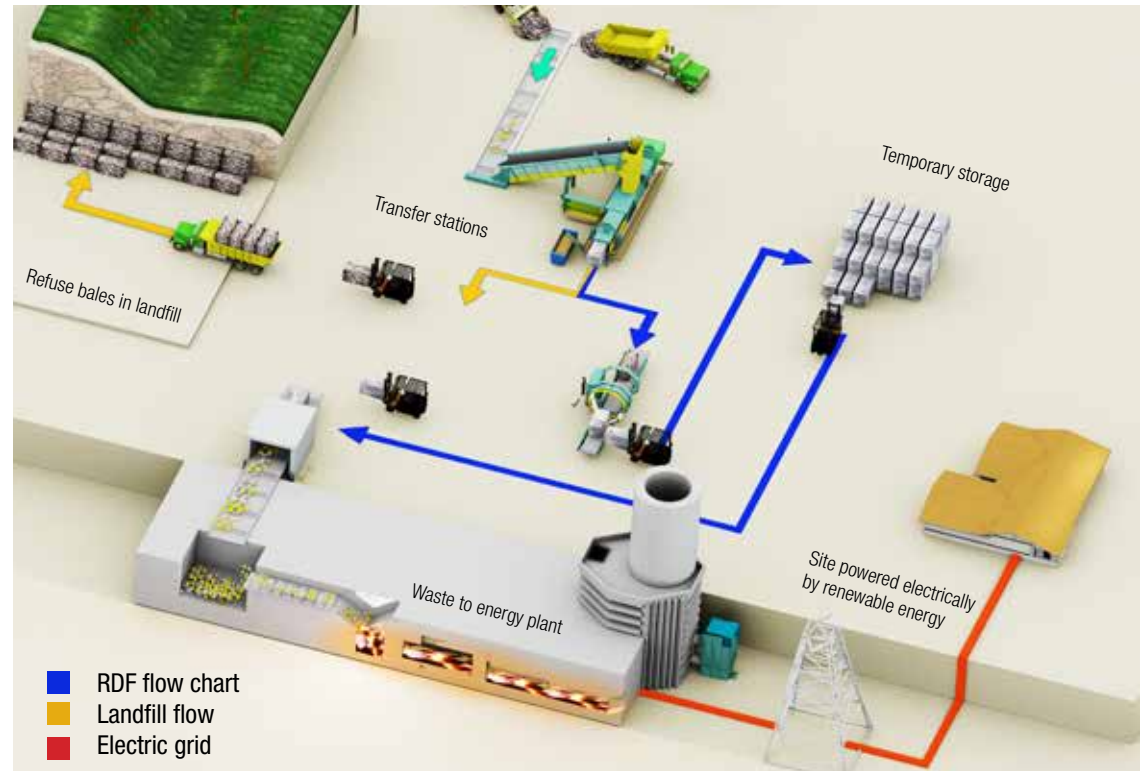
EASY MAINTENANCE

## WASTE FLOW OVERVIEW

**BALES CAN BE EITHER STORED FOR INCINERATION OR SENT TO LANDFILL FOR A SAFE DISPOSAL IN ORDER TO INCREASE ITS LIFE.**

WITH THE  
SAME SITE  
VOLUME  
THE LIFE OF  
THE LANDFILL IS  
INCREASED BY 30%

**30%**



## TRANSPORT EFFICIENCY

### ROAD TRANSPORT



### SEA TRANSPORT



### RAIL TRANSPORT



## STORAGE AND DISPOSAL SITES

### TEMPORARY STORAGE & DISPOSAL SITE CAPACITY





# MOBILE PRESSES OF MACPRESSE SERIES



# BALING & WRAPPING WASTE MATERIAL



## 20-50 BALES/HOUR

WE CAN SUPPLY PRESSES FOR BALING MUNICIPAL SOLID WASTE AND RDF/SRF WITH VARIOUS POWER RATINGS, WITH A PRODUCTION OF UP TO 50 TONS/HOUR

### ADVANTAGES OF PLASTIC FILM WRAPPING

- CLEAN AND TIDY STORAGE AND HANDLING
- REDUCED VOLUME OF 3 TO 4 TIMES FOR MSW
- NO FERMENTATION
- NO ODOR
- PRESERVES MATERIAL PROPERTIES
- NO ENERGY AND MASS LOSS
- NO FIRE RISK FROM SELF IGNITION
- WATERTIGHT OUTDOOR STORAGE
- TRANSPORT OF BALES DO NOT REQUIRE SPECIAL TRUCKS

## MACPRESSED HAS STUDIED A SPECIFIC LINE OF MOBILE PRESSES AND WRAPPING MACHINES

### MODELS OF PRESSES AND WRAPPING MACHINES SIZED ACCORDING TO PROJECT OUTPUT REQUIREMENTS

PLANT COMPOSED OF :

MAC 112 XL PRESS EQUIPPED WITH WHEELED PLATFORM  
WRAPPING MACHINE EQUIPPED WITH WHEELED PLATFORM  
GENERATING SET

SELF-PROPELLED HYDRAULIC LOADER OR CONVEYOR BELT (NO PHOTO)  
FORKLIFT WITH CLAMPS

ADVANTAGES  
COMPLETE MOBILITY OF MACHINERY  
FAST COMMISSIONING  
TYING UNIT WITH PLASTIC\_ IRON WIRES

Bales bundled with plastic film, with features of leachate containment, odour reduction, keeping birds and rodents away, fire risk reduction, and allowing temporary storage for greater logistic flexibility.





**THE SECTORS OF APPLICATION OF THE SERIES (MAC PLUG IN) ARE:**

- NON-COMPLIANT LANDFILL RECLAMATIONS**
- RECLAMATION OF TEMPORARY WASTE EMPLACEMENTS**
- TEMPORARY WASTE TREATMENT FACILITIES TO DEAL WITH EMERGENCIES IN LANDFILLS**
- CSS PRODUCTION PLANTS IN LANDFILLS**
- INCINERATOR FURNACES: WASTE PACKAGING DURING PLANT DOWNTIME - MAINTENANCE**
- BIOMASS BALING PLANTS**
- SEASONAL SERVICES FOR BALING AGRICULTURAL PRODUCTS**

FOR THOSE WHO NEED TO PERFORM BALING JOBS, THE MAC PLUG MOBILE LINES ALLOW YOU TO GET TO THE WORKSITES QUICKLY, BALE THE PRODUCTS AND THEN MOVE THE MACHINERY TO THE NEXT WORKSITE WITHOUT THE NEED TO RE-INSTALL THE PLANT

**THE MOBILE SYSTEM REDUCES THE TIME AND THE COST OF ASSEMBLY AND DISASSEMBLY AT THE WORKSITES.**

- THE PLANT REQUIRES 3 OPERATORS
- 1 FOR MACHINE LOADING
- 1 FOR PRESS AND WRAPPING MACHINE CONTROL
- 1 FOR BALE HANDLING

THE BALES CAN BE TIED WITH IRON OR PLASTIC WIRES. THE TYING UNIT HAS BEEN SPECIFICALLY DESIGNED TO ALLOW A VERY QUICK PASSAGE FROM ONE TYPE OF WIRE TO ANOTHER.  
THE HANKS OF THE PLASTIC WIRES ARE MOUNTED ON SPECIAL DISPENSERS INSTALLED ON THE MOBILE PLATFORM OF THE PRESS



**WEAR RESISTANT**

**CORE VALUE**



**Rexroth**  
Bosch Group



## HARDOX STEEL LINERS

THIS WEAR-RESISTANT SYSTEM PROTECTS THE BALER FROM ABRASION AND CORROSION.

The HARDOX wear-resistant liners are bolted in the extrusion channel and in the compaction box for easy replacement.

- 1 RESISTANT TO WEAR AND ABRASIVE MATERIALS
- 2 QUICK REPLACEMENT (PATENTED FASTENING)
- 3 MINIMUM BALER DOWNTIME

# 400%

**LONGER LASTING**  
THAN NORMAL STEEL



# ACCESSORIES OF BALERS

OPTIONAL



MUNICIPAL SOLID  
WASTE PROCESSING



RECYCLING SECONDARY  
RAW MATERIAL



RENEWABLE ENERGY  
AND BIOMASS



PAPER INDUSTRY



REAL TIME CONTROL



SENSORS CONTROL



PRODUCTION REPORT

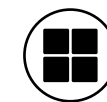
## MAC SUPERVISOR SYSTEM MSS1



SIEMENS



INTERNET CONNECTIVITY



OUTPUT OPTIMIZATION



DOWNTIME REDUCTION



## PRODUCTION MANAGEMENT

- BALE COUNTER PER TYPE
- TOTAL PRODUCTION IN TONS EACH GRADE MATERIAL
- DOWNTIME RECORDED
- PRODUCTION TIME
- PRODUCTION TIME TON/H
- PRODUCTION TIME TON/H SHIFT
- ELECTRIC ENERGY CONSUMPTION KW/H
- ELECTRIC ENERGY CONSUMPTION COST PER TON
- LABOR COST PER TON
- COST PER TON ON EACH GRADE PROCESSED.
- BALING WIRE COST PER TON
- RECORDS DIVIDED PER SHIFT (NR. 3 MAX AVAILABLE)
- A. 20 SETTINGS OR MORE OF MACHINE PARAMETERS ACCORDING TO MATERIAL TO BE BALED (COMBINED WITH MDC SYSTEM)
- B. ALARMS MANAGEMENT
- C. REMOTE ASSISTANCE
- D. 5 LANGUAGES





PRODUCTION REPORT



ALERT NOTIFICATION

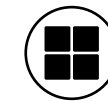
## MAC SUPERVISOR SYSTEM MSS2



**SIEMENS**



INTERNET CONNECTIVITY



OUTPUT OPTIMIZATION



DOWNTIME REDUCTION



## PRODUCTION MANAGEMENT

- BALE COUNTER TOTAL
- TOTAL ACTIVITY TIME
- BALE COUNTER PARTIAL RESETTABLE
- ACTIVITY TIME RESETTABLE

## FUNCTIONS

- 5 SETTINGS AVAILABLE (COMBINED WITH MDC – MAC DENSITY CONTROL)
- ALARMS MANAGEMENT
- REMOTE ASSISTANCE
- 5 LANGUAGES

## OPTIMIZATION OF PRODUCT OUTPUT AND REDUCTION OF BALER DOWNTIME AND OPERATING COSTS



## HYDRAULIC SYSTEM MDC

### IMMEDIATE RECONFIGURATION OF MACHINE PARAMETERS FOR MULTI-MATERIAL PROCESSING

**AUTOMATIC CONFIGURATION OF BALING PARAMETERS ACCORDING ON SELECTED INFEED MATERIALS, TO ACHIEVE MAXIMUM BALE DENSITY, REDUCTION OF TRANSPORT COSTS**

#### PROCESSING ADVANTAGES:

OPTIMISED BALES WEIGHT ACCORDING TO MATERIAL TO BE BALED



OUTPUT  
OPTIMISATION



LOW COST







## FLUFFER FOR WASTE PAPER



PLANT  
CLEANING



OPERATOR  
SAFETY



EASY  
MAINTENANCE



## FLUFFER FOR WASTE PAPER

MECHANICAL DEVICE FOR PROCESSING PAPER MATERIALS, TO REDUCE DENSITY PRIOR TO COMPACTION, OBTAINING:

- INTEGRITY OF IDEAL BALES
- REDUCED ELECTRICAL CONSUMPTION
- GREATER DENSITY
- EASY HANDLING



## MAC POLY-TIE©

### FLEXIBILITY OF USE AND REDUCED OPERATING COSTS

**THE PATENTED MACPRESSE BINDING MACHINE CAN USE EITHER STEEL OR PLASTIC WIRE AS NEEDED. CHANGING FROM THE PLASTIC WIRE TO STEEL WIRE CAN BE DONE QUICKLY AND EASILY.**

THE ELECTRO-MECHANICAL PLASTIC WIRE TYING UNIT HAS BEEN DESIGNED SPECIFICALLY FOR USERS THAT NEED TO BALE RDF WASTE TO BE SENT TO WASTE INCINERATION FACILITIES, IN ORDER TO AVOID METAL LEFTOVER IN ASH THAT INCREASE OPERATIONAL, MAINTENANCE AND DISPOSAL COST.

To prevent potential unwinding, suggested bale length is 1,4 - 1,6 METERS



RELIABILITY



ROBUSTNESS



FLEXIBILITY



EASY  
MAINTENANCE







## COLLECTION OF LEACHATES AND REJECTS

### ESSENTIAL FOR BALING MUNICIPAL SOLID WASTE WITH ORGANIC MATERIAL

It is essential to keep the workplace clean and free of leachate and residue to increase safety of personnel.



PLANT  
CLEANING



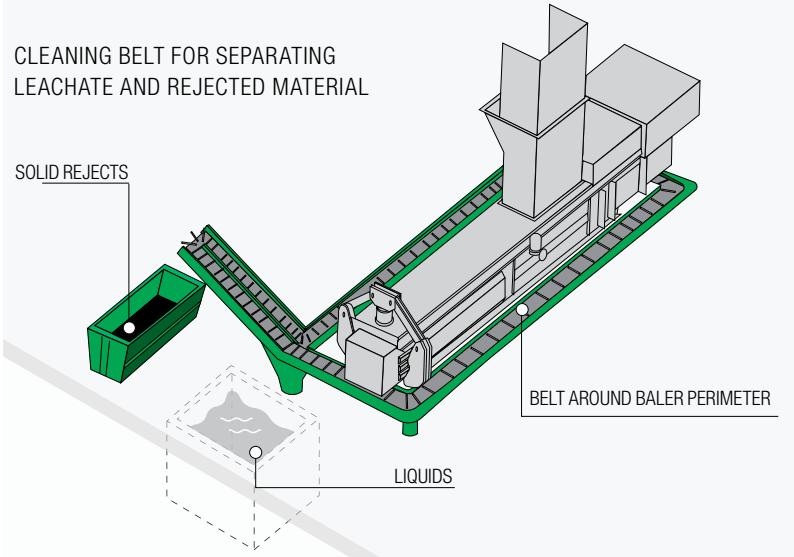
OPERATOR  
SAFETY



EASY  
MAINTENANCE



SOLID WASTE COLLECTION TANK



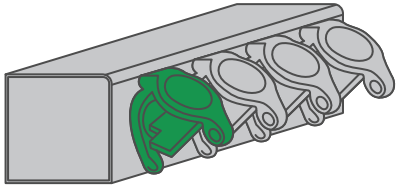
THE CLEANING CONVEYOR WITH CHAIN AND SCRAPERS IS INSTALLED AROUND THE PERIMETER OF THE BALER. LEACHATE AND REJECTED MATERIALS ARE COLLECTED AND DISPOSED OF IN SPECIAL TANKS.



## SECURITY SYSTEM MSK



KEY-LOCK BLOCK



OPERATOR SAFETY

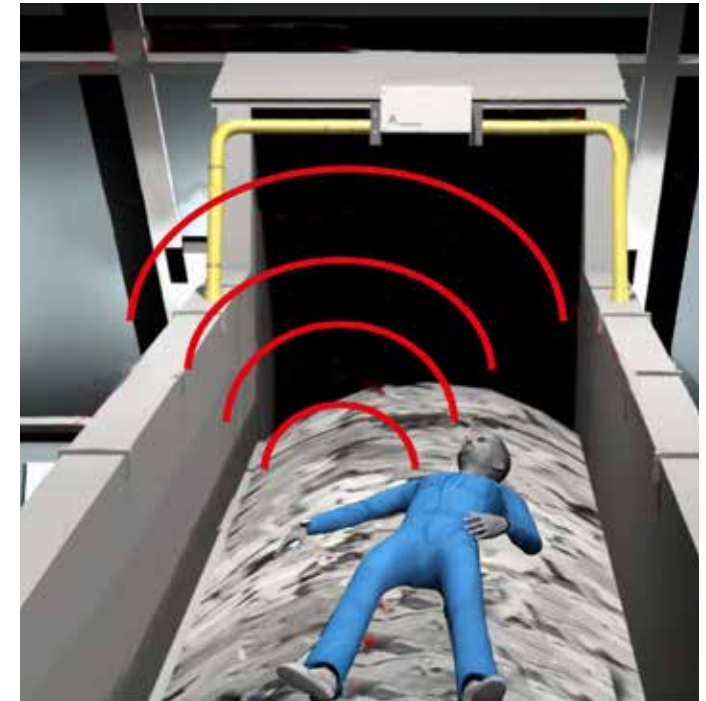
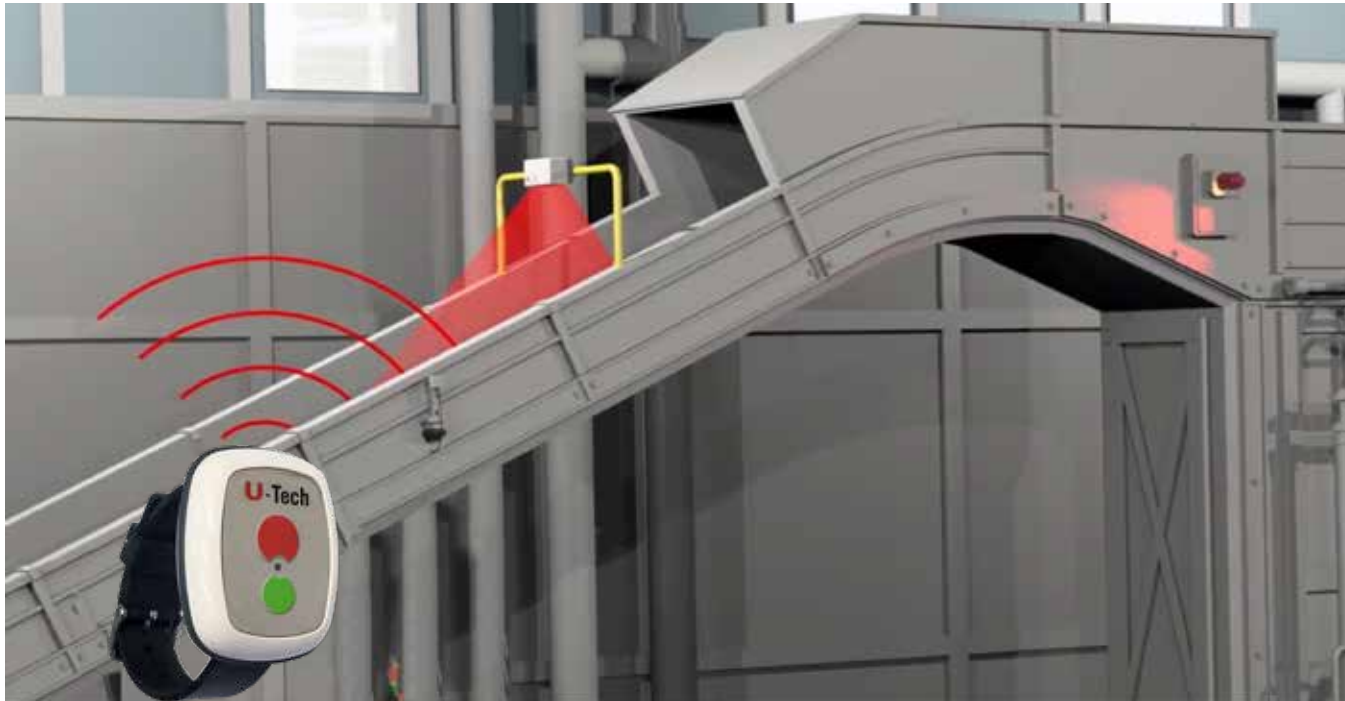
### MSK MAC SAFETY KEYS

INSTALLED ON ALL EQUIPMENT ACCESS DOORS.

MSK MAC SAFETY KEYS SYSTEM HAS BEEN DESIGNED TO OFFER ENHANCED SAFETY DURING OPERATIONS IN COMPARISON WITH THE BASIC STANDARDS REQUIRED BY THE SAFETY REGULATIONS CURRENTLY IN FORCE.

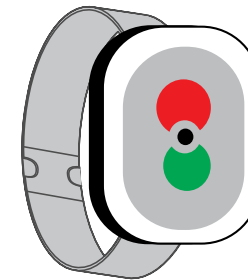
THE MSK (MAC SAFETY KEYS) SYSTEM ALLOWS SAFE MACHINE MAINTENANCE AND CLEANING, ACTIVATING ACCESS DOOR OPENING BY MEANS OF CASTLE LOCK KEYS. THE KEYS ARE RELEASED ONLY WHEN THE ELECTRICAL CONTROL PANEL IS SWITCHED OFF.





## SECURITY SYSTEM MSB

THE MSB SAFETY SYSTEM MONITORS A SELECTED AREA OF THE CONVEYOR BELT RESERVED FOR THE DETECTION OF A TAG, (WRISTBAND WORN BY THE OPERATOR), WHOSE PRESENCE SIGNALS A SITUATION OF SERIOUS DANGER AND AUTOMATICALLY STOPS THE BELT.



OPERATOR SAFETY

## MSB - MAC SAFETY BRACELET

OPERATOR SAFETY SYSTEM

THIS SPECIAL INNOVATION PROTECTS THE OPERATOR IN THE EVENT OF A FALL ON THE CONVEYOR BELT: THE SYSTEM STOPS AUTOMATICALLY, PREVENTING THE PERSON FROM FALLING INSIDE THE BALER AND PREVENTING THE BELT FROM BEING RESTARTED UNTIL THE DANGER HAS CEASED.

PRODUCT SERIES

# BALING & WRAPPING WASTE MATERIAL

## FILM WRAPPERS CAN BE INTEGRATED WITH THE BALERS

Suitable models depending on the hourly production needed



ENVIRONMENTALLY FRIENDLY



ODOR-FREE



NO LEACHATE

## 20-50 BALES/HOUR

WE CAN SUPPLY PRESSES FOR BALING MUNICIPAL SOLID WASTE AND RDF/SRF WITH VARIOUS POWER RATINGS, WITH A PRODUCTION OF UP TO 50 TONS/HOUR

Bales/h

50-60

40-45

30-35

10-15

PRODUCTION

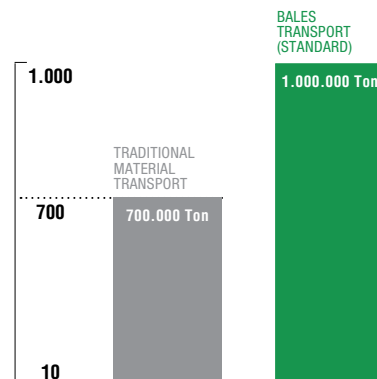
### ADVANTAGES OF PLASTIC FILM WRAPPING

- CLEAN AND TIDY STORAGE AND HANDLING
- REDUCED VOLUME OF 3 TO 4 TIMES FOR MSW
- NO FERMENTATION
- NO ODOR
- PRESERVES MATERIAL PROPERTIES - NO ENERGY AND MASS LOSS
- NO FIRE RISK FROM SELF IGNITION
- WATERTIGHT OUTDOOR STORAGE
- TRANSPORT OF BALES DO NOT REQUIRE SPECIAL TRUCKS

### TRANSPORT EFFICIENCY



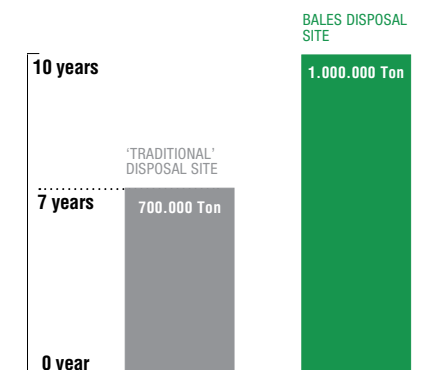
### HIGH FLEXIBILITY WHEN CHOOSING THE METHOD OF TRANSPORTATION



### STORAGE AND DISPOSAL SITES



### CAPACITY OF DISPOSAL SITE OVER TIME FOR SAME VOLUME





# STEEL PLATE CONVEYORS BELTS DESIGNED FOR ALL MATERIALS



MUNICIPAL SOLID  
WASTE PROCESSING



RECYCLING SECONDARY  
RAW MATERIAL



RENEWABLE ENERGY  
AND BIOMASS



PAPER INDUSTRY

# SERIES CONVEYOR BELTS



MOTOR AND GEAR BOX



EASILY REPLACEABLE STEEL SLATS



EMERGENCY STOP ROPE



OIL TANK



TAIL PULLEY TENSIONING DEVICE



PUSH-BUTTON





# MATERIALS PROCESSED AND PERFORMANCE



PLASTIC BOTTLES

L Series



CHAIN PITCH 100 MM

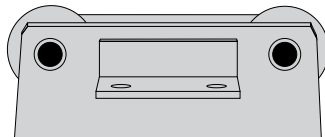


HEAVY WASTE PAPER, RDF

P Series



CHAIN PITCH 200 MM

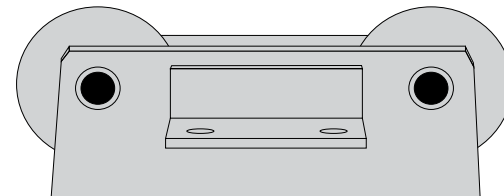


MUNICIPAL SOLID WASTE,  
INDUSTRIAL WASTE, DEMOLITION  
WASTE, RDF

PP Series



CHAIN PITCH 250 MM



L SERIES:  
LIGHT LOADS





**5,5 HP**  
MOTOR POWER

CHAIN PITCH  
**100 mm 3" 15/16**

MATERIALS  
**PLASTIC MATERIALS AND LIGHT WASTE PAPER**

**GENERAL SPECIFICATIONS**

**EXTERNAL CONVEYOR WIDTH**

**LOADING WIDTH**

EUROPE (mm)

USA

EUROPE (mm)

USA

1000 L

1 100

43"

850

33"

1500 L

1 550

61"

1 300

51"

1800 L

1 700

67"

1 450

57"

2100 L

2 000

79"

1 750

69"

**L SERIES:  
LIGHT LOADS**

**MOTOR POWER**

4 KW

OUR CONVEYOR BELTS SERIES L ARE COMBINED WITH THE MAC 102, MAC 106/2 AND MAC 107/2 BALERS. THESE MODELS ARE IN FACT IN LINE WITH THE CHARACTERISTICS OF THESE CONVEYOR BELTS BOTH FOR THE LEVEL OF PRODUCTIVITY REACHED BY THE BALERS AND FOR THE CHARACTERISTICS OF THE LOADING HOPPER IN FACT THE LOADING HOPPER OF THESE BALERS IS SLIGHTLY WIDER THAN THE USEFUL WIDTH OF THE CONVEYOR BELT.

**THESE CONVEYOR BELTS ARE DESIGNED FOR THE PLASTIC RECYCLING INDUSTRY AND FOR THE PROCESSING OF LIGHT WASTE PAPER LOADS.**

**MAC 102 TO MAC 106/2-107/2  
BALING PRESS**



CHAIN AND GUIDE



MOTORIZED HEAD PULLEY «L» SERIES



CHAIN PITCH 100 MM

P SERIES:  
**HEAVY LOADS**





**7,5 - 10 HP**  
MOTOR POWER

CHAIN PITCH  
**200 mm 7" 7/8**

MATERIALS  
**WASTE PAPER, BIOMASS, RDF-SRF**

GENERAL SPECIFICATIONS	EXTERNAL CONVEYOR WIDTH		LOADING WIDTH	
	EUROPE (mm)	USA	EUROPE (mm)	USA
1500 P	1 481	58"	1 181	47"
1800 P	1 741	68"	1 441	57"
2100 P	2 086	82"	1 786	70"
2250 P	2 250	88"	1 950	76"

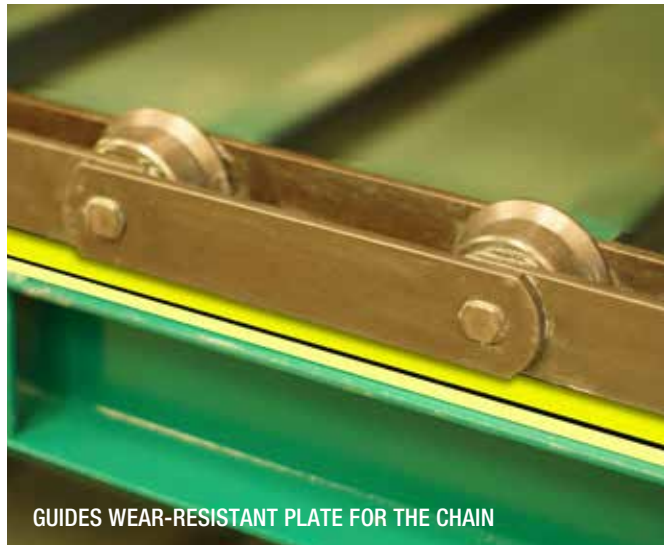
**THIS SERIES IS USED ALSO IN PAPER MILLS TO LOAD PULPERS BECAUSE THEY CAN TRANSPORT BALES WEIGHING SEVERAL TONS FOR THE WHOLE LENGTH WITHOUT ANY PROBLEM.**

**P SERIES:  
HEAVY LOADS**

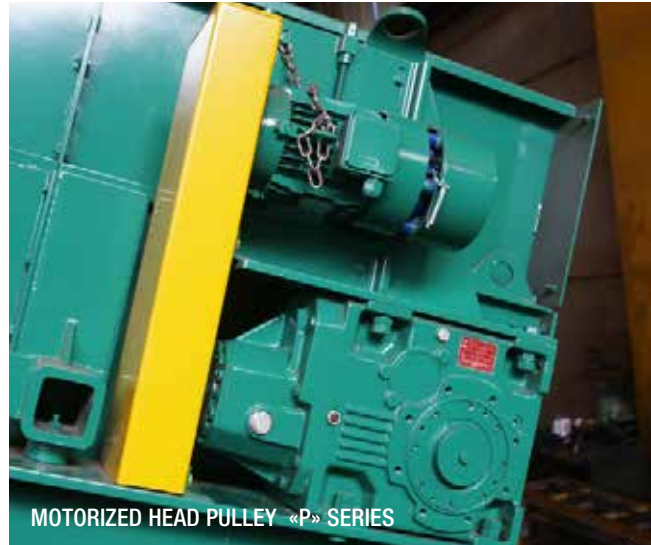
MOTOR POWER 5,5 - 7,5 KW

THE P SERIES IS SUITED TO MATCH BALERS WITH VERY HIGH HOURLY PRODUCTION DEMANDS.

**MAC 107/2 TO MAC 112XL  
BALING PRESSES**



GUIDES WEAR-RESISTANT PLATE FOR THE CHAIN



MOTORIZED HEAD PULLEY «P» SERIES



CHAIN PITCH 200 MM



# PP SERIES: HEAVIER LOADS





**10 HP**  
MOTOR POWER

CHAIN PITCH  
**250 mm 10"**

MATERIALS  
**RDF-SRF, MUNICIPAL SOLID WASTE**

**GENERAL SPECIFICATIONS**

**EXTERNAL CONVEYOR WIDTH**

**LOADING WIDTH**

	EUROPE (mm)	USA	EUROPE (mm)	USA
1500 PP	1 550	61"	1 170	46"
1800 PP	1 825	72"	1 445	57"
2100 PP	2 170	85"	1 790	70"

**PP SERIES:  
HEAVIER LOADS**

MOTOR POWER 7,5 KW

THE PP SERIES IS GENERALLY USED IN LARGE WASTE TREATMENT PLANTS AND MSW BALERS.

**THE MAC SERIES PP CONVEYOR BELTS HAVE CHARACTERISTICS WHICH DISTINGUISH THEM FROM THOSE OF COMPETITORS. THE CHAIN PITCH AND THE DRIVE UNITS ARE DESIGNED TO HANDLE EXCEPTIONALLY HARSH AND HEAVY LOADS.**

**MAC 108L/1 TO MAC 112  
BALING PRESS**



GUIDES WEAR-RESISTANT PLATE FOR THE CHAIN



MOTORIZED HEAD PULLEY «PP» SERIES



CHAIN PITCH 250 MM



CONVEYOR BELT CONFIGURATION

## STEEL PLATE CONVEYORS BELTS CONFIGURATIONS

### STEEL BELTS FOR WASTE PAPER, RECYCLABLES PLASTIC, WASTE AND BALED WASTE PAPER

MACPRESSE ENGINEERING DEPARTMENT USES EXPERT TECHNICIANS WHO DESIGN EFFICIENT LAYOUT SOLUTIONS TO SATISFY THE NEEDS OF EACH CUSTOMER. DESIGNS ARE PREPARED RANGING FROM SIMPLE CONVEYOR UNITS WHICH FEED THE BALERS UP TO COMPLETE SORTING SYSTEMS.



OVERLAPPED CONVEYOR



IN PIT CONVEYOR



## CONVEYORS DISCHARGE SECTIONS

**MOTORIZED HEAD PULLEY SECTION  
WITH 0° INCLINATION**



**MOTORIZED HEAD PULLEY SECTION  
WITH 30° INCLINATION**



**MOTORIZED HEAD PULLEY SECTION  
WITH 45° INCLINATION**



**MOTORIZED HEAD PULLEY SECTION  
WITH 60° INCLINATION**



## CONVEYORS LOADING SECTIONS



**LOADING SECTION  
OUT OF PIT**



**LOADING SECTION  
OUT OF PIT**



# OTHER ACCESSORIES

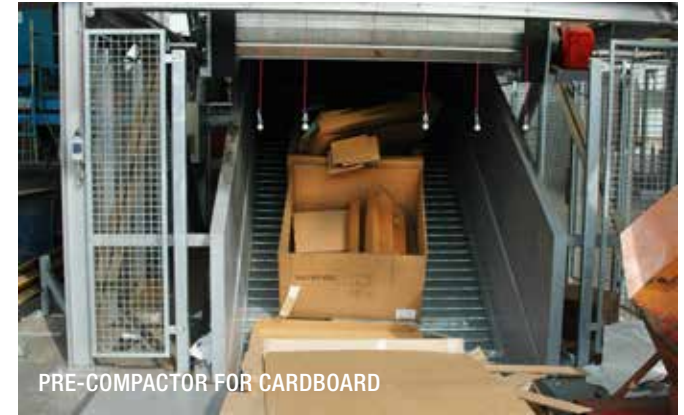
OPTIONAL



CONVEYOR TUNNELING FROM SHREDDERS



DUST FILTER WITH BRIQUETTING MACHINE



PRE-COMPACTOR FOR CARDBOARD



TRANSITION HOPPER



CENTRALISED LUBRICATION SYSTEMS



INVERTER



SAFETY MARKERS SUSPENDED



BUNKER CONVEYOR



LOADING HOPPER



TIPPING QUALITY CONTROL SIDE PANELS



# SHREDDERS: DESIGNED FOR PAPER RECYCLERS & PAPER MILLS SINCE 1968



**MUNICIPAL SOLID  
WASTE PROCESSING**



**RECYCLING SECONDARY  
RAW MATERIAL**



**RENEWABLE ENERGY  
AND BIOMASS**



**PAPER INDUSTRY**

# SHREDDERS SERIES: GENERAL DESCRIPTION



LOADING  
HOPPER



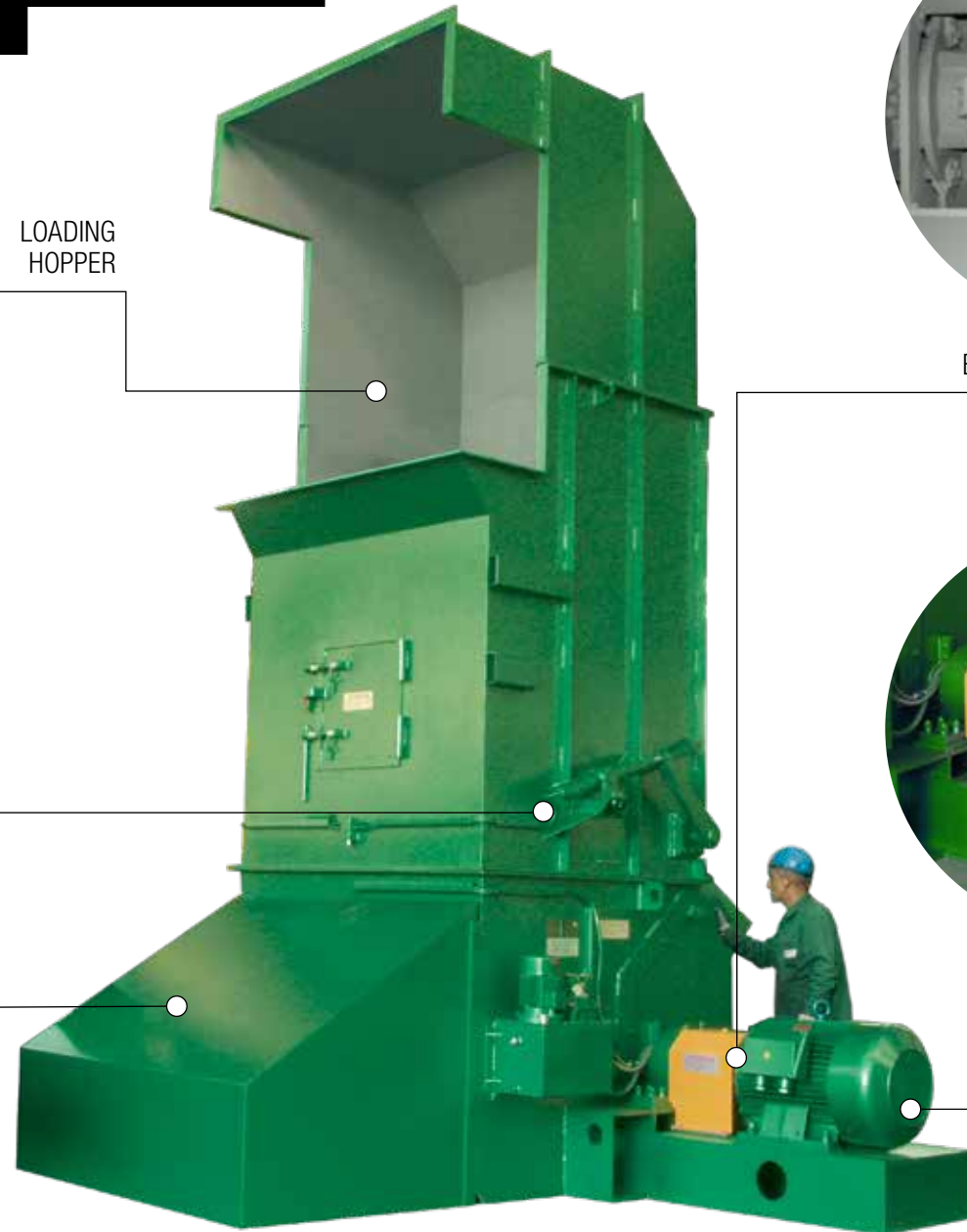
BOLTED HAMMERS ROTOR

HYDRAULIC BYPASS



ENERGY EFFICIENT  
ELECTRIC MOTOR AND  
SUPPORTS

HOPPER





# MATERIALS PROCESSED AND PRODUCTION



Mac 1000

EUROPA  
PRODUCTION 6-10 TON/H

USA  
PRODUCTION 6.6-11 TON (US)/H

Mac 1500

EUROPA  
PRODUCTION 11-15 TON/H

USA  
PRODUCTION 12-17 TON (US)/H

Mac 2000

EUROPA  
PRODUCTION 18-22 TON/H

USA  
PRODUCTION 20-25 TON (US)/H

MODEL  
MAC 1000





**60 HP**  
MOTOR POWER

LOADING HOPPER  
**100 CM / 39"**



**GENERAL SPECIFICATIONS**

	EUROPE	USA
MOTOR POWER	45 KW	45 KW
DIMENSIONS OF LOADING HOPPER	1000 mm	39"
PRODUCTION	6-10 TON/H	6.6-11 TON(US)/H
SHREDDER WEIGHT	5.500 KG	12.000 lb

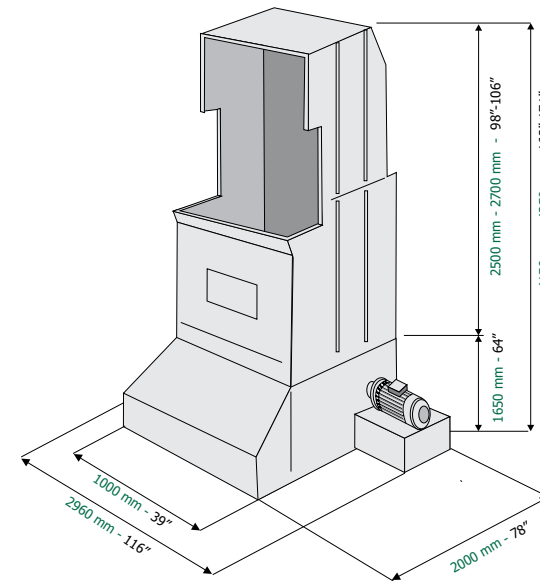
**MODEL**  
**MAC 1000**

TO GET A BALANCED OUTPUT BETWEEN  
BALER AND SHREDDER WE RECOMMEND

IDEAL FOR SHREDDING WASTE  
PAPER WITH A HIGH SPECIFIC  
WEIGHT

This model is designed with a single fast rotor  
and bolted hammers for high hourly production  
rates. Thick bulky packs such as magazines,  
newspapers, paper cores and books.

**MAC 106/2 MAC107/2  
BALERS**



MODEL  
MAC 1500





**75-100 HP**  
MOTOR POWER

LOADING HOPPER  
**150 CM / 59"**



**GENERAL SPECIFICATIONS**

	EUROPE	USA
MOTOR POWER	55-75 KW	55-75 KW
DIMENSIONS OF LOADING HOPPER	1500 mm	59"
PRODUCTION	11-15 TON/H	12-17 TON(US)/H
SHREDDER WEIGHT	7.500 KG	17.000 lb

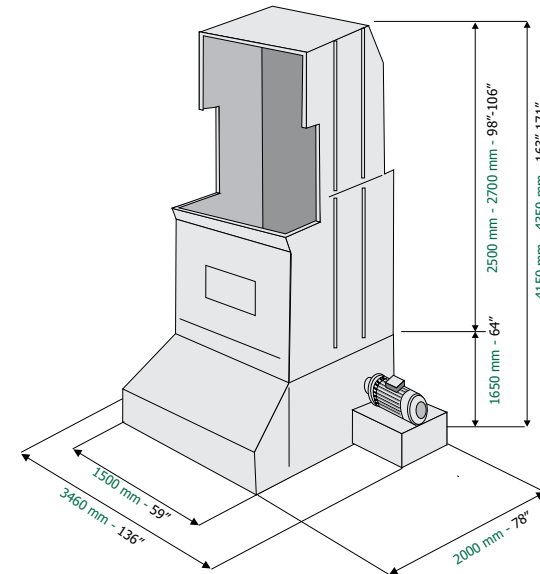
**MODEL**  
**MAC 1500**

TO GET A BALANCED OUTPUT BETWEEN  
BALER AND SHREDDER WE RECOMMEND  
COUPLING THIS MODEL WITH

**IDEAL TO SHRED WASTE PAPER**

This model is designed with a single fast rotor and bolted hammers for high hourly production rates. Thick bulky packs such as magazines, newspapers, paper cores and books are easily shredded .

**MAC 108/1 MAC 110/1**  
**BALERS**



MODEL  
MAC 2000





**120-150 HP**  
MOTORS POWER

LOADING HOPPER  
**200 CM / 78"**



**GENERAL SPECIFICATIONS**

	EUROPE	USA
MOTOR POWER	90-110 KW	90-110 KW
DIMENSIONS OF LOADING HOPPER	2000 mm	78"
PRODUCTION	18-22 TON/H	20-25 TON(US)/H
SHREDDER WEIGHT	8.500 KG	18.260 lb

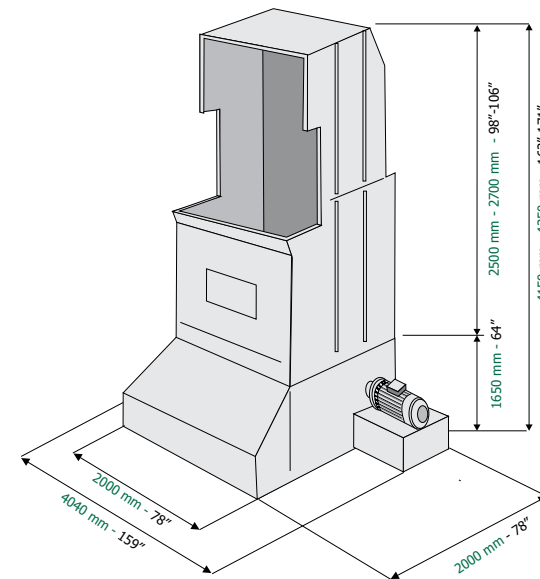
**MODEL**  
**MAC 2000**

TO GET A BALANCED OUTPUT BETWEEN  
BALER AND SHREDDER WE RECOMMEND  
COUPLING THIS MODEL WITH

**IDEAL TO SHRED WASTE PAPER**

This model is designed with a single fast rotor and bolted hammers for high hourly production rates. Thick bulky packs such as magazines, newspapers, paper cores and books are easily shredded .

**MAC 111/1 MAC 111AS/1  
MAC 112XL BALERS**



**200 HP**  
MOTOR POWER

LOADING HOPPER  
**150 CM/59"**

CONFIDENTIAL DOCUMENTS DESTRUCTION

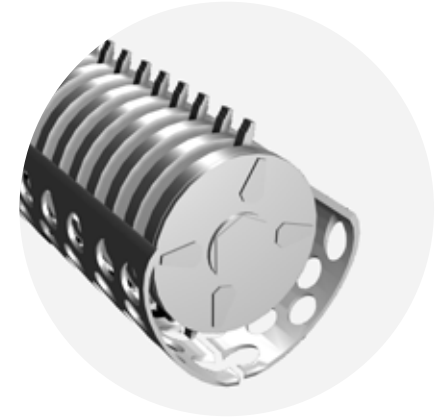
**MAC 1500D**



HYDRAULIC GRIDS



SUCTION HOPPER



ROTOR WITH PIVOTING HAMMERS

ELECTRIC MOTOR AND SUPPORTS





# DIMENSIONS AND PRODUCTIONS



EASY  
MAINTENANCE



HIGH DENSITY  
BALES

## PROCESSING COMPARISON



PRIMARY SHREDDER DOUBLE SHAFT SLOW  
HYDRAULIC MULTI-MATERIAL



SHREDDER MAC 1500 D GRIDS 38 MM



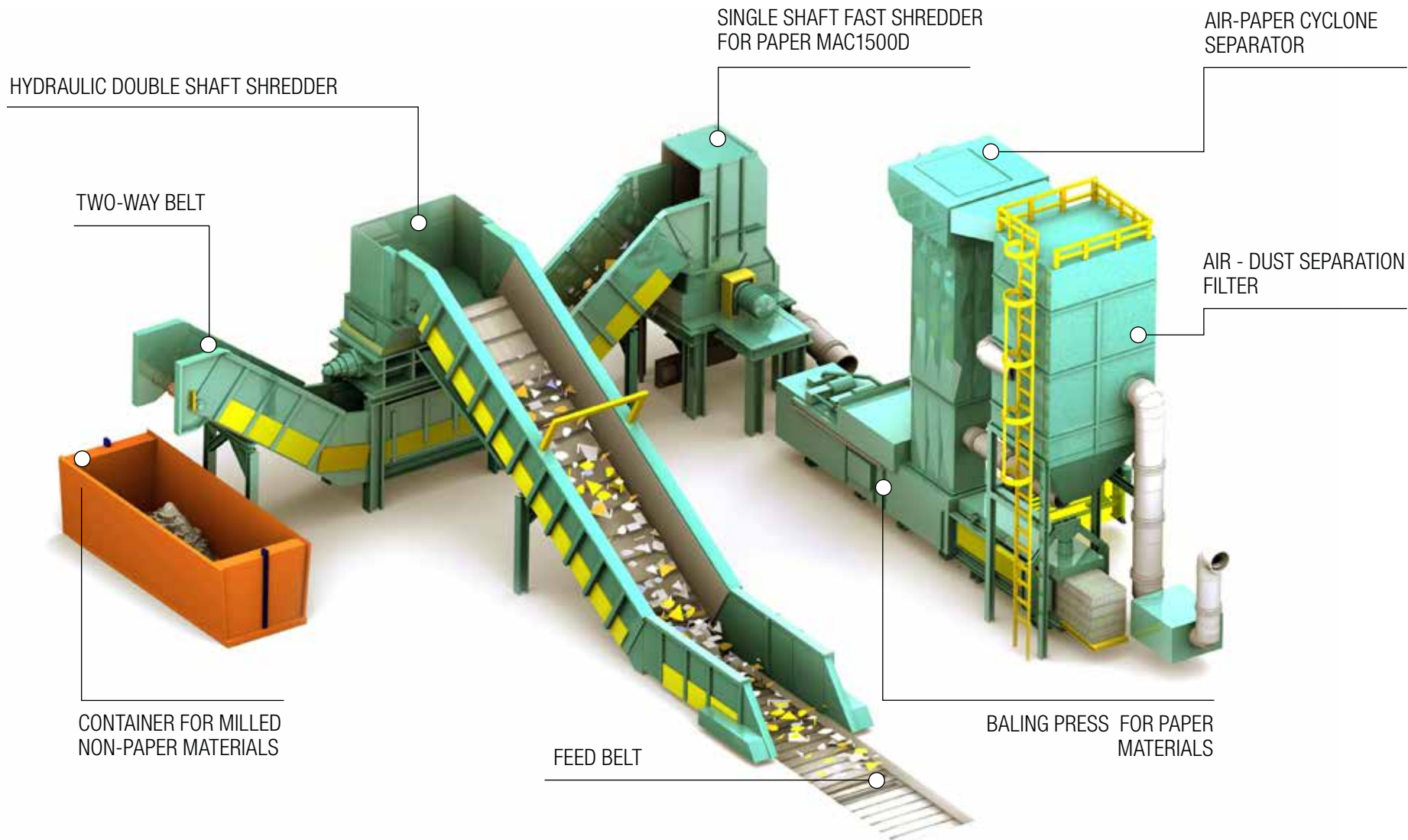
SHREDDER MAC 1500 D GRIDS 28MM

TECHNICAL DATA	EUROPE	USA
MOTOR POWER	150 KW	150 KW
ROTOR/MOTOR SPEED	1000 RPM	1000 RPM
LOADING HOPPER	1500 X 1403 mm	60" X 55"
SHREDDER WEIGHT	14000 KG	30800 LB

OUTPUT PER HOUR WITH CONTINUOUS FEEDING			
EUROPE	Ø 70 mm	Ø 35 mm	Ø 28 mm
USA	Ø 2" 3/4	Ø 1" 3/8	Ø 1" 7/64
	6 - 7 TON/H	3,5 - 4 TON/H	2 - 3 TON/H

# CONFIDENTIAL DOCUMENTS DESTRUCTION

## GENERAL DESCRIPTION





# ACCESSORIES

## OPTIONALS

**ALL SHREDDERS CAN BE EFFICIENTLY SOUNDPROOFED AND EQUIPPED WITH DUST REDUCTION SYSTEMS.**



LONG SERVICE LIFE



ROBUSTNESS



EASY MAINTENANCE



SOUNDPROOFING CABIN



# ACCESSORIES

## OPTIONALS



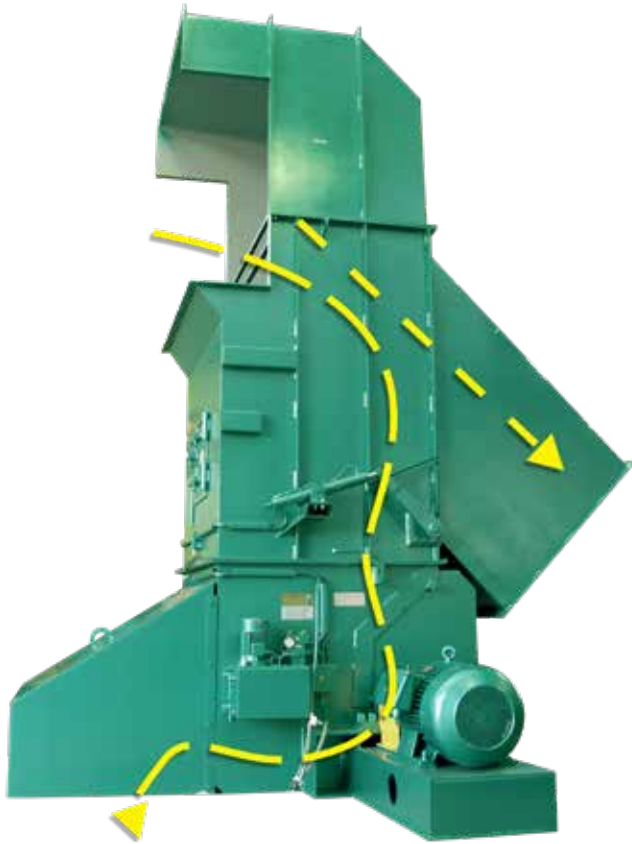
A SOLID SHREDDER PLANT WITH TREMENDOUS OUTPUT A LOW RUNNING COST.

THIS MACHINE HAS BEEN CONSTRUCTED TO SHRED CORES, THICK VOLUME BOOKS, TELEPHONE DIRECTORIES

THE MACPRESSE SHREDDER WILL SHRED REEL OF PAPER AND BUNDLES OF NEWSPAPERS (WITHOUT REMOVAL OF STRAPS) AND OTHER TYPE OF HEAVY WASTE PAPER. THE CONTROLS FOR THE SHREDDER ARE LOCATED IN THE MAIN ELECTRIC PANEL.







**BYPASS SYSTEM**

THE BYPASS SYSTEM INSTALLED INSIDE THE HOPPER ALLOWS THE MATERIALS ENTERING INTO THE MACHINE TO EXIT FROM AN ALTERNATIVE WAY (EG. A BIN) IN CASE OF MACHINE STOP (EG. FOR MAINTENANCE). IN THIS WAY A PLANT DOWNTIME WILL NOT OCCUR.



BYPASS



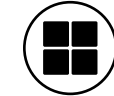
STEEL SHREDDER SUPPORT



CONCRETE SHREDDER SUPPORT

## VARIOUS LAYOUTS

### TAYLOR MADE SOLUTIONS



OUTPUT  
OPTIMISATION



LOW COST



L-CONFIGURATION



CONFIGURATION IN LINE WITH BYPASS



T-CONFIGURATION

THE QUANTITY OF BOLTED HAMMERS AND FLANGES DESIGNED AND CUSTOMIZED FOR THE CUSTOMER'S SPECIFIC REQUIREMENTS AND THE MATERIALS TO BE PROCESSED.

BOLTED SUPPORTS SPECIALLY MANUFACTURED BY MACPRESSE ARE CONSTRUCTED WITH HIGH RESISTANCE BEARINGS CONNECTING THE ROTOR OF THE SHREDDER TO THE MOTOR; HAMMERS ARE INTERCHANGEABLE AND BOLTED TO THE ROTOR AND ARE COATED WITH A HARD WEAR-RESISTANT METAL ALLOY.



# 30%

ENERGY  
SAVINGS

COMPARED TO  
TRADITIONAL MOTORS



# SORTING PLANTS FOR WASTE PROCESSING



MUNICIPAL SOLID  
WASTE PROCESSING



RECYCLING RAW MATERIALS



RENEWABLE ENERGY &  
ENGINEERED FUELS



PAPER INDUSTRY



MACPRESSE PLANTS INCREASING  
**THE VALUE OF WASTE**





# PROCESSED MATERIALS



**RDF - SRF**



**C&I**



**MSW**

INFEED DENSITY



EUROPE

150/200 kg/m<sup>3</sup>

200/300 kg/m<sup>3</sup>

300/350 kg/m<sup>3</sup>

USA

9.36/12.49 lb/ft<sup>3</sup>

12.49/18.73 lb/ft<sup>3</sup>

18.73/21.85 lb/ft<sup>3</sup>



# AUTOMATIC SORTING PLANT FOR RECYCLABLES

## 25-30 TON/H

BUNKER AND BALLISTIC SEPARATOR STADLER



STAR DISC SCREEN



QUALITY CONTROL



OPTICAL SELECTOR



END-OF-LIE-STORAGE BUNKER



SHREDDER MAC 2000



BALER FEED LOADING BELT



BALER FEED BELT



MAC 111/1 BALERS





TETRAPACK



ALUMINUM



HDPE



HIGH GRADE

## STORAGE OF MULTI-MATERIAL BALES WITH PERFECT INTEGRITY AND OPTIMUM BALES SPECIFIC WEIGHT OPTIMIZE STORAGE COSTS AND HANDLING.



BALE DENSITY



EASY HANDLING



OPTIMAL STORAGE



RAIL TRANSPORT



SEA TRANSPORT



ROAD TRANSPORT



PET



CARDBOARD



**SORTING**

# **MSW - 40 TON/H**

**SELECTION PLATFORM**



**DYNAMIC SCREENS**



**PLATFORM LOADING BELTS**



**MAC 108/1 BALER FOR RECYCLABLE MATERIALS**



**UNDERSCREEN DYNAMIC SEPARATOR**



**MAC 108L/1 BALER FOR MSW**







SELECTION PLATFORM AND BUNKER



MSW IN BALES



HDPE BALES



ALUMINUM BALE



# SORTING AND BALING MUNICIPAL SOLID WASTE

## MSW - 50/55 TON/H

MSW INFEEED BELTS



ROTARY SCREENS AND UNDERSCREEN COLLECTION



END-OF-LINE BYPASS BELTS



MAC 111L/1 BALERS



RECYCLABLE MATERIAL STORAGE BUNKER







ROTARY SCREENS



RECYCLABLE MATERIAL BUNKER UNLOADING



BALING LINES: MSW-RECYCLABLE MATERIAL



TIPPING FLOOR FOR THE UNLOADING MSW



PET BOTTLES



NEWSPAPER



PLASTICS



WRAPPING LINE FOR MSW





CONTAINER LOADING

## PLANTS DESIGNED TO PROCESS ALL THE SECONDARY RAW MATERIALS, SUCH AS PET, PPT, HDPE, PAPER AND ALUMINUM, AND MORE.

MACPRESSE HAS PRODUCED PLANTS FOR THE SORTING OF WASTE RECYCLING FOR MORE THAN 50 YEARS WITH OUTPUTS VARYNG FROM 10 TO 50 TON/HOUR. WITH MORE THAN 1.000 PLANTS INSTALLED IN MORE THAN 50 COUNTRIES, CONTINUOS RESEARCH AND INNOVATION MAKES MACPRESSE YOUR RELIABLE PARTNER.



NEWSPAPER





RDF



HDPE



OCC



ALUMINUM



PET



PLASTIC FILM

## UNSORTED MUNICIPAL SOLID WASTE OR INDUSTRIAL WASTE CONTAINS A HIGH PERCENTAGE OF RECYCLABLE MATERIALS.

The MACPRESSE sorting plants allow recyclable materials to be separated in an economical and efficient manner. The dry fraction of the remaining waste may be transformed into RDF (refuse derived fuel) with a high calorific value and sent to waste-to-energy plants or cement production plants, radically minimizing waste that cannot be reclaimed.



# SEPARATION OF WASTE FROM INERT MATERIALS: BALING AND WRAPPING MSW USING A SEMI-MOBILE PLANT FOR SANITARY LANDFILL REMEDIATION

SCREENED WASTE COLLECTION BELT



INERT UNDERSCREEN



LOADING DYNAMIC SCREEN



MAC 111L/1 BALER FOR MUNICIPAL SOLID WASTE



WRAPPING BALES



TEMPORARY BALES STORAGE

NON-COMPLIANT LANDFILLS CAN BE RECLAIMED:

A high percentage of recyclable materials can be recovered from waste in landfills. The inert materials can be used for daily cover, all remaining material can be baled reducing the volume and tripling the capacity of the landfill.



# STORAGE AND DISPOSAL SITES

## TEMPORARY STORAGE & DISPOSAL SITE CAPACITY



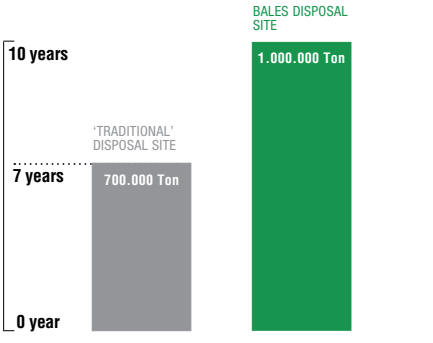
EASILY HANDLED



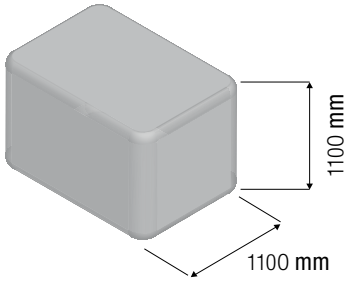
OPTIMAL STORAGE



HIGH DENSITY BALES



## CAPACITY OF DISPOSAL SITE OVER TIME FOR SAME VOLUME



WITH THE SAME SITE VOLUME

THE LIFE OF THE LANDFILL IS INCREASED BY 30%

# 30%

## TRANSPORT EFFICIENCY

### ROAD TRANSPORT



### SEA TRANSPORT



### RAIL TRANSPORT



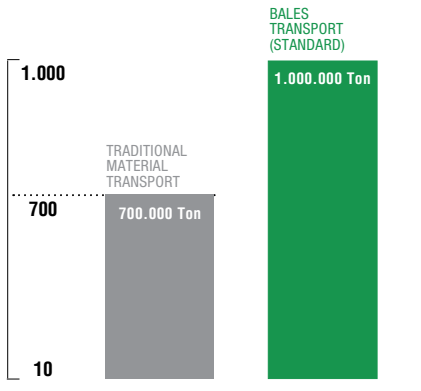
ROAD TRANSPORT



SEA TRANSPORT



RAIL TRANSPORT



# MACPRESSE IN NUMBERS

**1500+**

BALERS  
INSTALLED

**15+**

PROPRIETARY  
PATENTS

**WORLDWIDE  
ASSISTANCE**

**200+**

COLLABORATION  
AROUND THE  
WORLD

**65+**

COUNTRIES WITH  
INSTALLED BALERS

**50+**

COUNTRIES WITH  
PARTNERS

**50+**

BALERS PER YEAR  
PRODUCED

**50+**

YEARS IN THE  
MARKET

**40+**

COUNTRIES WITH  
SPARE PARTS  
STORES

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## CONTACTS

Find out more on [www.macpresse.com/mac2](http://www.macpresse.com/mac2) or contact us:  
e-mail [info@macpresse.com](mailto:info@macpresse.com)  
tel. +39 02 905 24 20

## SOLUTION FEATURES

