



# MACPRESSE EUROPA

WWW.MACPRESSE.COM

## EXCELLENT BALERS FOR ALL TYPES OF RECYCLABLES



MUNICIPAL SOLID  
WASTE PROCESSING



RECYCLING RAW MATERIALS



RENEWABLE ENERGY &  
ENGINEERED FUELS



PAPER INDUSTRY



HEADQUARTER



SERVICE & MAINTENANCE

## MACPRESSE PRODUCTS, OUR DISTINCTIVE VALUES

### PRODUCTION EFFICIENCY

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

### REMOTE SOFTWARE SUPPORT

integrated troubleshooting modem.

### ENERGY SAVING

first class 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

simple and safe maintenance.



# 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  
CYCLE



STEP 4  
PAINTING



STEP 5  
TESTING



STEP 6  
STORAGE



STEP 7  
DELIVERY



STEP 8  
ON-SITE ASSEMBLY



STEP 9  
COMMISSIONING



STEP 10  
LOCAL TECHNICAL  
SUPPORT IN 40  
COUNTRIES

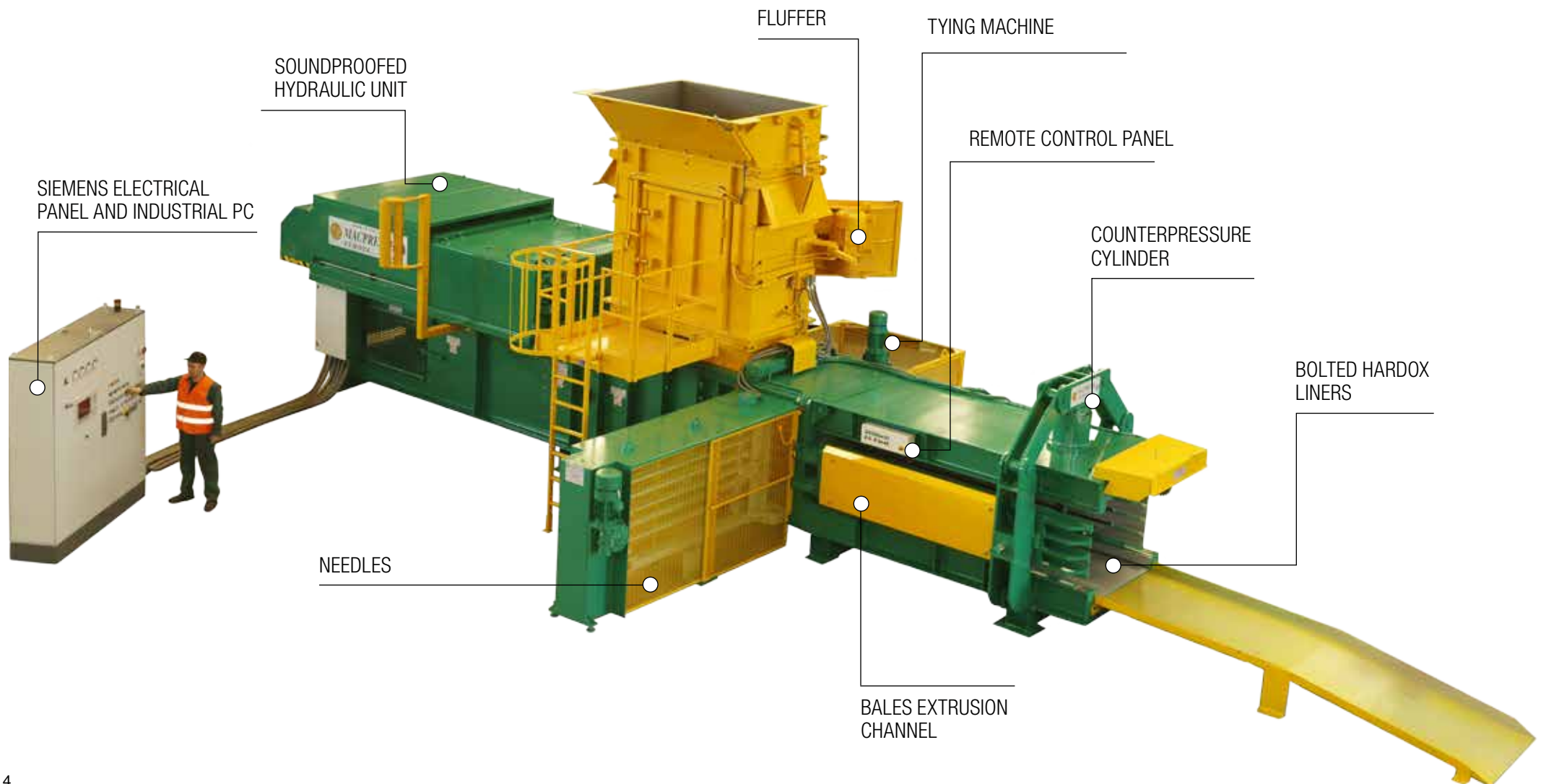


STEP 11  
SPARES STORE



MAC SERIES

# RECOVERY OF SECONDARY RAW MATERIALS



# MATERIALS PROCESSED AND PERFORMANCE



PET

INFEED DENSITY



EUROPE 25/30 kg/m³

USA 1.56/1.87 lb/ft³



OCC



70/80 kg/m³

4.37/4.99 lb/ft³



MIXED PAPER

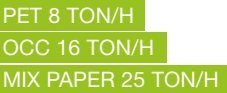


100/120 kg/m³

6.24/7.49 lb/ft³

Mac 108/1

EUROPE

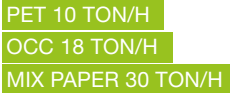


USA



Mac 110/1

EUROPE

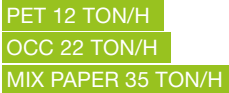


USA



Mac 111/1

EUROPE

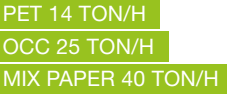


USA



Mac 111AS/1

EUROPE

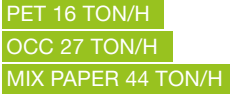


USA



Mac 112XL

EUROPE



USA





MODEL  
MAC 108/1



# 75 KW

MOTOR POWER

## CUTTING AND THRUST POWER

### 120 TON / 264.500 LB

#### NO LOAD PERFORMANCE

EUROPE 2,5 m<sup>3</sup> 525 m<sup>3</sup>/h 3.5 17 sec

USA 88 ft<sup>3</sup> 18.540 ft<sup>3</sup>/h 3.5 17 sec



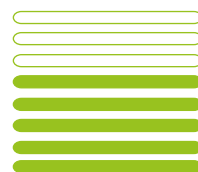
LOADING VOLUME



VOLUMES PER HOUR



CYCLES PER MINUTE



CYCLE TIME

#### GENERAL SPECIFICATIONS

EUROPE (MM)

USA (FT)

OVERALL LENGTH

11.745

38'6"

MAXIMUM WIDTH

5.835 (AT TIER STATION)

19'21"

OVERALL HEIGHT

4.055 (AT FLANGE HOPPER)

13'4"

FEED OPENING

1800 x 950

71"x 37"

BALE CHANNEL

1100 x 1000 (dimens. WxH)

43" x 39"

BALER WEIGHT WITHOUT FLUFFER

35.850 Kg (less oil)

79.036 lbs

BALER WEIGHT WITH FLUFFER

40,650 Kg (less oil)

89.618 lbs

NUMBERS OF WIRES

5

5

MODEL

# MAC 108/1

EUROPE

PET 8 TON/H

OCC 16 TON/H

MIX PAPER 25 TON/H

USA

PET 8.8 TON (US)/H

OCC 17.6 TON (US)/H

MIX PAPER 27.6 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

95 GPM/  
360 l/min

OPERATING PRESSURE

3200-4000 PSI (220-280 Bar)  
4500 PSI (315 Bar)

MAIN CYLINDER

bore (8,67" - 220 mm)

RAM FORCE

264.500 lbs/  
120.000 kg

RAM FORCE PRESSURE

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

OIL RESERVOIR CAPACITY

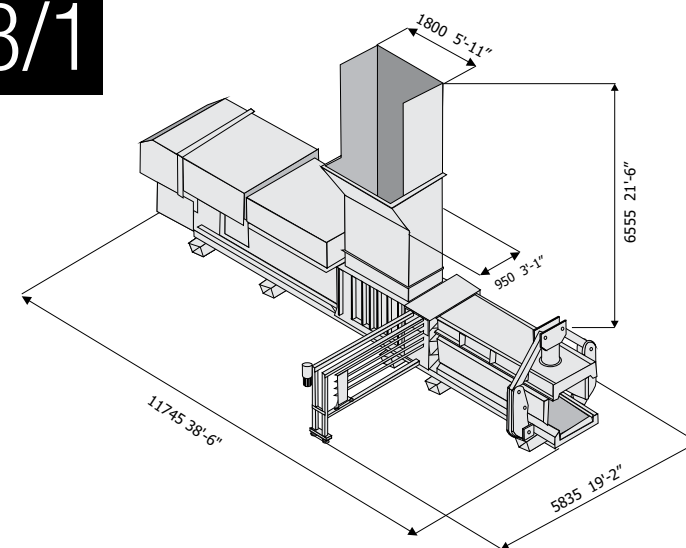
820 US Gal  
3100 Lt

COOLING SYSTEM

Thermostatically controlled air to oil heat exchanger

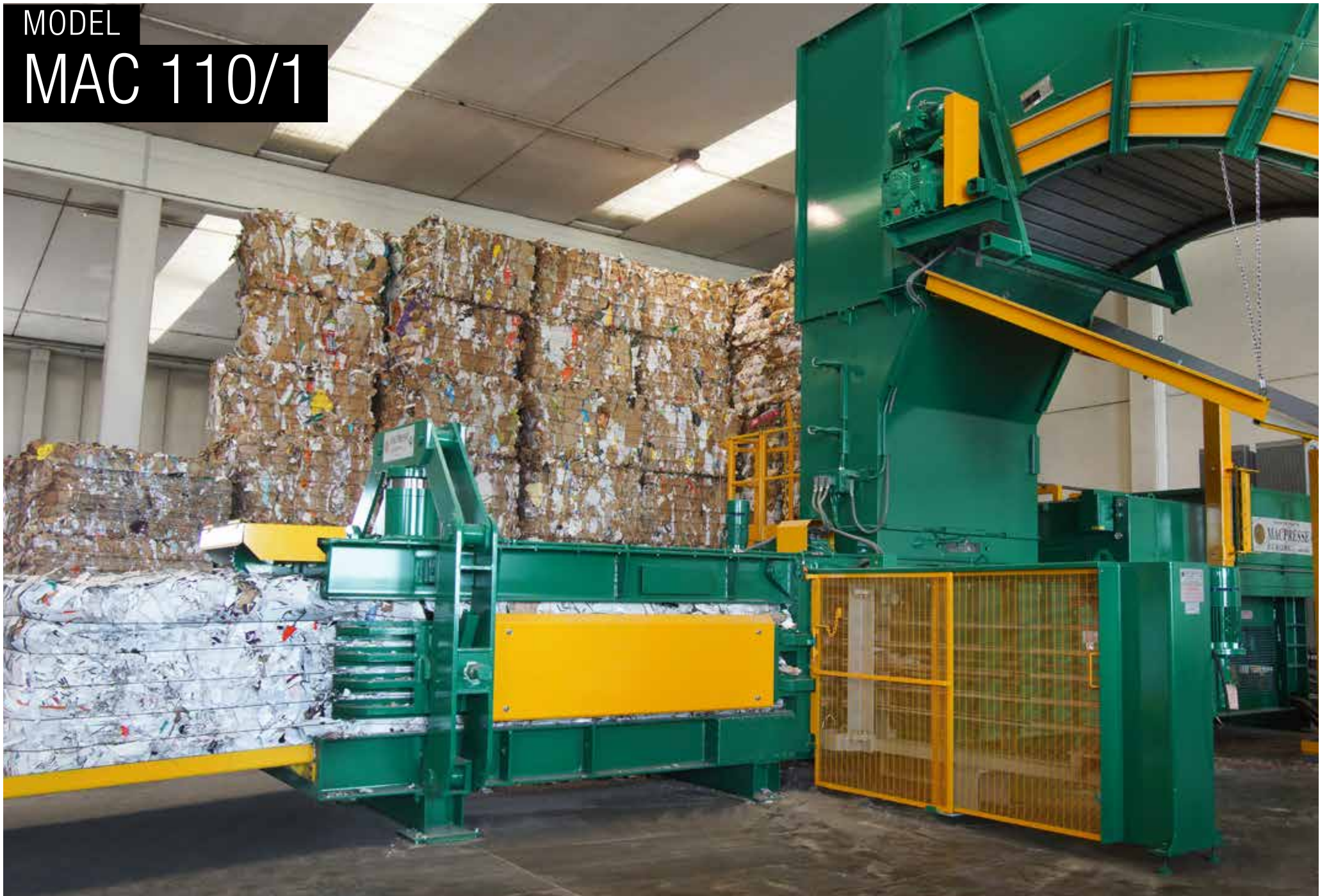
OPERATING CONTROL

Siemens S7 300 programmable controller





MODEL  
MAC 110/1





**90 KW**  
MOTOR POWER

CUTTING AND THRUST POWER  
**170 TON / 374.800 LB**

#### NO LOAD PERFORMANCE

EUROPE **2,5 m<sup>3</sup>** **600 m<sup>3</sup>/h** **4** **15 sec**

USA **88 ft<sup>3</sup>** **21.186 ft<sup>3</sup>/h** **4** **15 sec**



LOADING VOLUME VOLUMES PER HOUR CYCLES PER MINUTE CYCLE TIME

#### GENERAL SPECIFICATIONS

EUROPE (MM)

USA (FT)

OVERALL LENGTH

11.485

37'8"

MAXIMUM WIDTH

5.945 (AT TIER STATION)

19'6"

OVERALL HEIGHT

4.055 (AT FLANGE HOPPER)

13'4"

FEED OPENING

1800 x 1020

71" x 40"

BALE CHANNEL

1100 x 1100 (dimens. WxH)

43" x 43"

BALER WEIGHT WITHOUT FLUFFER

38,100 Kg (less oil)

84,000 lb

BALER WEIGHT WITH FLUFFER

43,100 Kg (less oil)

95,000 lb

NUMBERS OF WIRES

5

5

#### MODEL

**MAC 110/1**

#### EUROPE

PET 10 TON/H

OCC 18 TON/H

MIX PAPER 30 TON/H

#### USA

PET 11 TON (US)/H

OCC 20 TON (US)/H

MIX PAPER 33.1 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

153 GPM/  
580 l/min

##### OPERATING PRESSURE

3200-4000 PSI (220-280 Bar)  
4500 PSI (315 Bar)

##### MAIN CYLINDER

bore (10,2" - 260 mm)

##### RAM FORCE

374.800 lbs/  
170.000 kg

##### RAM FORCE PRESSURE

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

##### OIL RESERVOIR CAPACITY

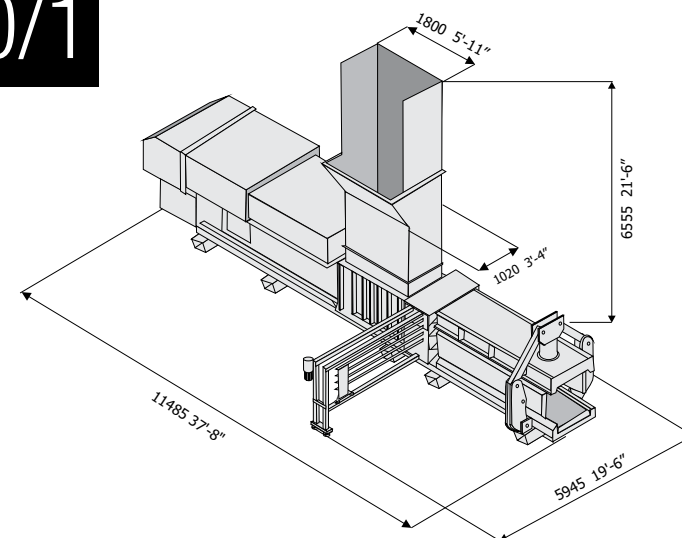
820 US Gal  
3100 Lt

##### COOLING SYSTEM

Thermostatically controlled air to oil heat exchanger

##### OPERATING CONTROL

Siemens S7 300 programmable controller



MODEL  
**MAC 111/1**





# 2x55 KW

MOTORS POWER

## CUTTING AND THRUST POWER

### 170 TON / 374.800 LB

#### NO LOAD PERFORMANCE

EUROPE	2,5 m <sup>3</sup>	750 m <sup>3</sup> /h	5	12 sec
USA	88 ft <sup>3</sup>	26.500 ft <sup>3</sup> /h	5	12 sec



LOADING VOLUME      VOLUMES PER HOUR      CYCLES PER MINUTE      CYCLE TIME

#### GENERAL SPECIFICATIONS

	EUROPE (MM)	USA (FT)
OVERALL LENGTH	11.485	37'8"
MAXIMUM WIDTH	5.945 (AT TIER STATION)	19'6"
OVERALL HEIGHT	4.055 (AT FLANGE HOPPER)	13'4"
FEED OPENING	1800 x 1020	71" x 40"
BALE CHANNEL	1100 x 1100 (dimens. WxH)	43" x 43"
BALER WEIGHT WITHOUT FLUFFER	39,100 Kg (less oil)	86,200 lb
BALER WEIGHT WITH FLUFFER	44,100 Kg (less oil)	97,225 lb
NUMBERS OF WIRES	5	5

## MODEL

# MAC 111/1

#### EUROPE

PET 12 TON/H  
OCC 22 TON/H  
MIX PAPER 35 TON/H

#### USA

PET 13.2 TON (US)/H  
OCC 24.3 TON (US)/H  
MIX PAPER 38.6 TON (US)/H

#### TECHNICAL DATA

##### MAIN MOTOR POWER

2x55 kw

##### MAIN HYDRAULIC PUMP

Two "REXROTH" variable flow pump with full regenerative circuit

##### PUMP FLOW CAPACITY

192 GPM/  
728 l/min

##### OPERATING PRESSURE

3200-4000 PSI (220-280 Bar)  
4500 PSI (315 Bar)

##### MAIN CYLINDER

bore (10,2" - 260 mm)

##### RAM FORCE

374.800 lbs/  
170.000 kg

##### RAM FORCE PRESSURE

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

##### OIL RESERVOIR CAPACITY

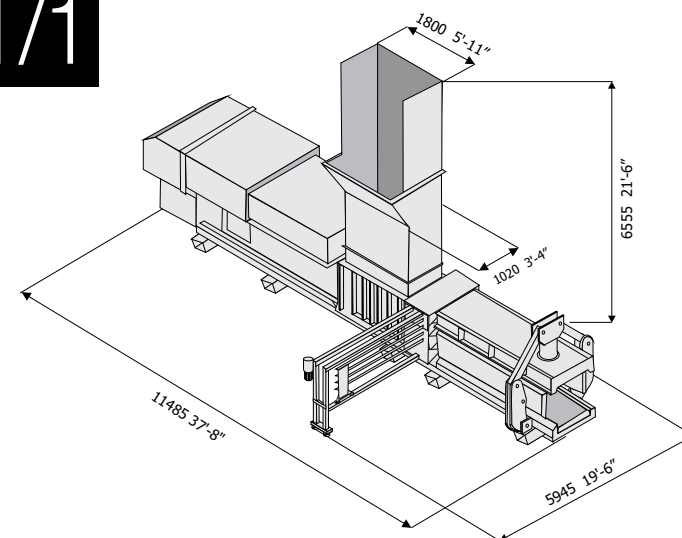
820 US Gal  
3100 L

##### COOLING SYSTEM

Thermostatically controlled air to oil heat exchanger

##### OPERATING CONTROL

Siemens S7 300 programmable controller



MODEL  
MAC 111AS/1





# 2x75 KW

MOTORS POWER

## CUTTING AND THRUST POWER

### 170 TON / 374.800 LB

#### NO LOAD PERFORMANCE

EUROPE	3,2 m <sup>3</sup>	960 m <sup>3</sup> /h	5	12 sec
USA	113 ft <sup>3</sup>	33.900 ft <sup>3</sup> /h	5	12 sec



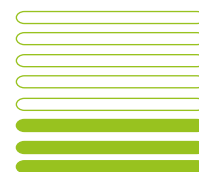
LOADING VOLUME



VOLUMES PER HOUR



CYCLES PER MINUTE



CYCLE TIME

#### GENERAL SPECIFICATIONS

	EUROPE (MM)	USA (FT)
OVERALL LENGTH	12.495	40'128"
MAXIMUM WIDTH	5.945 (AT TIER STATION)	19'6"
OVERALL HEIGHT	4.055 (AT FLANGE HOPPER)	13'4"
FEED OPENING	2100 x 1020	82½" x 40"
BALE CHANNEL	1100 x 1100 (dimens. WxH)	43" x 43"
BALER WEIGHT WITHOUT FLUFFER	40,000 Kg (less oil)	88,184 lb
BALER WEIGHT WITH FLUFFER	45,300 Kg (less oil)	99,870 lb
NUMBERS OF WIRES	5	5

#### MODEL

# MAC 111AS/1

#### EUROPE

PET 14 TON/H  
OCC 25 TON/H  
MIX PAPER 40 TON/H

#### USA

PET 15.4 TON (US)/H  
OCC 27.6 TON (US)/H  
MIX PAPER 44.1 TON (US)/H

#### TECHNICAL DATA

##### MAIN MOTOR POWER

2x75 kw

##### MAIN HYDRAULIC PUMP

Two "REXROTH" variable flow pump with full regenerative circuit

##### PUMP FLOW CAPACITY

240 GPM/  
910 l/min

##### OPERATING PRESSURE

3200-4000 PSI (220-280 Bar)  
4500 PSI (315 Bar)

##### MAIN CYLINDER

bore (10,2" - 260 mm)

##### RAM FORCE

374.800 lbs/  
170.000 kg

##### RAM FORCE PRESSURE

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

##### OIL RESERVOIR CAPACITY

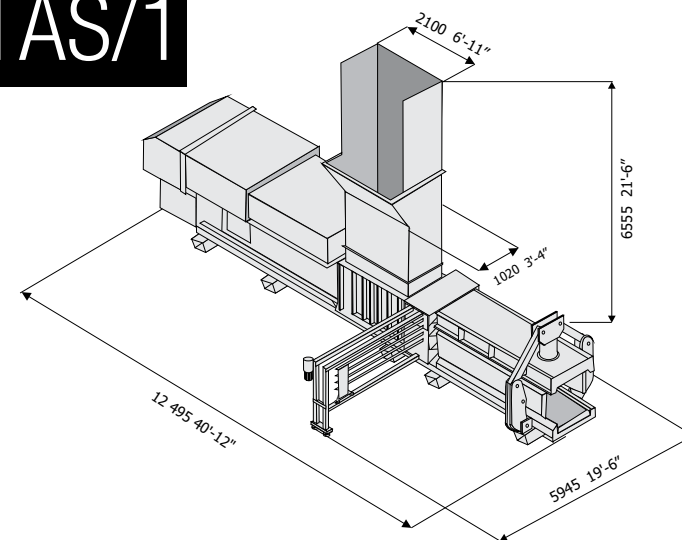
792 US Gal  
3000 L

##### COOLING SYSTEM

Thermostatically controlled air to oil heat exchanger

##### OPERATING CONTROL

Siemens S7 300 programmable controller



MODEL  
MAC 112 XL





# 2x90 KW

MOTOR POWER

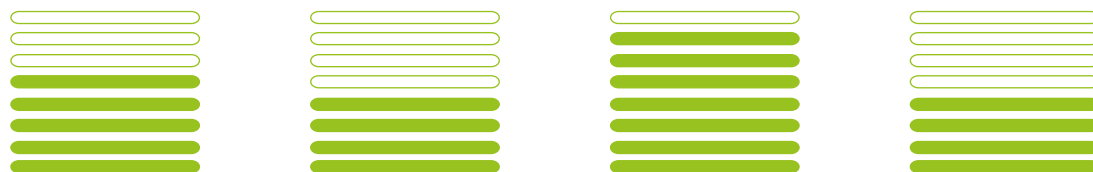
## CUTTING AND THRUST POWER

### 200 TON / 414.000 LB

#### NO LOAD PERFORMANCE

EUROPE 2,6 m<sup>3</sup> 702 m<sup>3</sup>/h 4,3 14 sec

USA 92 ft<sup>3</sup> 24.791 ft<sup>3</sup>/h 4,3 14 sec



LOADING VOLUME VOLUMES PER HOUR CYCLES PER MINUTE CYCLE TIME

#### GENERAL SPECIFICATIONS

EUROPE (MM)

USA (FT)

OVERALL LENGTH

13.990

45'11"

MAXIMUM WIDTH

5.965 (AT TIER STATION)

19'7"

OVERALL HEIGHT

4.275 (AT FLANGE HOPPER)

14'0"

FEED OPENING

2000 x 1020

79" x 40"

BALE CHANNEL

1100 x 1100 (dimens. WxH)

43" x 43"

BALER WEIGHT WITHOUT FLUFFER

55,300 Kg (less oil)

121,915 lb

BALER WEIGHT WITH FLUFFER

60,500 Kg (less oil)

133,380 lb

NUMBERS OF WIRES

5

5

MODEL

# MAC 112 XL

EUROPE

PET 16 TON/H

OCC 27 TON/H

MIX PAPER 44 TON/H

USA

PET 17.6 TON (US)/H

OCC 29.8 TON (US)/H

MIX PAPER 48.5 TON (US)/H

#### TECHNICAL DATA

MAIN MOTOR POWER

2x90 kw

MAIN HYDRAULIC PUMP

Two "REXROTH" variable flow pump with full regenerative circuit

PUMP FLOW CAPACITY

273 GPM/  
1035 l/min

OPERATING PRESSURE

3200-4000 PSI (220-280 Bar)  
4500 PSI (315 Bar)

MAIN CYLINDER

bore (11" - 280 mm)

RAM FORCE

414.000 lbs/  
200.000 kg

RAM FORCE PRESSURE

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

OIL RESERVOIR CAPACITY

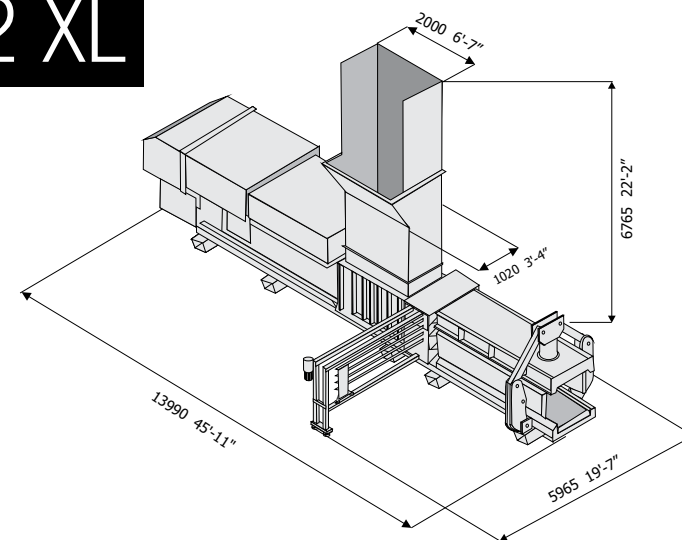
792 US Gal  
3000 L

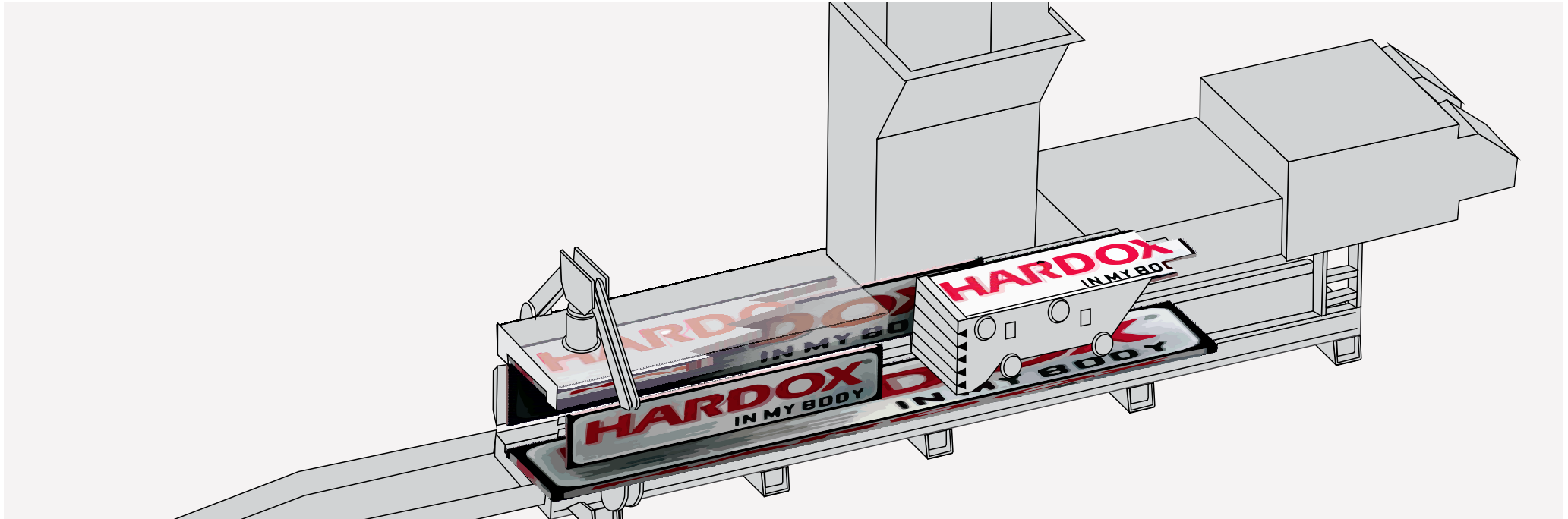
COOLING SYSTEM

Thermostatically controlled air to oil heat exchanger

OPERATING CONTROL

Siemens S7 300 programmable controller





WEAR RESISTANT

CORE VALUE



LONG  
LASTING



ROBUSTNESS



EASY  
MAINTENANCE

# HARDOX STEEL LINERS



Bolted liners made of HARDOX wear-resistant plates, which extends working life of the machines.

The HARDOX steel plates bolted in the counterpressure channels and in the compaction chamber and can be easily replaced.

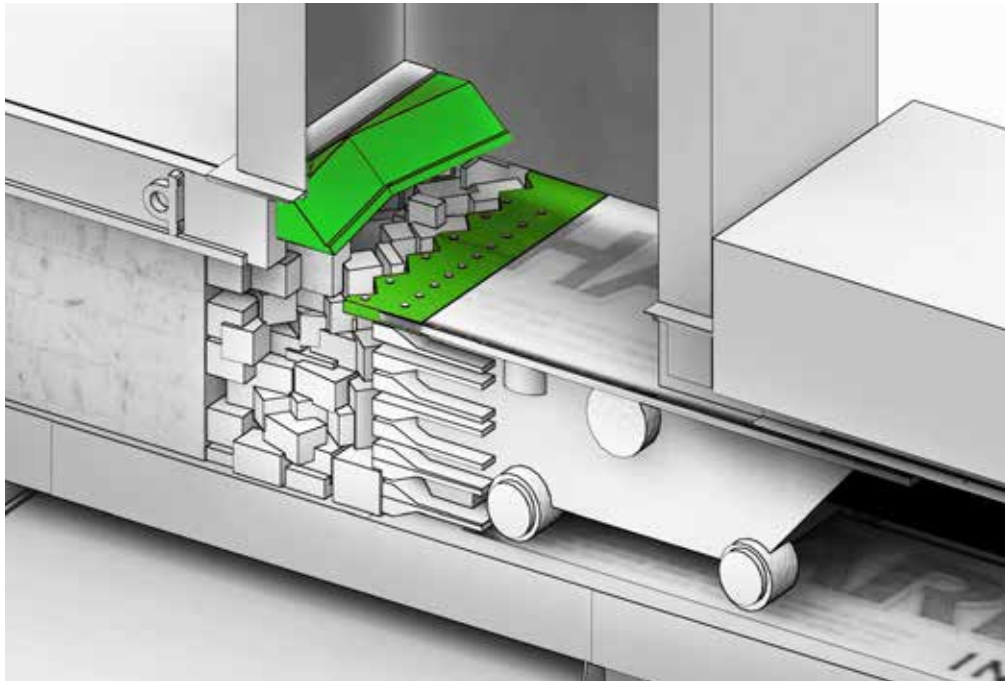
THIS WEAR RESISTANT SYSTEM PROTECTS THE MACHINE FROM ABRASION AND CORROSION.

1. RESISTANCE TO WEAR AND CHEMICAL AGENTS
2. FAST REPLACEMENT  
(PATENTED BOLTED FIXING SYSTEM)
3. MINIMIZE BALER DOWNTIME

400%

LONGER LASTING  
THAN NORMAL STEEL



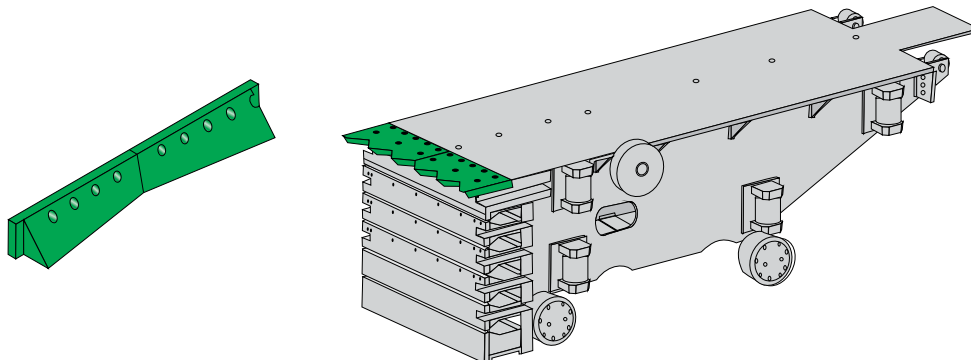


## CUTTING SYSTEM

CORE VALUE

### HIGH EFFICIENCY BLADE

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



FAST  
INTERCHANGEABILITY



LOW ENERGY  
CONSUMPTION

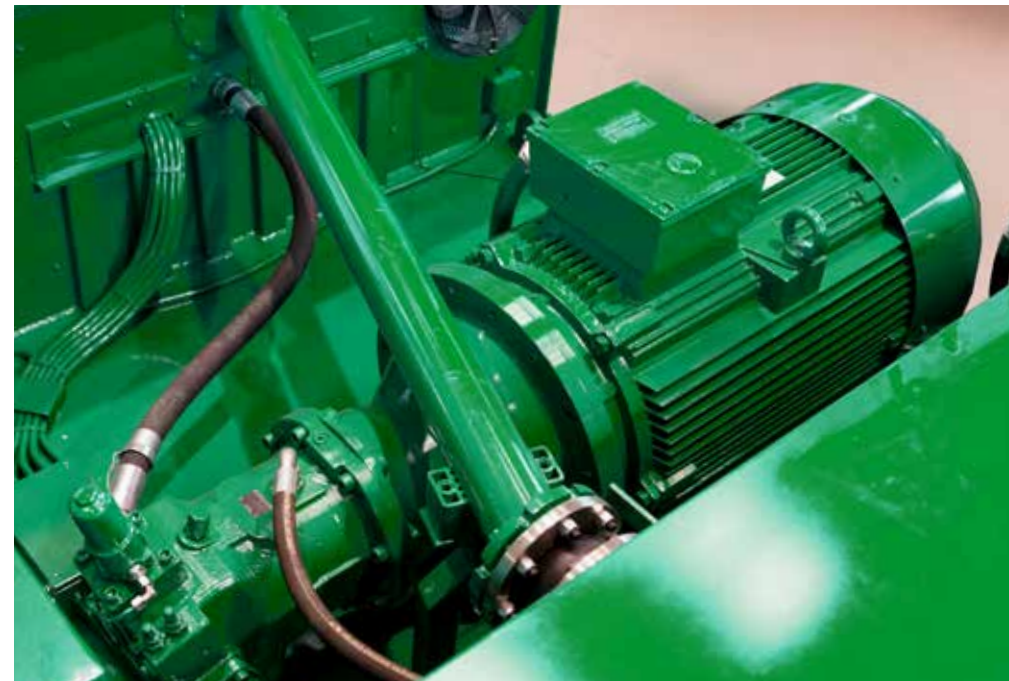


LONG  
LASTING

### BACK PRESSURE DISCHARGE SYSTEM



HYDRAULIC DEVICE FOR FAST  
ZERO-SETTING OF COUNTERPRESSURE.



## HYDRAULICS

CORE VALUE

## SMART SYSTEM ADAPTABLE TO MATERIAL

THE HYDRAULIC UNIT CONSISTS OF A SERIES OF REXROTH VARIABLE FLOW RATE PUMPS WHICH ADJUST THE ADVANCE SPEED OF THE COMPACTING CARRIAGE AND THE THRUST ACCORDING TO THE MATERIALS TO BE BALED.

Pumps outside oil tank for a better performance and easier maintenance. Installation of variable flow rate pumps provides a better performance with reduced consumption.

High efficiency IE3 electric motors are adopted, with a 30% energy saving compared with traditional motors.



**Rexroth**  
Bosch Group



HARSH  
ENVIRONMENTS



LOW ENERGY  
CONSUMPTION



EASY  
MAINTENANCE

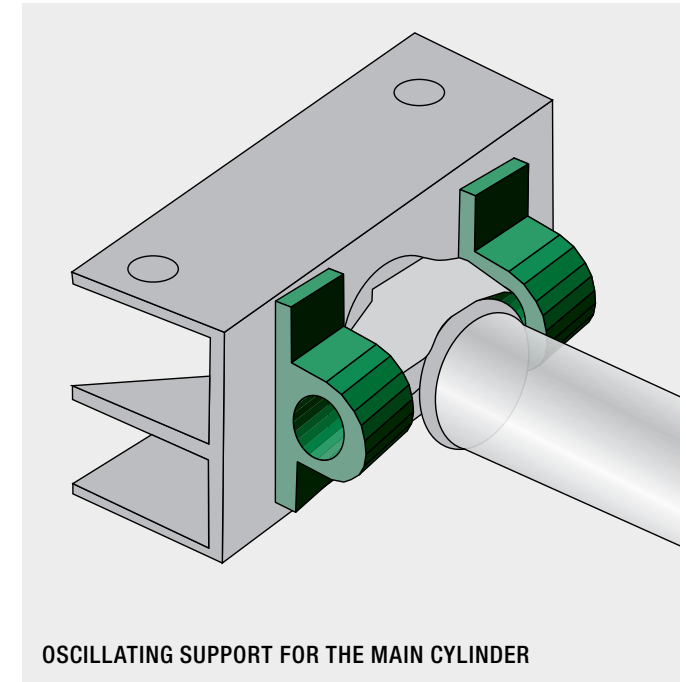
# 30%

## ENERGY SAVINGS

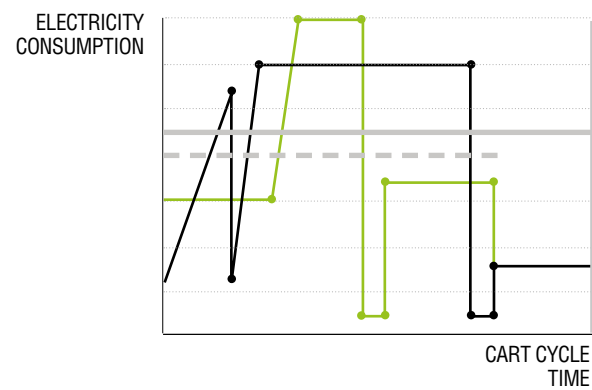
COMPARED TO  
TRADITIONAL  
ELECTRIC MOTORS



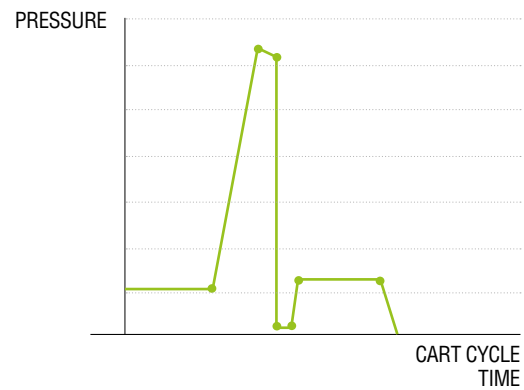




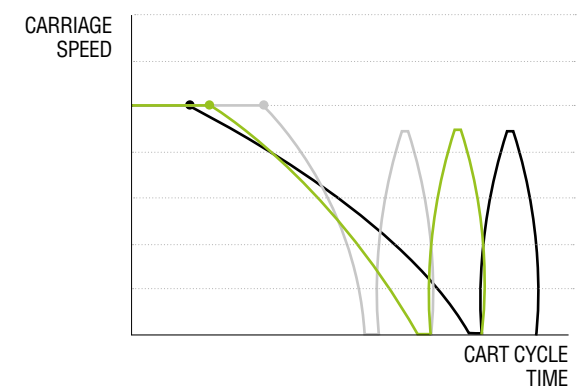
## CONSUMPTION - CYCLE TIME DIAGRAM



## PRESSURE - CYCLE TIME DIAGRAM



## CARRIAGE SPEED - CYCLE TIME DIAGRAM



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

— LIGHT MATERIAL  
 — MEDIUM MATERIAL  
 — HEAVY MATERIAL

# TYING MACHINE

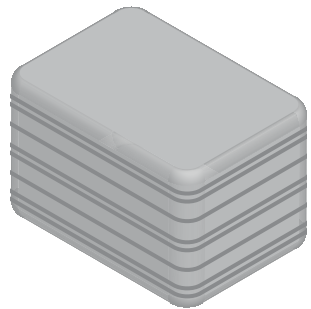
## CORE VALUE

### FLEXIBILITY OF USE AND OPTIMISATION OF COSTS

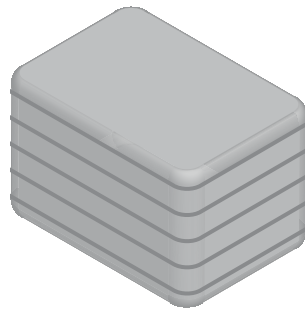
#### ELECTROMECHANICAL HORIZONTAL TYING SYSTEM DESIGNED FOR TYING BOTH PLASTIC AND STEEL WIRES

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.

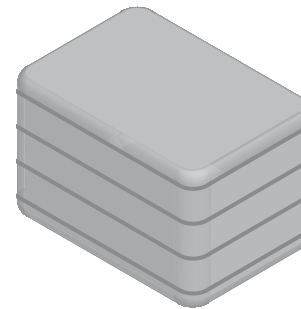
#### TYING METHOD



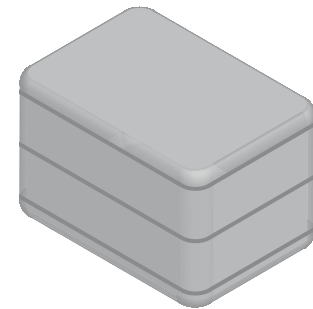
5+3 WIRES



5 WIRES



4 WIRES



3 WIRES



RELIABILITY



ROBUSTNESS



FLEXIBILITY



EASY  
MAINTENANCE



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

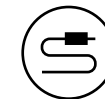
## ELECTRICAL COMPONENTS

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



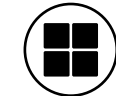
EASY  
MAINTENANCE

PROPORTIONAL VALVE

OPTIONAL

## 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**



OUTPUT  
OPTIMISATION



LOW COST

### PROCESSING ADVANTAGES:

OPTIMISED BALES WEIGHT ACCORDING TO MATERIAL TO BE BALED







## STEEL PLATE CONVEYOR

OPTIONAL



LOW COST



ROBUSTNESS



HIGH  
PRODUCTION



EASY  
MAINTENANCE

## DESIGN AND MANUFACTURE INTEGRATED WITH THE PRESS

Conveyor belts are designed and manufactured to match hourly productions rates for each baler model optimizing operating costs.

P MODEL

**4-5,5-7,5 KW**  
MOTOR POWER

**200 MM**  
CHAIN PITCH

RDF - RECYCLABLES

## PRE-CONDITIONERS FOR WASTE PAPER

OPTIONAL



OUTPUT  
OPTIMISATION



OPERATOR  
SAFETY



EASY  
MAINTENANCE

### FLUFFER CONDITIONER

Mechanical device for processing paper materials, reduces infeed density prior to compaction, improves bale density and quality

- reduced electrical consumption
- greater density
- store more bales and more tons in less space



### SHREDDERS

Electrical single shaft with fixed hammers. Allows high density, coated, fibrous materials to be pre-conditioned.

Allows appropriate mixing of different qualities of waste and reduces wear of press. High productivity even with materials in packs.



**MACPRESSE PRODUCES SPECIAL MACHINES FOR THE PAPER INDUSTRY, AUTOMATIC PRESSES WITH AN HOURLY OUTPUT OF BETWEEN 3 AND 60 TONS PER HOUR AS WELL AS OTHER ANCILLARY EQUIPMENTS**



REAL TIME CONTROL



SENSORS CONTROL

Material	N°	Bale length (meters)	Bale weight (pounds)
OCC max sizes	01	1.00	3000
OCC rebales	02	1.10	3100
Newspapers	03	0.80	1000
Magazines	04	1.00	1300
Coated book	05	1.30	900
Trim waste	06	1.30	800
High grade	07	1.40	1000
Other grades	08	1.30	1700
Cores	09	1.30	900
PET bottles	10	1.30	750

PRODUCTION REPORT

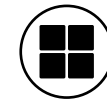
## MAC SUPERVISOR SYSTEM MSS1 & MSS2

OPTIONAL

**SIEMENS**



INTERNET  
CONNECTIVITY



OUTPUT  
OPTIMIZATION

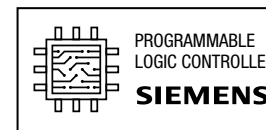


REDUCTION  
DOWNTIME

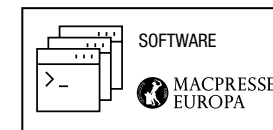
**OPTIMISATION OF PRODUCT OUPUT AND  
REDUCTION OF MACHINE STOPPAGE  
DOWNTIMES AND COSTS**



+



+



**FUNCTIONS:**  
A. Setting of machine parameters according to material to be baled (combined with MDO system)  
B. Alarms management  
C. Remote assistance  
D. 5 languages



### MSS1

- 20 SETTINGS
- REAL TIME PRODUCTION REPORT
- PHOTOGRAPHIC FAULT DISPLAY



### MSS2

- 5 SETTINGS
- FAULT SIGNALLING





MACPRESSE SAFETY BELT (MSB)



KEY BLOCK & MICROSWITCH

## SAFETY COMPONENTS

OPTIONAL

### OPERATOR SAFETY SYSTEM

MSB (MAC SAFETY BELT) IS A MACPRESSE PATENT

ALLOWS THE PLANT TO BE STOPPED IN THE CASE OF ACCIDENTAL FALLING OF THE OPERATOR IN THE PRESS FEED BELT



OPERATOR  
SAFETY



EASY  
MAINTENANCE

### SAFETY KEYS

Installed on all machine access points.



MACPRESSE SAFETY BELT (MSB)



KEY-LOCK BLOCK



# PLASTIC BALES & STORAGE

## PLASTIC MATERIALS



EASY  
MAINTENANCE



HIGH DENSITY  
BALES



PLASTIC FILM



PET



WRAPPING PLASTIC BALES



TETRAPACK



CAR BUMPERS



HDPE



# MULTI-MATERIAL BALES

## BALES INTEGRITY





# TRANSPORT EFFICIENCY

## RAIL AND ROAD TRANSPORT



ROAD  
TRANSPORT



RAIL  
TRANSPORT



MARTIME  
TRANSPORT





## BALING PRESS AND SHREDDER



## BALING PRESS AND FLUFFER CONDITIONER





# MACPRESSE IN NUMBERS

**1500+**

BALERS  
INSTALLED

**15+**

PROPRIETARY  
PATENTS

**WORLDWIDE  
ASSISTANCE**

**200+**

COLLABORATIONS  
AROUND THE  
WORLD

**45+**

COUNTRIES  
WITH INSTALLED  
BALERS

**50+**

COUNTRIES WITH  
PARTNERS

**50+**

BALERS PER YEAR  
PRODUCED

**50+**

YEARS ON THE  
MARKET

**40+**

COUNTRIES WITH  
SPARE PARTS  
STORES

## CONTACTS

For further information visit [www.macpresse.com](http://www.macpresse.com) or contact us:  
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## SOLUTION FEATURES



BALE  
DENSITY



WATERPROOF



EASY  
HANDLING



OPTIMUM  
STOWAGE



MARITIME  
TRANSPORT



ROAD  
TRANSPORT



RAIL  
TRANSPORT