



MACPRESSE EUROPA

WWW.MACPRESSE.COM

SERIES MAC/2 MULTI-MATERIAL BALERS FOR RECYCLABLES



MUNICIPAL SOLID
WASTE PROCESSING



RECYCLING SECONDARY
RAW MATERIAL



RENEWABLE ENERGY
AND BIOMASS



PAPER INDUSTRY





HEADQUARTER



SERVICE & MAINTENANCE

MACPRESSE PRODUCTS, OUR DISTINCTIVE VALUES

PRODUCTION EFFICIENCY
Cutting efficiency and production optimisation (m³/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 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
PAINTING



STEP 5
TESTING



STEP 6
STORAGE



STEP 7
DELIVERY



STEP 8
ON-SITE ASSEMBLY



STEP 9
COMMISSIONING/
TRAINING



STEP 10
LOCAL TECHNICAL IN
40 COUNTRIES



STEP 11
SPARE PARTS
INVENTORY

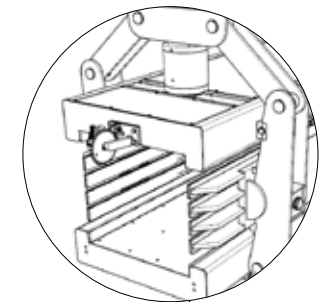
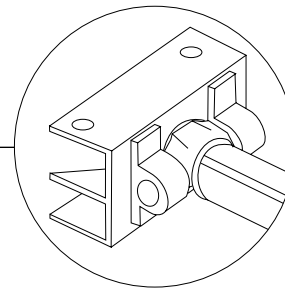


GENERAL DESCRIPTION

MAC 108/2

EXTRUSION PRESSURE CHANNEL
CONTROLLED COMPLETELY BY
PROPORTIONAL VALVES FOR GREATER
BALE DENSITY
IN WHATEVER CONDITION

OSCILLATING SUPPORT FOR MAIN CYLINDERS



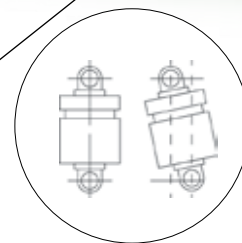
IMPROVED DESIGN WITH THICKER SIDES

HYDRAULIC UNIT EQUIPPED WITH
SOUNDPROOFING AND FORCED
VENTILATION

REMOTE CONTROL PANEL

LARGER DOORS FOR BETTER CLEANING AND MAINTENANCE

BOLTED HARDOX
PLATES



CONTROL CHAMBER OF THE EXTRUSION CHANNEL
ALLOWING A 40 TON AXIAL THRUST WITHOUT RADIAL
LOADS ON THE SEALS

MATERIALS PROCESSED AND PRODUCTION

MAC 108/2

EUROPE

PET 10 TON/H

OCC 17 TON/H

MIX PAPER 27 TON/H

RDF 31 TON/H

USA

PET 11 TON (US)/H

OCC 18.7 TON (US)/H

MIXED PAPER 29.7 TON (US)/H

RDF 34.2 TON (US)/H



PET

INFEED DENSITY



EUROPE

25/30 kg/m³



OCC



70/80 kg/m³



MIX PAPER

INFEED DENSITY



EUROPE

100/120 kg/m³



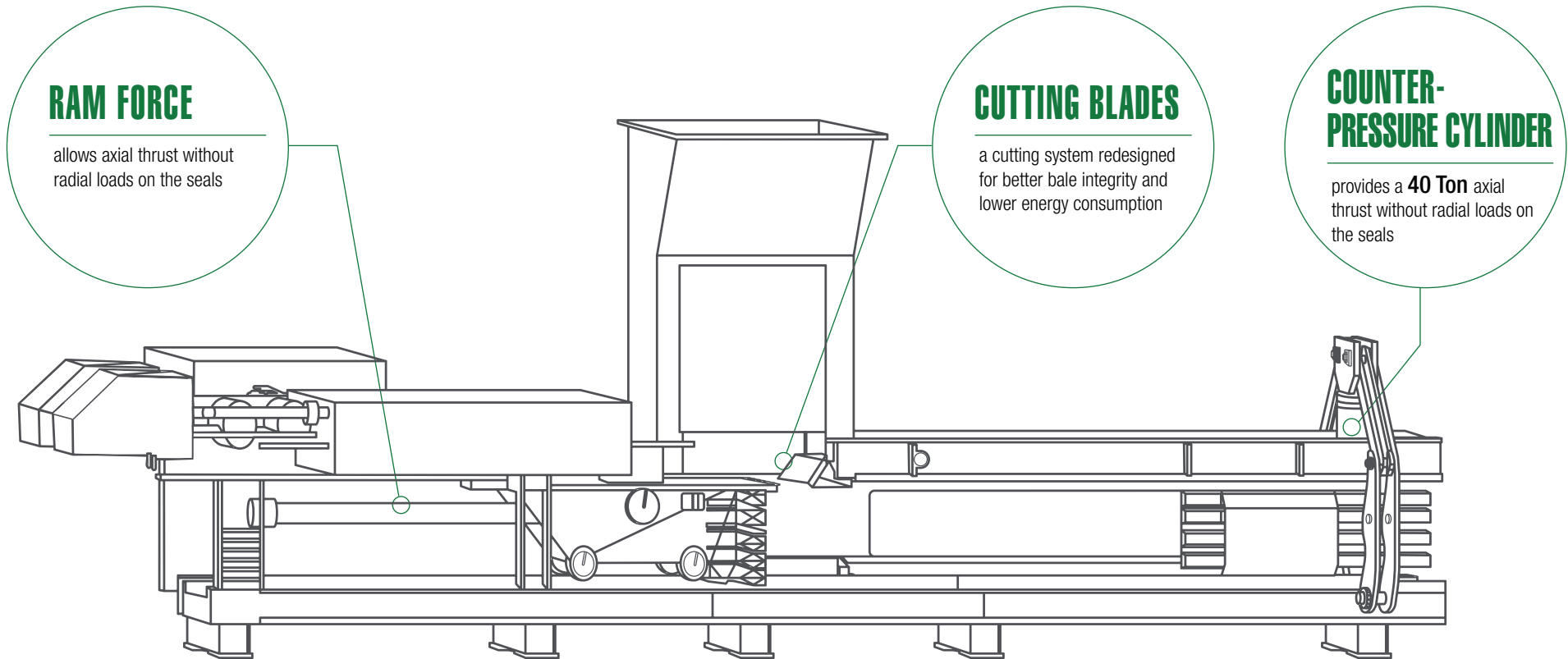
RDF



150/200 kg/m³

ADVANTAGES OF SERIES/2

COMPARISON WITH PREVIOUS SERIES



RAM FORCE

allows axial thrust without radial loads on the seals

CUTTING BLADES

a cutting system redesigned for better bale integrity and lower energy consumption

COUNTER-PRESSURE CYLINDER

provides a **40 Ton** axial thrust without radial loads on the seals

+30%

ENERGY EFFICIENCY

IE3 high efficiency motors.

+30%

SERVICE LIFE

main cylinder mounted centrally, seals are the latest SKF generation, spherical mounting to reduce radial loads on the stem.

+10%

ROBUSTNESS

reinforced structure, completely redesigned using high resistant steel.

+30%

ACCESSIBILITY

compacting chamber equipped with 2 larger size access doors.

+45%

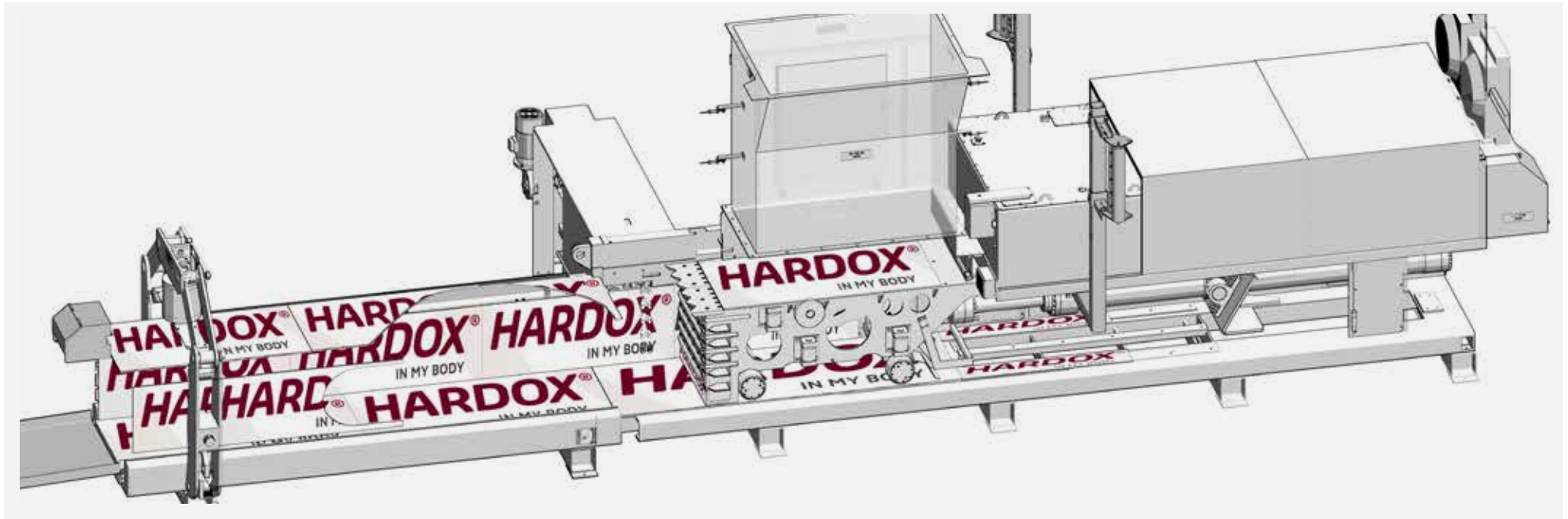
XL CHANNEL

longer extrusion channel **+1.5 m (59")** for better bale density.

+12%

HOPPER DIMENSIONS

larger load hopper dimensions



WEAR RESISTANT

CORE VALUE



LONG LASTING



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. WEAR RESISTANT SYSTEM REDESIGNED TO REDUCE OPERATING COSTS
2. RESISTANCE TO WEAR AND CHEMICAL AGENTS
3. RAPID REPLACEMENT(PATENTED ATTACHMENT SYSTEM)
4. MINIMIZE BALER DOWNTIME

400%

LONGER LASTING
than normal steel

MODEL
MAC 108/2



2X100 HP

MOTORS POWER

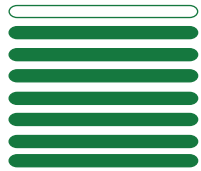
CUTTING AND THRUST POWER

170 ton / 374 800 lb

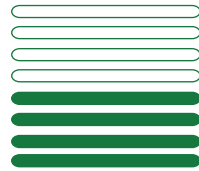
NO LOAD PERFORMANCE

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

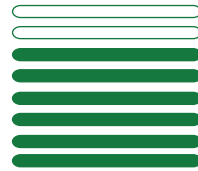
	LOADING VOLUME	VOLUMETRIC PRODUCTION	CYCLES PER MINUTE	CYCLE TIME
EUROPE	2,3 m ³	694 m ³ /h	5	12 sec
USA	81,2 ft ³	24 508 ft ³ /h	5	12 sec



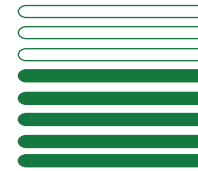
LOADING VOLUME



VOLUMETRIC PRODUCTION



CYCLES PER MINUTE



CYCLE TIME

GENERAL SPECIFICATIONS

	EUROPE (mm)	USA
OVERALL LENGTH	14 385	47'2"
MAXIMUM WIDTH	5 620 (at tier station)	18'5"
OVERALL HEIGHT	3 972 (at flange hopper)	13"
FEED OPENING	2 000 x 1 020	79" x 40"
BALE DIMENSIONS WxH	1 100 x 750	43" 1/3 x 29" 1/2
BALER WEIGHT WITHOUT FLUFFER	40 000 Kg (without oil)	88 148 lbs
BALER WEIGHT WITH FLUFFER	45 000 Kg (without oil)	99 208 lbs
NUMBERS OF WIRES	4	4

MODEL MAC 108/2

EUROPE
 PET 10 TON/H
 OCC 17 TON/H
 MIX PAPER 27 TON/H
 RDF 31 TON/H

USA
 PET 11 TON (US)/H
 OCC 18.7 TON (US)/H
 MIXED PAPER 29.7 TON (US)/H
 RDF 31 TON (US)/H

TECHNICAL DATA

MAIN MOTORS POWER

2 x 75 kw

MAIN HYDRAULIC PUMPS

Two "REXROTH" variable flow pump with full regenerative circuit

PUMP FLOW CAPACITY

910 l/min
240 GPM

OPERATING PRESSURE

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

OPERATING CONTROL

Siemens S7 300 programmable controller

RAM FORCE

170 000 kg
374 800 lbs

RAM FORCE PRESSURE

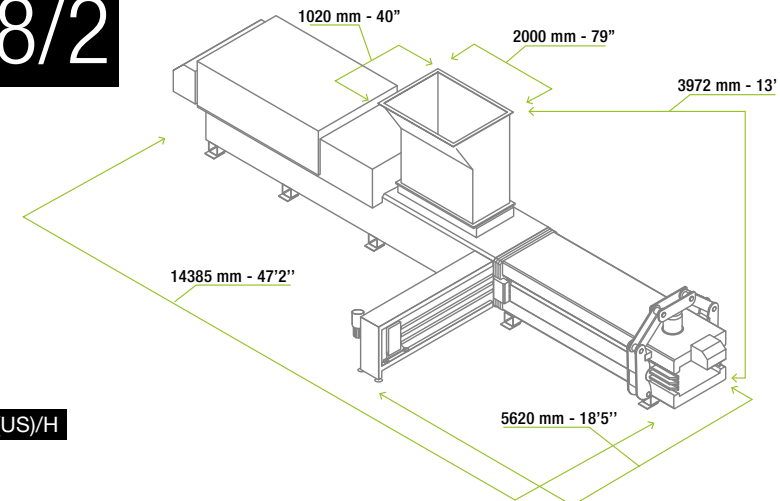
20.6 kg/cm²
290 Psi

OIL RESERVOIR CAPACITY

3 100 Lt
820 US Gal

COOLING SYSTEM

Thermostatically controlled air to oil heat exchanger



MULTI-MATERIALS BALES

BALES INTEGRITY



TRANSPORT EFFICIENCY



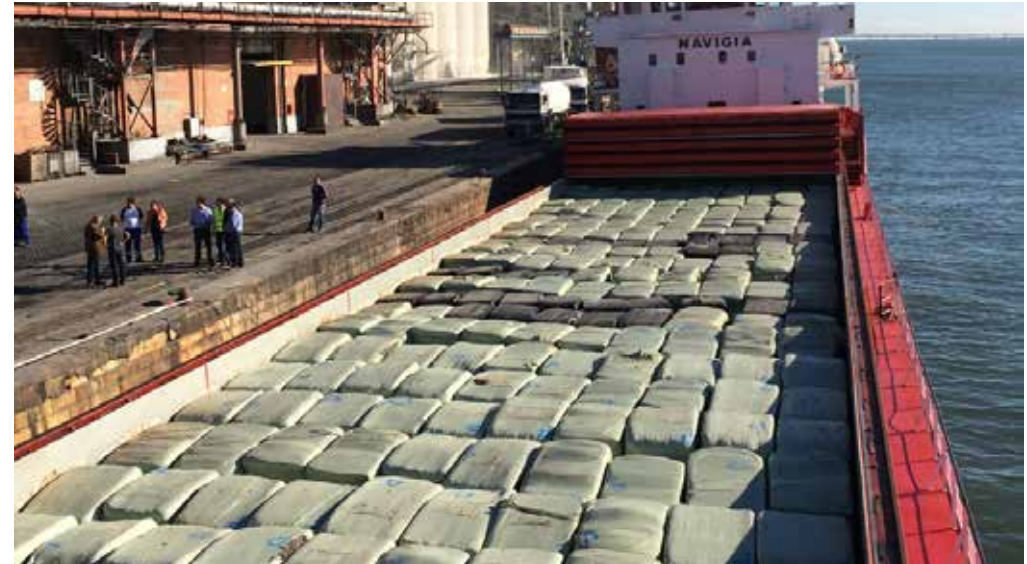
ROAD
TRANSPORT



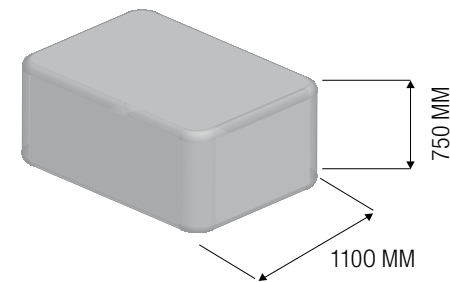
RAIL
TRANSPORT



MARTIME
TRANSPORT



VARIABLE LENGHT

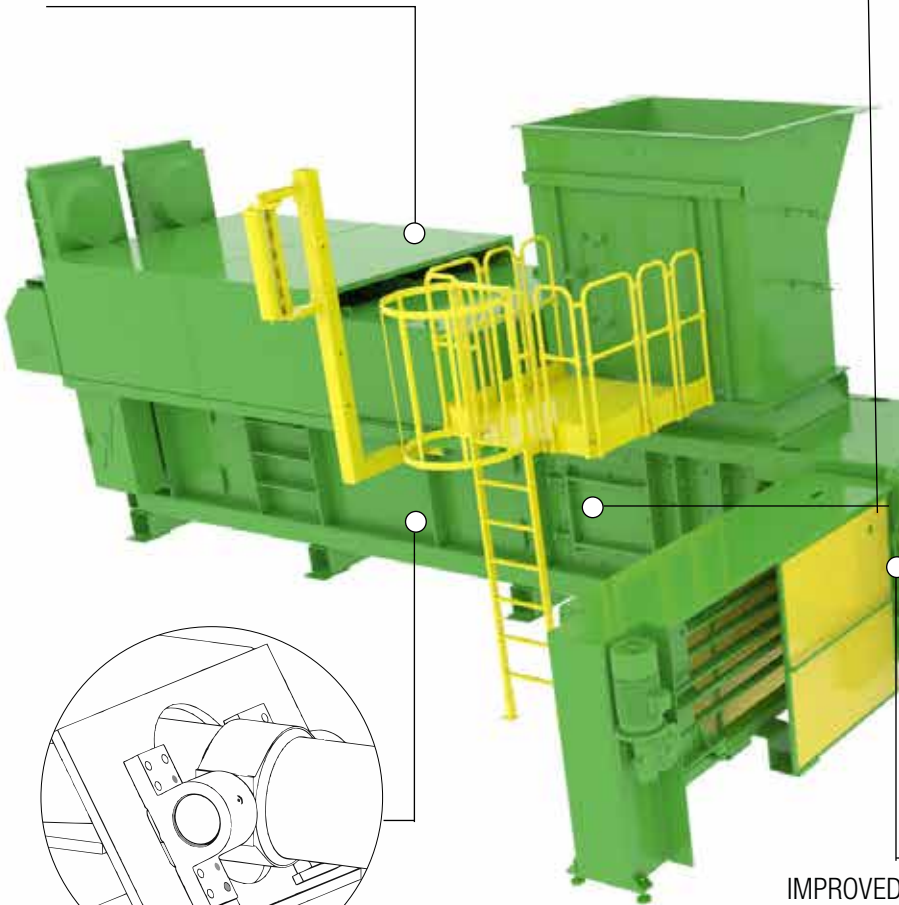


**DIMENSIONS OF BALES ARE SUITABLE FOR OPTIMIZING
LOADING OPERATIONS OF THE MOST COMMON LAND, SEA
AND RAILROAD METHODS OF TRANSPORTATION.**

GENERAL DESCRIPTION

MAC 110/2

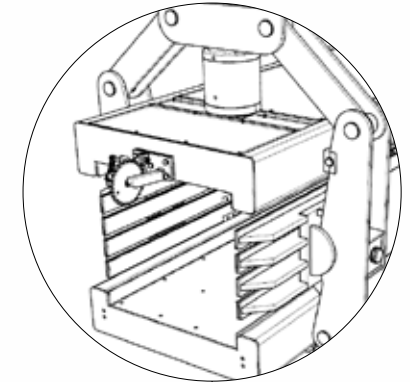
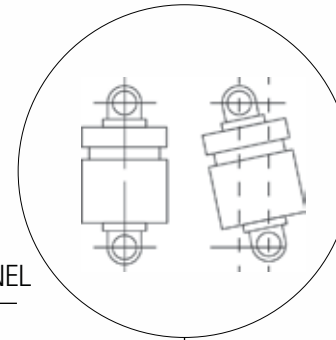
HYDRAULIC UNIT EQUIPPED WITH SOUNDPROOFING AND FORCED VENTILATION



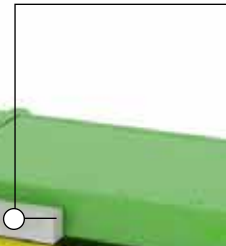
LARGER DOORS FOR BETTER CLEANING AND MAINTENANCE

CONTROL CHAMBER OF THE EXTRUSION CHANNEL ALLOWING A 40 TON AXIAL THRUST WITHOUT RADIAL LOADS ON THE SEALS

EXTRUSION PRESSURE CHANNEL CONTROLLED COMPLETELY BY PROPORTIONAL VALVES FOR GREATER BALE DENSITY IN WHATEVER CONDITION



REMOTE CONTROL PANEL

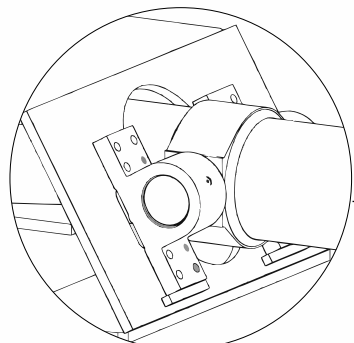


MAC 110/2

BOLTED HARDOX PLATES

IMPROVED DESIGN WITH THICKER SIDES

BALE EXTRUSION CHANNEL



CENTRALLY MOUNTED PIVOT POINT TO SUPPORT THE MAIN RAM CYLINDER

MATERIALS PROCESSED AND PRODUCTION

MAC 110/2

EUROPE

- PET 11 TON/H
- OCC 20 TON/H
- MIXED PAPER 32.5 TON/H
- RDF 37 TON/H

USA

- PET 12.1 TON (US)/H
- OCC 22 TON (US)/H
- MIXED PAPER 35.8 TON (US)/H
- RDF 40.7 TON (US)/H



PET



OCC

INFEED DENSITY



EUROPE

25/30 kg/m³

70/80 kg/m³

USA

1.56/1.87 lb/ft³

4.37/4.99 lb/ft³



MIXED PAPER



RDF

INFEED DENSITY



EUROPE

100/120 kg/m³

150/200 kg/m³

USA

6.24/7.49 lb/ft³

9.36/12.48 lb/ft³

MODEL
MAC 110/2



2X75 HP

MOTORS POWER

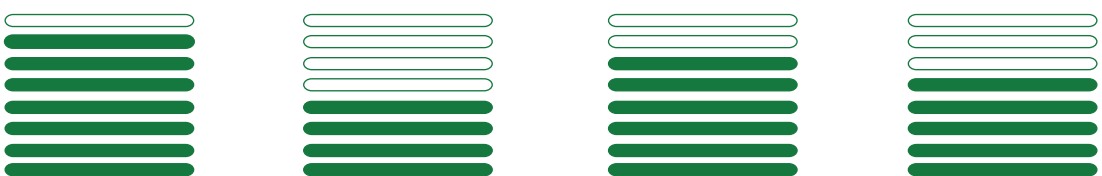
CUTTING AND THRUST POWER

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
EUROPA	3.4 m ³	815 m ³ /h	4	15 sec
USA	120 ft ³	28 781 ft ³ /h	4	15 sec



GENERAL SPECIFICATIONS

	EUROPE (mm)	USA
OVERALL LENGTH	14.735	48'4"
MAXIMUM WIDTH	5 945 (at tier station)	19'6"
OVERALL HEIGHT	4 070 (at flange hopper)	13'4"
FEED OPENING	2 000 x 1 020	79" x 40"
BALE DIMENSIONS WxH	1100 x 1100	43" 1/3 x 43" 1/3
BALER WEIGHT WITHOUT FLUFFER	39 100 Kg (without oil)	86 200 lbs
BALER WEIGHT WITH FLUFFER	44 100 Kg (without oil)	97 225 lbs
NUMBERS OF WIRES	5	5

MODEL MAC 110/2

EUROPE

PET 11 TON/H
OCC 20 TON/H
MIXED PAPER 32.5 TON/H
RDF 37 TON/H

USA

PET 12.1 TON (US)/H
OCC 22 TON (US)/H
MIXED PAPER 35.8 TON (US)/H
RDF 40.7 TON (US)/H

TECHNICAL DATA

MAIN MOTORS POWER

2x55 kw

MAIN HYDRAULIC PUMPS

Two "REXROTH" variable flow pump with full regenerative circuit

PUMP FLOW CAPACITY

728 l/min
192 GPM

OPERATING PRESSURE

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

OPERATING CONTROL

Siemens S7 300 programmable controller

RAM FORCE

170 000 kg
374 800 lbs

RAM FORCE PRESSURE

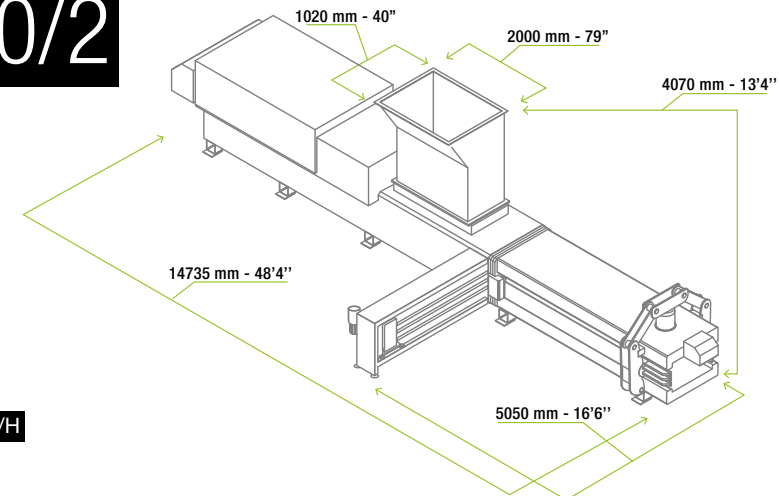
14 kg/cm²
200 Psi

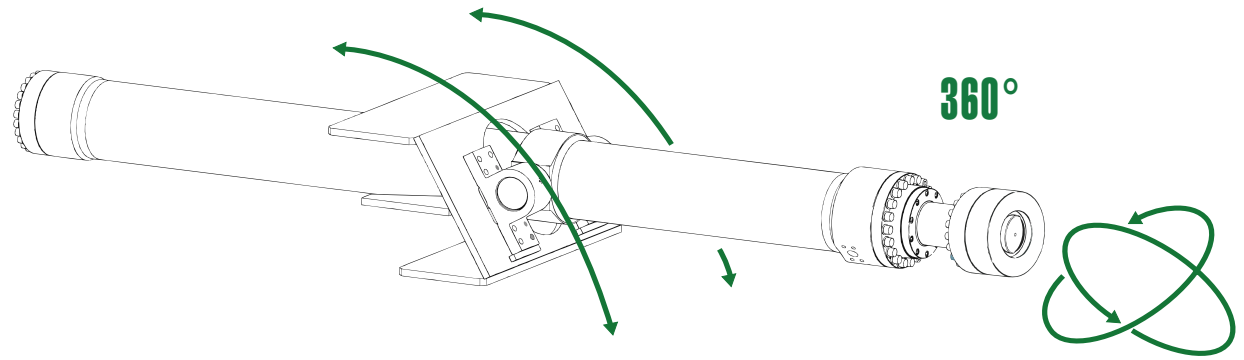
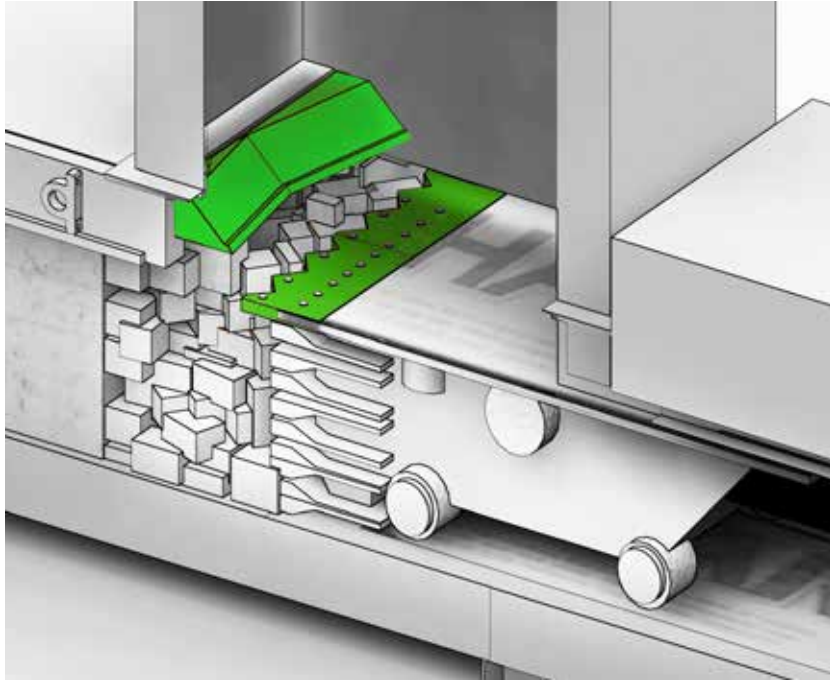
OIL RESERVOIR CAPACITY

3 100 lt
820 US Gal

COOLING SYSTEM

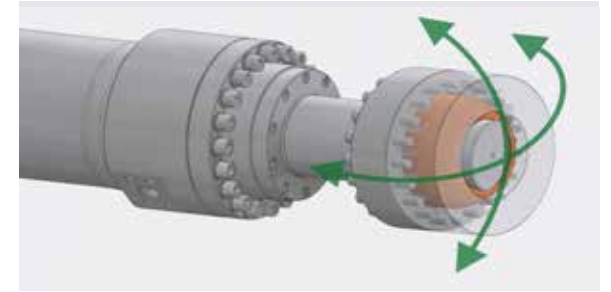
Thermostatically controlled air to oil heat exchangers





MAIN CYLINDER MAC 110/2

Centrally mounted pivot point to support the main ram cylinder



CUTTING SYSTEM

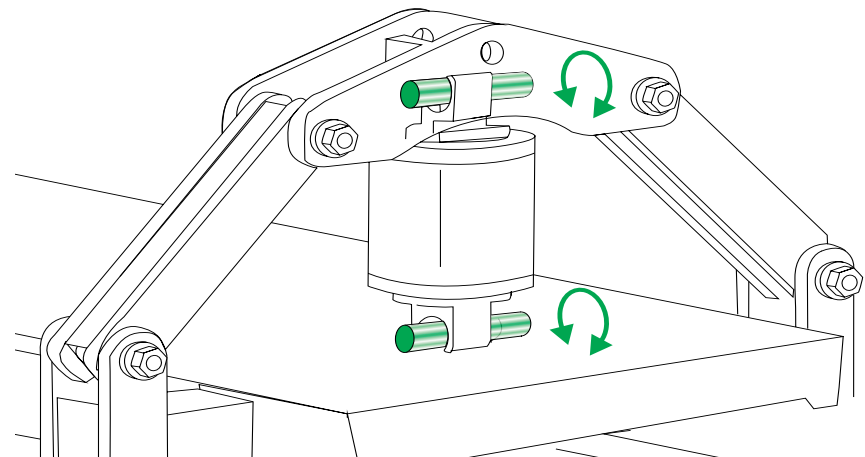
Specific interchangeable tempered cutting blades based on the type of material to be baled.

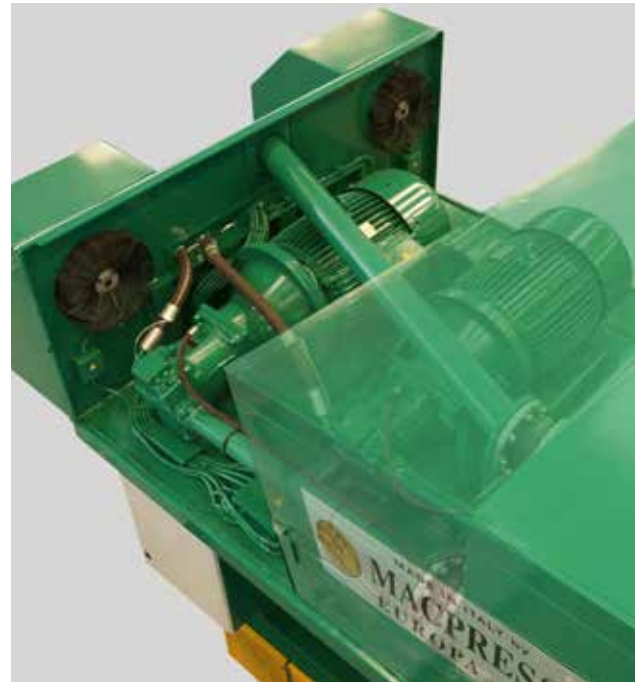
COUNTER-PRESSURE RELEASE SYSTEM



TILTING COUNTER-PRESSURE CYLINDER

THE SYSTEM IS DESIGNED TO AVOID MECHANICAL STRESS TO THE CYLINDER OF COUNTER-PRESSURE





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.

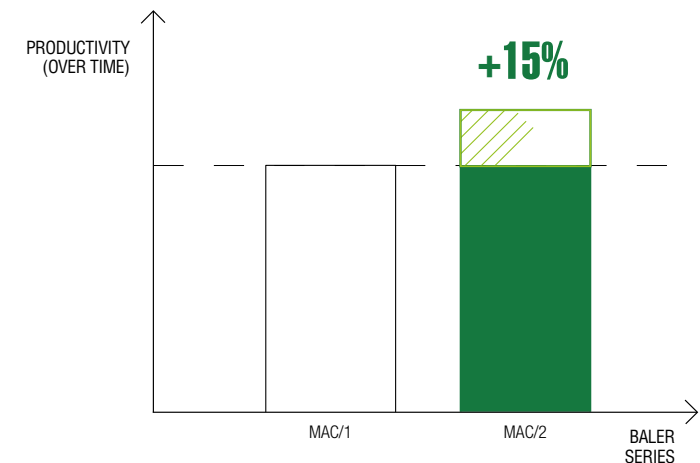
HIGH EFFICIENCY IE3 MOTORS ARE USED WITH AN ENERGY SAVINGS OF 30% COMPARED WITH TRADITIONAL MOTORS.

Hydraulic quick release circuit for fast zero-setting of counter pressure should a foreign object accidentally fall in the hopper.

35%

ENERGY SAVINGS

compared with traditional motors



MOBILE TYING MACHINE

CORE VALUE



ROBUSTNESS



RELIABILITY



FLEXIBILITY



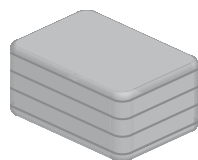
EASY
MAINTENANCE

FLEXIBILITY OF USE AND OPTIMISATION OF COSTS

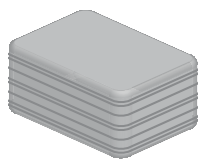
ELECTROMECHANICAL HORIZONTAL TYING SYSTEM DESIGNED FOR TYING BOTH PLASTIC AND STEEL WIRES

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 MAC 108/2

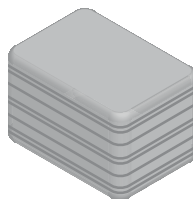


4 WIRES

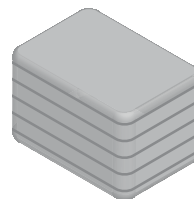


4+2 WIRES

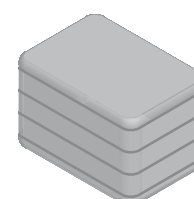
TYING METHOD MAC 110/2



5+3 WIRES



5 WIRES



4 WIRES

+50%

TYING SPEED



MOBILE TYING MACHINE



STEEL WIRE REELS



TYING MACHINE MAINTENANCE



PLASTIC WIRE



PLASTIC WIRE REELS



MAIN ELECTRIC PANEL 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

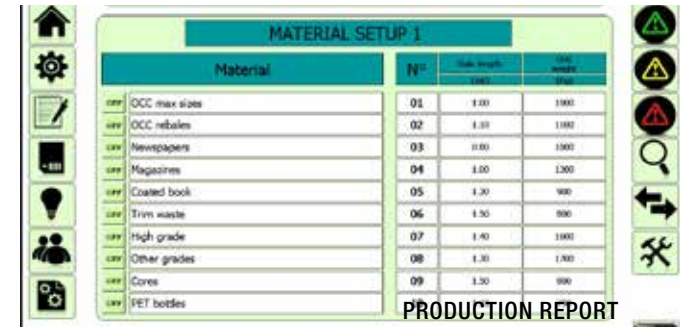
NEWLY REDESIGNED AND DEVELOPED MACHINE MANAGEMENT SYSTEM



REAL TIME CONTROL



SENSORS CONTROL



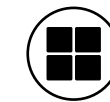
PRODUCTION REPORT

MAC SUPERVISOR SYSTEM MSS1 & MSS2

OPTIONAL



INTERNET
CONNECTIVITY



OUTPUT
OPTIMIZATION

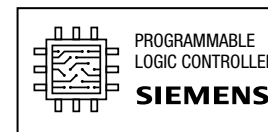


REDUCTION
DOWNTIME

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 MDC MAC Dencity Control)
 - 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)



MACPRESSE SAFETY BELT (MSB)

SAFETY COMPONENTS

OPTIONAL

OPERATOR SAFETY SYSTEM

MSB (MAC SAFETY BELT) IS A MACPRESSE PATENT

THIS SPECIAL INNOVATION PROTECTS EMPLOYEES SHOULD THEY FALL ONTO THE CONVEYOR. THE EQUIPMENT IS IMMEDIATELY STOPPED AND AN ALARM IS SOUNDED TO ALERT OTHERS OF AN ACCIDENT. THE EQUIPMENT CANNOT BE RESTARTED UNTIL THE EMPLOYEE IS REMOVED FROM THE DANGER ZONE.



SAFETY OF OPERATORS

MSK MAC SAFETY KEYS

INSTALLED ON ALL EQUIPMENT ACCESS DOORS.



KEY-LOCK LOCK BLOCK



KEY LOCK & MICROSWITCH



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

PROCESSING ADVANTAGES:

OPTIMISED BALES WEIGHT ACCORDING TO MATERIAL TO BE BALED



OUTPUT
OPTIMISATION



LOW COST



TRANSPORT EFFICIENCY



ROAD
TRANSPORT



RAIL
TRANSPORT



MARTIME
TRANSPORT



MACPRESSE IN NUMBERS

1500+

BALERS
INSTALLED

45+

COUNTRIES WITH
INSTALLED
BALERS

50+

BALERS PER YEAR
PRODUCED

200+

COLLABORATIONS
AROUND THE
WORLD

15+

PROPRIETARY
PATENTS

**WORLDWIDE
ASSISTANCE**

50+

COUNTRIES WITH
PARTNERS

50+

YEARS IN THE
MARKET

40+

COUNTRIES WITH
SPARE PARTS
STORES

CONTACTS

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

SOLUTION FEATURES

*Macpresse reserves the right to change specifications without notice.



HIGH DENSITY
BALES



IMPERMEABLE



EASILY
TRANSPORTABLE



OPTIMUM
STORAGE



SEA
TRANSPORT



ROAD
TRANSPORT



RAIL
TRANSPORT