

Solutions for Recycling

Recycling



MARKETS &
APPLICATIONS





Recycling



Stand Alone Recycling Machine

Page 4 to 7



Recycling Plant

Page 8 to 13

The widest range of solutions for Recycling processing and machinery

Bonfiglioli conceives, designs and produces custom solutions for collection, downsizing and sorting of waste materials. Recycling is a key component of waste management to reduce pollution and landfill waste.

Our wide product portfolio includes planetary gearboxes, motors and frequency inverters that are designed for the specific requirements of our customers.

These solutions are developed with the highest level of customization, which requires, right from the initial design phases, in-depth interaction between the customer and Bonfiglioli's team, to ensure that all the required specifications and variants are known, to obtain a product that perfectly meets the expectations.

This is why our pre-sales and after-sales teams - spread strategically over all continents - play such a crucial role, and why ensuring complete support is at the heart of our global success.

Bonfiglioli also provides solutions for:



BIOGAS ENERGY



WASTE WATER TREATMENT

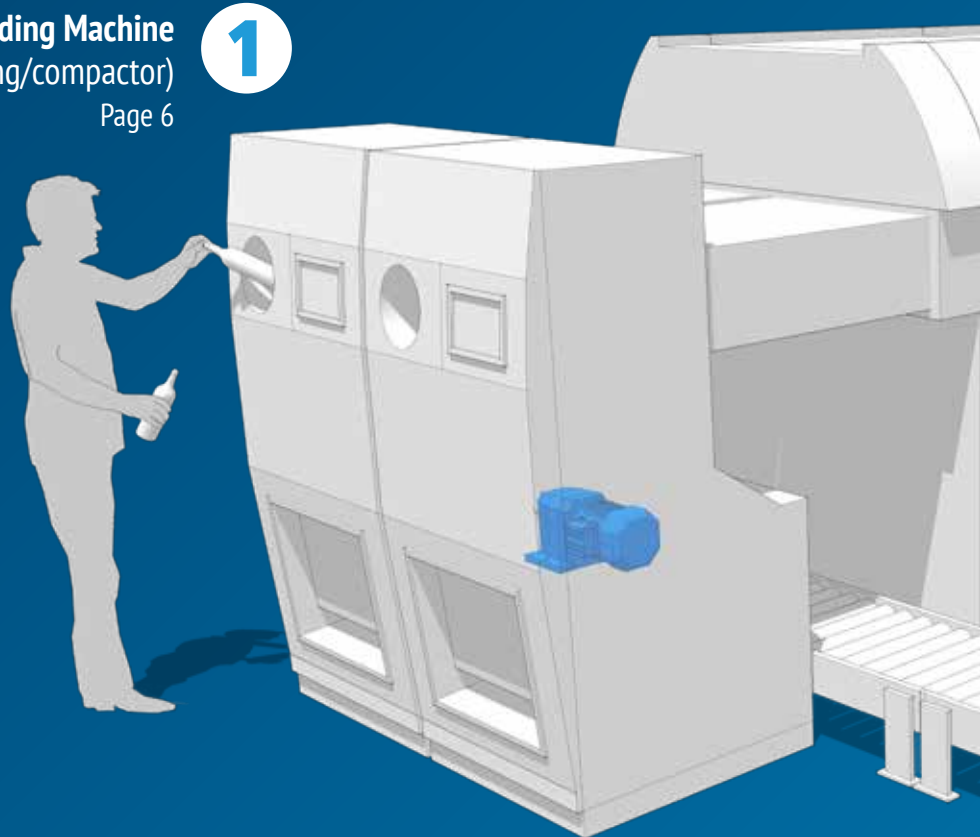
www.bonfiglioli.com

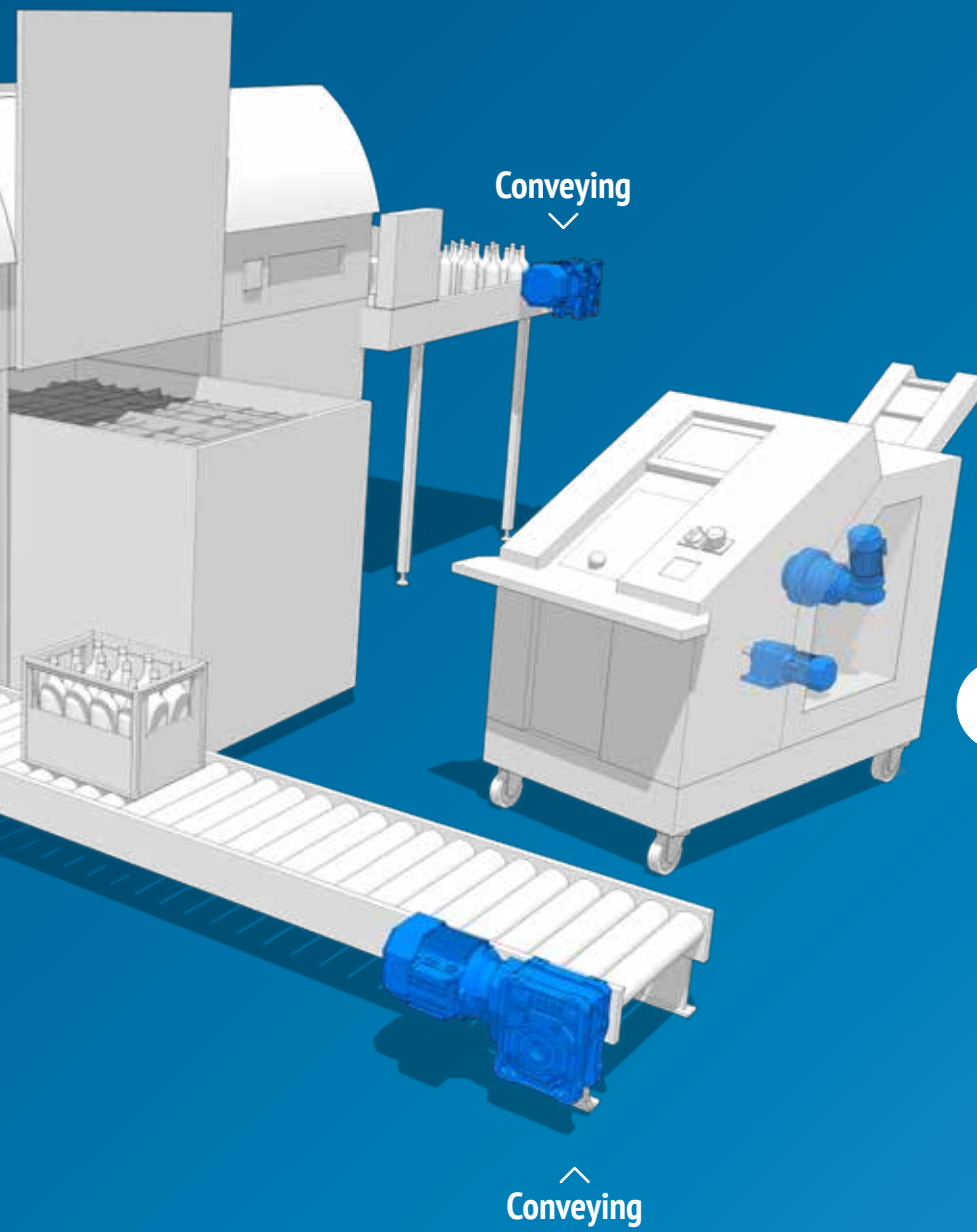


Stand Alone Recycling Machine

Reverse Vending Machine
(shredding/compactor)
Page 6

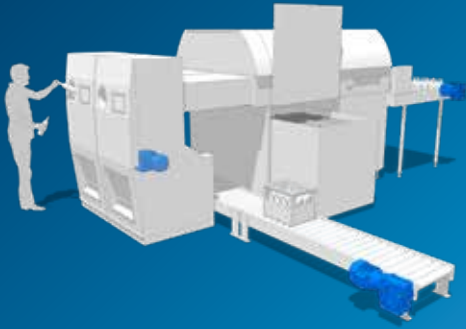
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2 Stand alone shredders
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Stand Alone Recycling Machine



Reverse Vending Machine (shredding or compactor)

1

High reliability and long operating life are the basic features that our products offer for stand alone recycling machines. And full integration with Bonfiglioli drives offers a complete package solution.

C Series

Helical in-line gearbox and geared motor

Benefits

- Highly compact
- Wide reduction ratio choice
- Wash down capability

Features

- Wide choice of output bolt-on-flanges
- Surface protection class C3, C4 and C5 (according to UNI EN ISO 12944-2 standard)



Agile Series Smart inverter

Benefits

- Smooth start
- Feed roll control
- Low energy consumption

Features

- Series optionally extendable for field bus communication
- Sensorless control of synchronous and asynchronous motors
- Modbus and Systembus onboard
- DC link connection
- Integrated brake chopper
- Power failure management
- Programmable PI Controller
- Integrated VPLC
- Electronic gear via analogue wire or Systembus
- Integrated Safe Torque Off STO (SIL 2 / PL d) function
- Energy Saving function
- Intelligent current limits
- Output frequency 0...599 Hz, higher frequencies on request
- Diagnosis and setup via integrated keypad and integrated Service interface for PC connection





Stand alone shredder

2

High reliability and long operating life are the basic features that our products offer for stand alone recycling machines. And full integration with Bonfiglioli drives offers a complete package solution.



300M Series

Planetary gearbox and geared motor

Benefits

- High shock load resistance
- Compact design
- One-stop-shop for complete drive solutions
- Wash down capability

Features

- High and premium efficiency motors (IE2, IE3)
- Protection rating up to IP56
- Thermal protection (bi-metallic, PTC or KTY)
- Anti-condensation heaters
- Total quality inspection certificate



C Series

Helical in-line gearbox and geared motor

Benefits

- Wide reduction ratio choice
- Wash down capability

Features

- Wide choice of output bolt-on-flanges
- Special seals set for applications in harsh environments
- Surface protection class C3, C4 and C5 (according to standard UNI EN ISO 12944-2)
- High and premium efficiency motors (IE2, IE3)
- Motor shaft extension
- Tropicalized windings



Agile Series

Smart inverter

Benefits

- Smooth start
- Feed roll control
- Low energy consumption

Features

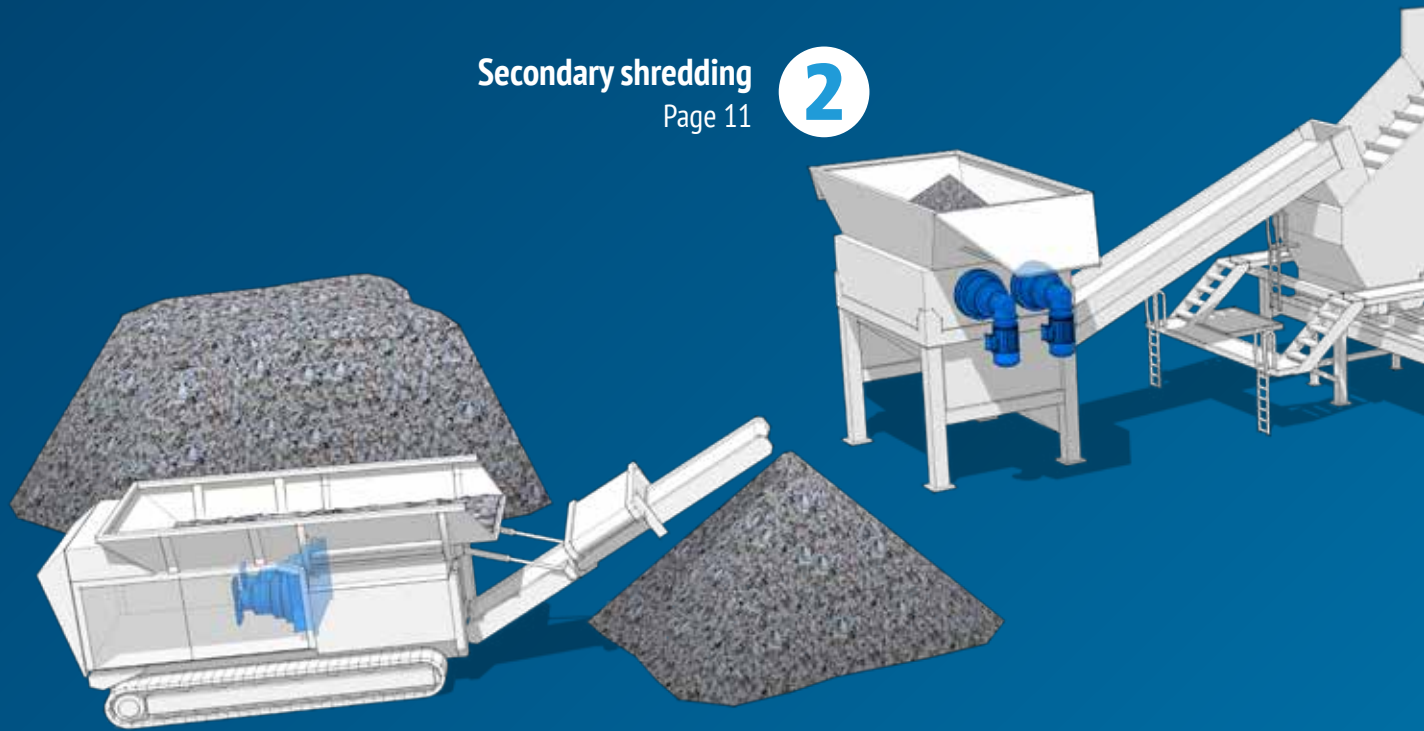
- Series optionally extendable for field bus communication
- Sensorless control of synchronous and asynchronous motors
- Modbus and Systembus onboard
- DC link connection
- Integrated brake chopper
- Power failure management
- Programmable PI Controller
- Integrated VPLC
- Electronic gear via analogue wire or Systembus
- Integrated Safe Torque Off STO (SIL 2 / PL d) function
- Energy Saving function
- Intelligent current limits
- Output frequency 0...599 Hz, higher frequencies on request
- Diagnosis and setup via integrated keypad and integrated Service interface for PC connection



Recycling Plant

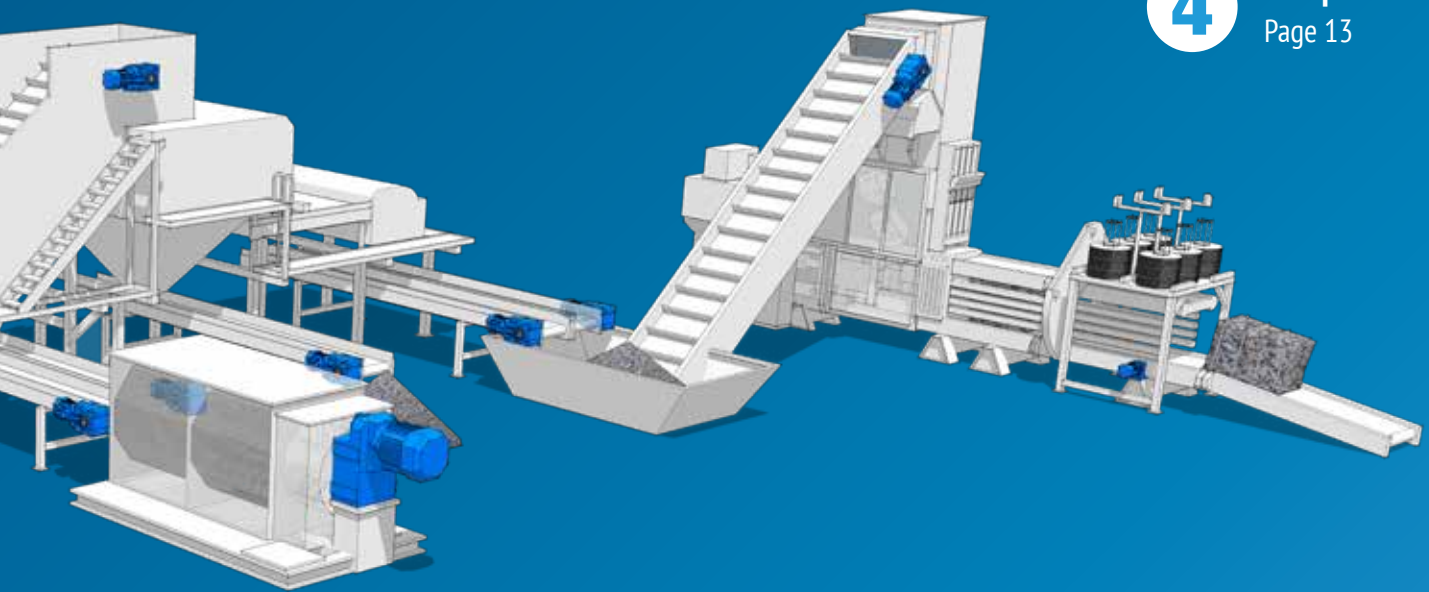
Secondary shredding
Page 11

2



Primary shredding
Page 10

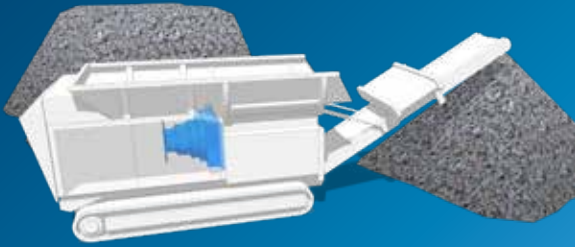
1



3 Conveying
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4 Compactors
Page 13

Recycling Plant



Primary shredding

1

Totally integrated machine design and performance are the key features that our planetary products offer for primary shredding equipment.

Bonfiglioli can boast a long experience with all OEM WW leaders. Its dedicated factory provides premium services worldwide.

R3 Series

Double planetary gearbox

Benefits

- Easy installation
- Quiet operation
- High torque capabilities

Features

- Surface protection class C3, C4 and C5 (according to standard UNI EN ISO 12944-2)
- Peak torque from 80,000 to 129,000 Nm
- Gear ratios from 92 to 115
- Shamrock output, output shaft: flanged output shaft
- Flanged axial piston hydraulic motors
- Axial piston hydraulic motors
- Synchro drive



Active Cube Series

Premium inverter

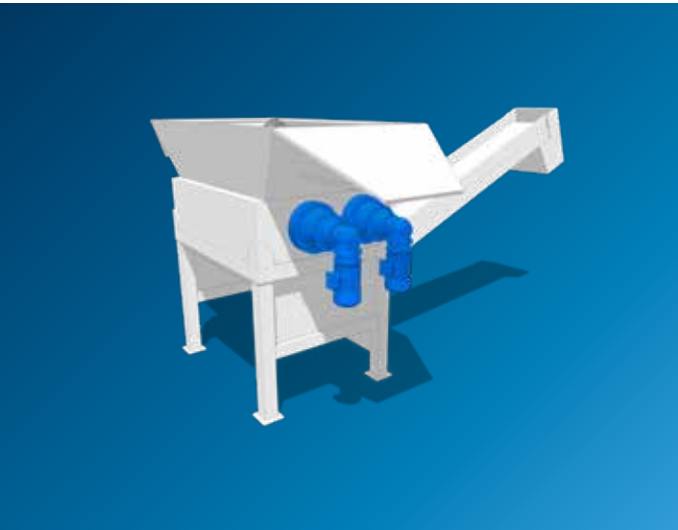
Benefits

- Synchronous and asynchronous motor control with and without encoder
- Electronic blocking detection
- Maximum torque for the entire speed range
- Boost of cinematic energy by speed increase
- 400kW single device with 180% overload
- Air and watercooled
- Cabinet solution available

Features

- Series optionally extendable for field bus communication and encoder evaluation
- Plug-in power terminals (up to 3kW)
- Plug-in and programmable control terminals
- DC link connection
- Integrated brake chopper
- Positioning function via field bus (Motion Control compatible to CiA DS402)
- Integrated VPLC
- Electronic gear in speed or position control
- Power failure management
- Integrated Safe Torque Off STO (SIL 3 / PL e) function
- Output frequency 0...599 Hz, higher frequencies on request
- Diagnosis and setup via optional keypad or PC software





Secondary shredding

2

Planetary rating torque over 2 MioNm guarantees a complete range of shredding machine applications. Thanks to their high peak load capacity, our planetary gears are the best in class in terms of mechanical performances. And full integration with Bonfiglioli drives offers a complete package solution.

300M Series

Planetary gearbox and geared motor

Benefits

- High shock load resistance
- Compact design
- One-stop-shop for complete drive solutions
- Reliable and customized solution for extreme low temperature working condition
- Wash down capability

Features

- High and premium efficiency motors (IE2, IE3)
- Protection rating up to IP56
- Thermal protection (bi-metallic, PTC or KTY)
- Anti-condensation heaters
- Total quality inspection certificate



Active Cube Series

Premium inverter

Benefits

- Cabinet solution up to 1,200kW
- Reversing when blocking detection
- Reduction of starting current and energy provision

Features

- Series optionally extendable for field bus communication and encoder evaluation
- Plug-in power terminals (up to 3kW)
- Plug-in and programmable control terminals
- DC link connection
- Integrated brake chopper
- Positioning function via field bus (Motion Control compatible to CiA DS402)
- Integrated VPLC
- Electronic gear in speed or position control
- Power failure management
- Integrated Safe Torque Off STO (SIL 3 / PL e) function
- Output frequency 0...599 Hz, higher frequencies on request
- Diagnosis and setup via optional keypad or PC software

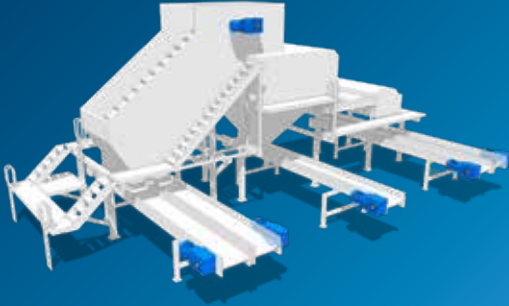


Recycling Plant

Conveying

3

Thanks to the extensive selection of features and space efficiency, we can offer specific products based on the conveying systems. High dynamic response and energy savings are fundamental features when you choose Bonfiglioli. Furthermore, the cost effective and extended service intervals reward a very low cost of ownership. And full integration with Bonfiglioli drives offers a complete package solution.



F Series Helical Parallel-Shaft Gearmotors

Benefits

- Easy installation
- Low noise
- High torque capability
- Wash down capability

Features

- Keyed Hollow Shaft - Two Bore Options per Size, Keyless Shrink Disc Fitting (Metric series)
- Keyed Hollow Shaft (Inch series)
- Backstop device
- High and premium efficiency motors (IE2, IE3)

A Series Helical Bevel Gearmotors

Benefits

- Compact
- Universal mounting
- Modular design
- Wash down capability

Features

- Keyed hollow shaft (metric and inch series)
- High and premium efficiency motors (IE2, IE3)
- Wide range of feedback devices (incremental and absolute encoders)

Active Cube Series Premium inverter

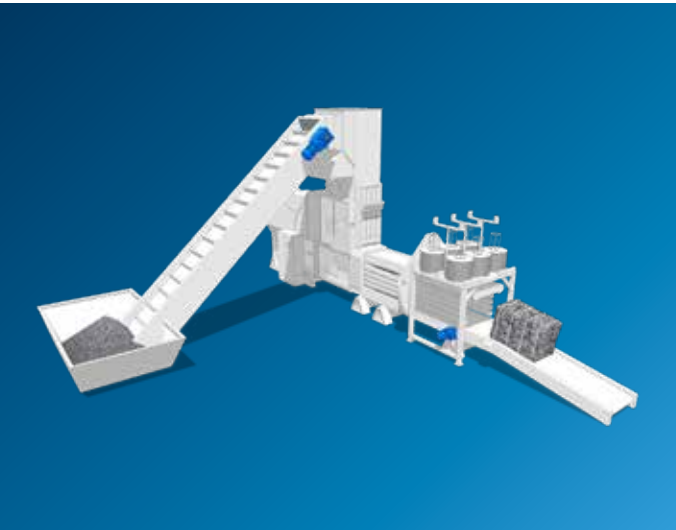
Benefits

- Cabinet solution up to 1,200kW
- Reversing when blocking detection
- Reduction of starting current and energy provision

Features

- Series optionally extendable for field bus communication and encoder evaluation
- Plug-in power terminals (up to 3kW)
- Plug-in and programmable control terminals
- DC link connection
- Integrated brake chopper
- Positioning function via field bus (Motion Control compatible to CiA DS402)
- Integrated VPLC
- Electronic gear in speed or position control
- Power failure management
- Integrated Safe Torque Off STO (SIL 3 / PL e) function
- Output frequency 0...599 Hz, higher frequencies on request
- Diagnosis and setup via optional keypad or PC software





Compactors Balers machine

4

We offer versatile, robust and energy-efficient solutions that enhance compactor requirements.

High dynamic response and energy savings are fundamental features when you choose Bonfiglioli.

Furthermore, the cost effective and extended service intervals reward a very low cost of ownership.

And full integration with Bonfiglioli drives offers a complete package solution.

C Series In-line Gearmotors

Benefits

- Highly compact
- Wide reduction ratio choice
- Wash down capability

Features

- Wide choice of output bolt-on-flanges
- Surface protection class C3, C4 and C5 (according to UNI EN ISO 12944-2 standard)



Active Cube Series Premium inverter

Benefits

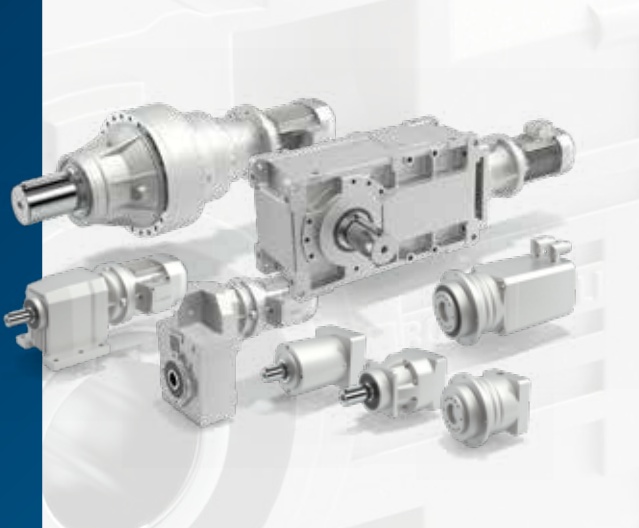
- Cabinet solution up to 1,200kW
- Reversing when blocking detection
- Reduction of starting current and energy provision

Features

- Series optionally extendable for field bus communication and encoder evaluation
- Plug-in power terminals (up to 3kW)
- Plug-in and programmable control terminals
- DC link connection
- Integrated brake chopper
- Positioning function via field bus (Motion Control compatible to CiA DS402)
- Integrated VPLC
- Electronic gear in speed or position control
- Power failure management
- Integrated Safe Torque Off STO (SIL 3 / PL e) function
- Output frequency 0...599 Hz, higher frequencies on request
- Diagnosis and setup via optional keypad or PC software



Complete solutions for Power Transmission & Automation



Gearboxes & Geared motors

- Heavy duty parallel/right angle shaft geared motors**
HDP/HDO Series
 Torque range: 5,190 to 210,000 Nm
 Gear ratios: 5.6 to 500
- Planetary geared motors | 300 Series**
 Torque range: 1,250 to 1,287,000 Nm
 Gear ratios: 3.4 ... 2,916

- Worm geared motors | W/VF Series**
 Torque range: 13 to 7,100 Nm
 Gear ratios: 7 to 10,000
- Helical geared motors | C Series**
 Torque range: 45 to 12,000 Nm
 Gear ratios: 2.6 to 1,481
- Bevel-helical geared motors | A Series**
 Torque range: 100 to 14,000 Nm
 Gear ratios: 5.4 to 1,715
- Shaft-mounted geared motors | F Series**
 Torque range: 140 to 14,000 Nm
 Gear ratios: 6.4 to 2,099

- Precision planetary servo geared motors**
TQ, TQK, TQF, TR, MP, LC, LCK, SL, KR Series
 Torque range: up to 1,000 Nm
 Gear ratios: up to 1,000
 Backlash: lower than 2 and 17 arcmin

Motors

- Asynchronous IEC Motor | BN, BE, BX Series**
Asynchronous Compact Motors | MN, ME, MX Series
 A complete range of AC motors, meeting worldwide MEPS (e.g. IE3)
 Power range: 0.06 to 355 kW
 Poles: from 2 to 8 and multiple poles

IE3

- Asynchronous motors | BN, BE, BX, M, ME, MX Series**
 A complete range of AC motors, meeting worldwide MEPS (e.g. IE3)
 Power range: 0.06 to 355 kW
 Poles: from 2 to 8 and multiple poles

IE3

- Synchronous motors | BMD Series**
 Stall torque: 0.85 to 60 Nm
 Rated speed: from 1,600 to 6,000 min⁻¹
 Power supply: 230, 400 VAC

- Synchronous reluctance motor | BSR Series**
 Two different versions for different needs: High efficiency IE4 and high output
 Power range: 0.37 to 18.5 kW

IE4

- Synchronous motors | BMD, BCR Series**
 Stall torque BMD: 0.85 to 60 Nm
 Stall torque BCR: 0.2 to 115 Nm
 Rated speed BMD: from 1,600 to 6,000 min⁻¹
 Rated speed BCR: from 2,000 to 4,500 min⁻¹
 Power supply: 230, 400 VAC
- Synchronous motors with integrated drives | iBMD Series**
 Stall Torque: 2.7 to 36 Nm
 Rated speed: 3,000 min⁻¹
 Power supply: 560 VDC



Inverters

- **Cabinet solution | Active Cube 8 IP 54**

Power range: 200 up to 1,200 kW
Voltage: 400 V, 525V, 690V

- **Premium inverter | Active Cube Series**

ACU210: 0,25 - 9,2 kW / 1- or 3-phase | **ACU410*:** 0,25 - 400 kW / 3-phase
ACU510*: 160 - 400 kW / 3-phase | **ACU610*:** 160 - 400 kW / 3-phase

- **Premium inverter | Active Cube Series**

ACU210: 0,25 - 9,2 kW / 1- or 3-phase | **ACU410*:** 0,25 - 400 kW / 3-phase
ACU510*: 160 - 400 kW / 3-phase | **ACU610*:** 160 - 400 kW / 3-phase

- **Smart inverter | Agile Series**

200V: 1-phase 0.12 up to 3 kW / 3-phase 0.25 up to 7.5 kW
400V: 0.25 up to 11 kW

- **Compact inverter | S2U Series**

S2U230S--(F) IP66: 0.2 - 2.2 kW / 1-phase

- **Servo inverter | ANG Series**

ANG210: 0.25 - 9.2 kW / 1- or 3-phase | **ANG410*:** 0.25 - 400 kW / 3-phase
ANG510*: 160 - 400 kW / 3-phase | **ANG610*:** 160 - 400 kW / 3-phase

- **Premium inverter | Active Cube Series**

ACU210: 0,25 - 9,2 kW / 1- or 3-phase | **ACU410*:** 0,25 - 400 kW / 3-phase
ACU510*: 160 - 400 kW / 3-phase | **ACU610*:** 160 - 400 kW / 3-phase

- **Smart inverter | Agile Series**

202V: 0.12 - 3 kW / 1-phase | 0.25 - 7.5 kW / 3-phase
402V: 0.25 - 11 kW / 3-phase

* up to 1200 kW with parallel connection



HMI

- **Human Machine Interfaces | BMI Series**

2 Display sizes 7", 10.1"
 True flat front panel in IP65
 High resolution 480x272 up to 1,024x600 pixels

- **Human Machine Interfaces | BMI Series**

2 Display sizes 7", 10.1"
 True flat front panel in IP65
 High resolution 480x272 up to 1,024x600 pixels

- **Human Machine Interfaces | BMI Series**

2 Display sizes 7", 10.1"
 True flat front panel in IP65
 High resolution 480x272 up to 1,024x600 pixels

Research & Development



Bonfiglioli's global research and development create breakthrough solutions that integrate the most advanced mechanical, electrical and hydraulic technologies. They meet the most demanding application requirements and support our customers' growth.

More than 200 employees around the world are involved in the group's research and development.



DESIGN YOUR
SOLUTIONS



CO-
ENGINEERING

We support our customers' projects from beginning to end.

At Bonfiglioli, we believe that product development relies on passion, efficient processes, and the ability to understand our customers' needs accurately.

First, our team identify the customer's needs after in-depth analysis drawn from our specific application expertise.

Through dedicated calculation tools, we can simulate the transmission's capabilities and performance allowing reducing development time.

The alignment phase allows us then to adapt our proposal according to key factors of performance, installation and maintenance.



The test centers at Bonfiglioli

Bonfiglioli's test laboratories support the various phases of the product life cycle, including development, certification and the production of solutions developed and manufactured in our plants around the world.

Our specialists are true partners to the R&D, technical and quality departments. They help validate each Bonfiglioli product from the smallest critical component to the overall solution.

The test centers regularly conduct additional tests to ensure the product durability and confirm the specifications declared during the official approval stage.



Quality, Health & Safety



Our team is wholly dedicated to continuous improvement in the quality, safety and environmental sphere, throughout the entire value chain, from the smallest supplier to the end client.

Bonfiglioli management systems are certified ISO 9001: 2015, ISO 14001: 2015 and OHSAS 18001: 2007, while our products are covered by international certifications. Responsibility, excellence and continuous improvement are the basic elements that make us the favored partner of our clients and suppliers.



SYSTEM
CERTIFICATION



PRODUCTS
CERTIFICATION

Quality

Bonfiglioli is committed to achieving the highest ethical and quality standards. These standards are documented in the Bonfiglioli Quality Management System.

Our products are intended to generate value for our customers. We are committed to designing, manufacturing and supplying effective products and services that set a benchmark for quality in the industry.

Based on defined procedures and instructions, the Bonfiglioli Quality Management System has been established not only to ensure the ongoing quality of our products and processes, but also to guarantee continuous improvement.

Bonfiglioli has also implemented a Quality Policy which sets customer focus as a primary goal. The Quality Policy is used to set and deploy goals and objectives at every level of the organization. The fulfilment of these objectives is measured on a regular basis with appropriate performance indicators.



Health & Safety: Sustainability starts with safety

Prevention of accidents and incidents is a key element of our company's sustainable strategy and an integral part of each one of our business processes. The successful management of risks is essential for protecting our employees and assets and thereby contribute therefore strengthening.



Global Presence



Bonfiglioli is a market force with a presence spanning 22 countries on 5 continents. Our organization makes the most of geographic proximity to offer complete solutions combining efficiency and competence.



3700
EMPLOYEES



20
BRANCHES



13
PLANTS



550
DISTRIBUTORS



80
COUNTRIES

We Are a Global Company

Thanks to an international network of sales branches and closely interconnecting production plants, we can guarantee the same high standards of Bonfiglioli quality anywhere at any given time. Aware that our direct presence in local markets is the key to long-lasting success, our family includes 20 sales branches, 13 production plants and more than 500 distributors around the world.

Our organization is always close by, offering complete and efficient solutions and supporting our customers with dedicated services, such as co-engineering or after-sales assistance.



Bonfiglioli Worldwide Locations

Australia

Bonfiglioli Transmission (Aust.) Pty Ltd.

2, Cox Place Glendenning NSW 2761
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Tel. +61 2 8811 8000

Brazil

Bonfiglioli Redutores do Brasil Ltda.

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Bairro Assunção - São Bernardo do Campo - São Paulo
Tel. +55 11 4344 2322

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O&K Antriebstechnik GmbH

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Tel. +84 650 3577411



We have a relentless commitment to excellence, innovation and sustainability. Our team creates, distributes and services world-class power transmission and drive solutions to keep the world in motion.

HEADQUARTERS

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