

We engineer dreams





The broadest range of solutions for Logistics & Industrial cranes

Bonfiglioli has been providing its solutions for several applications in the Industrial cranes sector all around the world. Overhead, gantry, vessel handling cranes, jib cranes are the main pillars of the logistics chain and heavy-duty industrial processes such as loading and transportation of containers.

Bonfiglioli's range of products perfectly meets requirements for cranes thanks to the extensive experience in the sector for gearmotors and frequency inverters ensuring reliable solutions for both indoor and outdoor installations.

Our dedicated frequency inverters provide the flexibility and high-level performance to support our customers in their daily challenge of moving workloads quickly and safely. Bonfiglioli offers complete drive solutions for hoist, trolley and travel drives that can improve operations safety and increase productivity.

Thanks to our long partnership with global leading manufacturers in lifting equipment, we have developed a deep expertise in the sector, which allows us to offer optimal solutions responding to a wide range of requirements in this sector.

Products for all types of industrial and logistics cranes:

- · Gantry Cranes
- · Overhead Cranes
- · Ship Loader/Unloaders

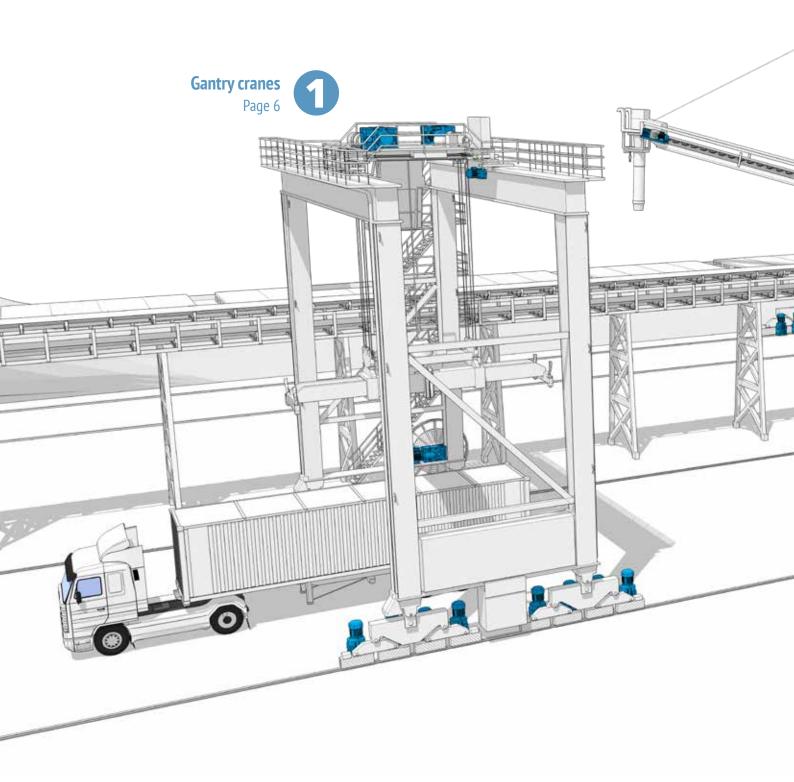
- · Boom Cranes
- · Jib Cranes
- · Vessel handling cranes



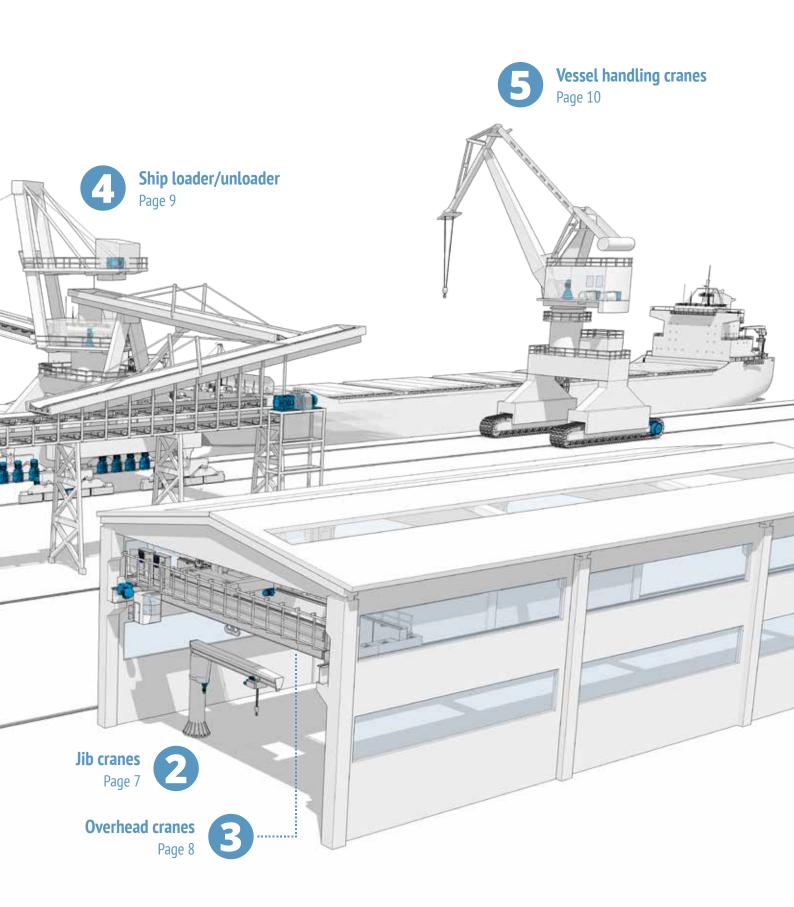


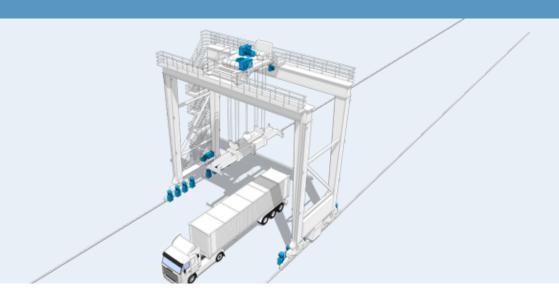


Solutions for LOGISTICS & INDUSTRIAL CRANES









Hoist drive

HDP Series

Heavy duty geared motor (Helical-Parallel)

Benefits

- Robustness
- · Wide range of temperature and working condition
- · Space effective U-shape E-Motor-Reducer-Hoist Drum Arrangement
- · Safety brake easy Inspection & maintenance

Features

- · Double Input
- · Electro-mechanical negative brake system
- · Servo Fan

Long travel drive

A Series

Helical bevel geared motor

Benefits

- Space effective solution & ground clearance
- Easy Installation
- · Reliable operation for vertical mounting E-motor

- · Shrink disk shaft coupling
- Brakemotor with microswitch monitoring system
- · Up to IP 56 Protection & Rain Canopy









Industrial cranes

Gantry cranes



The high reliability and robustness of Bonfiglioli's products ensure safety in vessel handling cranes. We can provide a complete solution for all the drives in these machines. Through our experience, we have developed gearmotors and frequency inverters with dedicated crane features that simplify machine systems' integration and design.

Cross travel drive F Series Shaft mounted gearbox BSR Series Synchronous reluctance motor

Benefits

- $\,\cdot\,$ High energy efficiency of the drive system up to IES2
- · Motor efficiency class up to IE4
- · High accurate sensorless control
- Reliability and robustness
- · High performance solution
- · Retrofit solution thanks to IEC design
- Space Saving
- · Optimized characterization for the whole package

Features

- · Power Range: up to 18,5 kW
- · Two packages available: high Efficiency and High Output
- Thermal protection: KTY, PTC, PT1000
- Forced ventilation
- · Low rotor inertia
- · Double extended shaft
- External mechanical protection
- · Rotor balancing grade B
- · Compact Gearmotor
- · Small units sealed for life

Frequency inverters Active Cube & AEC Series Premium frequency inverters and Regenerative units

Benefits

- · Drive control highly customizable
- · Great operational safety
- · Higher productivity
- · Increased service life of the crane
- Easy installation
- · Lower Total Cost of Ownership

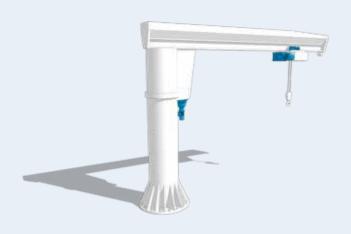
- · Power Range: 0.37...1200 kW
- · Open & closed loop field oriented control
- · Master/slave control and Communication protocols
- · PLC with integrated functionalities
- · Coated boards
- · STO Functional Safety
- · Multi drive synchronisation and torque control
- · Advanced brake control
- · Brake chopper
- · DC link connection for energy sharing
- Energy recovery braking (Recovered electricity can be sent back to the grid)
- Energy consumption optimization (AEC/B)
- Mains unit (AEC/S)





Solutions for

LOGISTICS & INDUSTRIAL CRANES



Slew drive **300M Series**

Planetary geared motor

Benefits

- · Hydraulic or electric motor input solution
- · Integration with negative brake
- · High overload capacity
- · Torque control
- Easy installation

Features

- · Reinforced bearing output shaft
- · Eccentric mounting flange option for pinion /girth gear adjustment
- · Shock load up to 2,000,000 Nm
- · Encoder and integrated load cell
- · Base frame, coupling, brake, motor
- · Oil expansion tank & oil level switch







Horizontal & Low handlings

Jib cranes

2

Bonfiglioli solutions for horizontal and low handling applications are cost-effective, compact and reliable. Our products are designed to meet and exceed the demanding requirements placed on these cranes: from the high radial loads of the slew drive to the precision necessary in the hoisting speed control and finally to the dynamics of the cross travel drive.

Hoist drive **BX Series**

Asynchronous IE3 Three Phase Motor

Benefits

- · Motor efficiency class up to IE3
- · Reliable, balanced and robust
- · Complete solution (Gear unit + Motor)
- Energy saving solution
- · Compliant with the most of the efficiency standards

Features

- Power Range: up to 355 kW
- · Built in brakes available for all power/sizes
- · Thermal protection: KTY, PTC, bimetal switches
- Forced ventilation
- · Anti-condensate heaters
- · Rotor balancing
- · Second shaft extension
- $\boldsymbol{\cdot}$ Anti corrosive paintings up to C5M
- Tropicalization
- · Degree of protection up to IP56

Frequency inverters

Agile

Standard frequency inverters

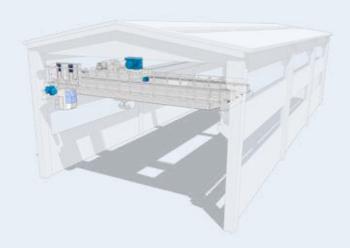
Benefits

- · Higher productivity
- · High control flexibility
- · Increased service life of the machine
- · Energy efficient and costs effective

- · Power Range: 0.25...15 kW
- V/F and Vector sensorless control for asynchronous and brushless motors
- · Maintenance service messages
- · Coated boards
- · Energy efficiency functions
- · Software VPLC with integrated functionalities







Hoist drive

HDP Series

Heavy duty geared motor (Helical-Parallel)

Benefits

- Robustness
- · Wide range of temperature and working condition
- · Space effective U-shape E-Motor-Reducer-Hoist Drum Arrangement
- · Safety brake easy Inspection & maintenance

Features

- · Double Input
- · Electro-mechanical negative brake system
- · Servo Fan

Long travel drive

A Series

Helical bevel geared motor

Benefits

- Space effective solution & ground clearance
- Easy Installation
- · Reliable operation for vertical mounting E-motor

- · Shrink disk shaft coupling
- Brakemotor with microswitch monitoring system
- · Up to IP 56 Protection & Rain Canopy









Warehouse lift & low process

Overhead cranes

3

Components in overhead indoor cranes have stringent requirements for space-optimization.

Thanks to our products' mounting flexibility and compactness, our customers will always find the solution that optimally meets their space requirements. To further increase efficiency, Bonfiglioli can also provide regenerative units to save the energy generated when lowering loads.

Cross travel drive F Series Shaft mounted gearbox BSR Series

Synchronous reluctance motor

Benefits

- $\,\cdot\,$ High energy efficiency of the drive system up to IES2
- · Motor efficiency class up to IE4
- · High accurate sensorless control
- Reliability and robustness
- · High performance solution
- · Retrofit solution thanks to IEC design
- Space Saving
- · Optimized characterization for the whole package

Features

- · Power Range: up to 18,5 kW
- · Two packages available: high Efficiency and High Output
- Thermal protection: KTY, PTC, PT1000
- · Forced ventilation
- · Low rotor inertia
- · Double extended shaft
- External mechanical protection
- · Rotor balancing grade B
- · Compact Gearmotor
- · Small units sealed for life

Frequency inverters Active Cube & AEC Series

Premium frequency inverters and Regenerative units

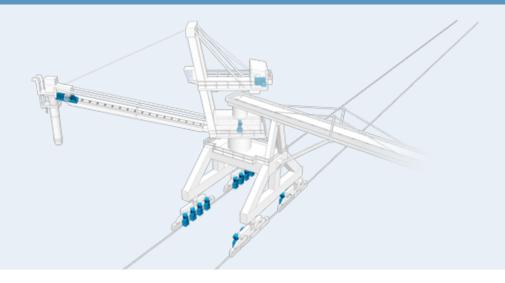
Benefits

- · Drive control highly customizable
- · Great operational safety
- Higher productivity
- · Increased service life of the crane
- · Easy installation
- · Lower Total Cost of Ownership

- Power Range: 0.37...1200 kW
- · Open & closed loop field oriented control
- Master/slave control and Communication protocols
- · PLC with integrated functionalities
- · Coated boards
- · STO Functional Safety
- · Multi drive synchronisation and torque control
- · Advanced brake control
- · Brake chopper
- $\cdot\,$ DC link connection for energy sharing
- Energy recovery braking (Recovered electricity can be sent back to the grid)
- Energy consumption optimization (AEC/B)
- · Mains unit (AEC/S)







Slew drive **300M Series** Planetary geared motor

Benefits

- · Hydraulic or electric motor input solution
- · Integration with negative brake
- · High overload capacity
- · Torque control
- · Easy installation
- · Backlash control

Features

- · Reinforced bearing output shaft
- · Eccentric mounting flange option for pinion /girth gear adjustment
- · Shock load up to 2,000,000 Nm
- · Encoder and integrated load cell
- · Base frame, coupling, brake, motor
- · Oil expansion tank & oil level switch
- · Plug-in pinion
- · Wide Torque & Ratio Range

Boom conveyor drive

HDO Series

Heavy duty geared motor (Bevel-Helical)

Benefits

- · One-stop-shop for a complete drive solution
- E-motor alignment free solution & free base frame
- · Reliable, free maintenance and integrated cooling system
- · Extended lifetime & reliability
- · Highly transmissible power
- · Reliable operation during boom tilting

Features

- · Extended bearing lifetime
- Torque range up to 210,000 Nm
- · Strengthened E-motor input flange with integrated fan and coupling
- · Wide range of options
- · Integrated forced oil lubrication option
- · Torque arm, coupling, brake, motor









Loading/unloading material

Ship loader/unloader



Ship loaders/unloaders need to operate in the most demanding and corrosive environments and under all weather conditions

Our solutions are specifically developed to ensure long resistance and safe operation in every environment conditions

Long travel drive **A Series**Helical bevel geared motor

Benefits

- · Space effective solution & ground clearance
- Easy Installation
- · Reliable operation for vertical mounting E-motor

Features

- · Shrink disk shaft coupling
- · Brakemotor with microswitch monitoring system
- Up to IP 56 Protection & Rain Canopy

Frequency inverters Active Cube & AEC Series

Premium frequency inverters and Regenerative units

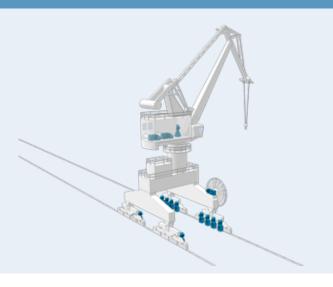
Benefits

- · Drive control highly customizable
- · Great operational safety
- Higher productivity
- · Increased service life of the crane
- · Easy installation
- · Lower Total Cost of Ownership

- Power Range: 0.37...1200 kW
- · Open & closed loop field oriented control
- Master/slave control and Communication protocols
- PLC with integrated functionalities
- · Coated boards
- · STO Functional Safety
- · Multi drive synchronisation and torque control
- · Advanced brake control
- · Brake chopper
- $\cdot\,$ DC link connection for energy sharing
- Energy recovery braking (Recovered electricity can be sent back to the grid)
- Energy consumption optimization (AEC/B)
- · Mains unit (AEC/S)









Hoist & Luffing drive **HDP Series**

Heavy duty geared motor (Helical-Parallel)

Benefits

- Robustness
- · Wide range of temperature and working condition
- · Space effective U-shape E-Motor Reducer-Hoist Drum Arrangement
- · Safety brake easy Inspection & maintenance

Features

- · Double Input
- · Electro-mechanical negative brake system
- · Servo Fan

Travel drives **700C Series** Geared motor

Output torque

· 1 ... 625 kNm

Gear ratios

· 5.3 ... 492

Benefits

- · Power shift capability
- · Compact solution
- · High performance

Features

- Two gear shifting transmission
- · Hydraulic controlled shifting
- · Integrated parking & emergenc brake
- · Optional cooling flow to input stage and clutch unit
- · Wide variety of ratio combinations

F Series Geared motor

Output torque

· 620 ... 2,916 kNm

Gear ratios

· 249 ... 989

Benefits

- · Power shift capability
- Compact solution
- · High performance

Features

- Two gear shifting transmission
- · Hydraulic controlled shifting
- · Integrated parking & emergency brake
- · Optional cooling flow to input stage and clutch unit
- · Wide variety of ratio combinations









Ship to shore handlings

Vessel handling cranes



Bonfiglioli provides vessel handling crane with high torque and robustness that allow smooth and easy handling from shore to ship under the most demanding conditions.

Slew drives 700T Series Geared motor

Output torque

· 1 ... 80 kNm

Gear ratios

· 3.4 ... 2,000

Benefits

- Compact structure
- Suitable for various hydraulic motors
- · High performance

Features

- · Notch-less ground tooth root
- · Integrated disc-brake
- Ready availability with highest teeth and production quality

S SeriesGeared motor

Output torque

· 5.5 ... 130 kNm

Gear ratios

· 23 ... 67

Benefits

- Compact structure
- Suitable for various hydraulic motors
- · High performance

Features

- · Notch-less ground tooth root
- · Integrated disc-brake
- Ready availability with highest teeth and production quality

Frequency inverters

Active Cube & AEC Series

Premium frequency inverters and Regenerative units

Benefits

- · Drive control highly customizable
- · Great operational safety
- Higher productivity
- · Increased service life of the crane
- · Easy installation
- · Lower Total Cost of Ownership

- Power Range: 0.37...1200 kW
- · Open & closed loop field oriented control
- Master/slave control and Communication protocols
- · PLC with integrated functionalities
- · Coated boards
- · STO Functional Safety
- · Multi drive synchronisation and torque control
- · Advanced brake control
- · Brake chopper
- · DC link connection for energy sharing
- Energy recovery braking (Recovered electricity can be sent back to the grid)
- Energy consumption optimization (AEC/B)
- · Mains unit (AEC/S)







Specific functions for Logistics & Industrial cranes

Mechatronic tailor made solutions for cranes, made easy

For different application purposes the Bonfiglioli frequency inverters offer fitting software functions:

- Anti-sway, which enables precise regulation through an encoder and without additional sensors.
- Load detection, to minimize mechanical efforts detecting the right weight of the load and applying only the necessary torque.
- · Synchronism for Gantry axis.
- Broken cable detection, to identify breakage or partial loss of the lifting cable
- Anti-rollback to ensure the correct movement of the load in the direction of rotation.
- Anti-crossover, to ensure for example on a gantry on wheels, the ideal wheel alignment is constantly maintained for easy movement.
- Heavy duty work, designed to work according to the highest requirements of the Industry.
- Brake control for a total control during the breaking with different options.
- Floating load to allow suspended loads to stay in position even with the brake open.
- Sling mode to provide several speed options before lifting a load on the ground.
- Overload and overspeed control to maintain the maximum operating speed and load values within the optimal working ranges.
- Levelling control to assure a balanced load during synchronization of hoists axis
- Over travel management to manage a stopping behavior at a defined position of the trolley.

Connectivity open standards

Fieldbus connectivity like CANopen, EtherCAT, PROFINET, Ethernet IP, PROFIBUS links the frequency inverter to the preferred PLC system.

The Ethernet based systems EtherCAT & PROFINET allow also simultaneous access for the diagnosis (and also parameter setup) via VPlus on the PC.

Field bus	
CANopen	
Profibus DP V1	
RS-232	
RS-485 Modbus	
DeviceNet	
EtherCAT	
Profinet	
Ethernet IP	
Modbus/TCP	
VABus/TCP	
TABUS/ TCI	











IIoT solutions

With our remote diagnostic & troubleshooting services, we are able to remotely monitor the state of our customers' equipment, allowing the anticipation of possible problems or breakdowns before they become critical, and plan activities to avoid them.

In addition, we offer tailor-made IIoT solutions to maximize the productivity and efficiency of our customers' machines. From application engineering to condition monitoring and data collection, our team of experts provides supports with the aim of making data valuable and speeding up development.

Energy efficiency

For a responsible resource usage, energy efficiency is a major task today for every production machine to reduce the ecological impact and saving operation costs at the same time.

The following approaches help to increase the energy efficiency of the drives and therefore for the whole machine:

- · Smart energy usage
- · Converting energy with high efficiency
- · Using kinetic energy during braking
- Reducing energy consumption through energy saving functions in the frequency inverter

The full Bonfiglioli axis (inverter + gearbox + motor) offers a complete package of highly dynamic drive systems for increasing production efficiency.



OUR CONSTANT AMBITION

QUALITY, HEALTH, SAFETY, ENVIRONMENT & ENERGY

QUALITY: WE CARE ABOUT OUR CUSTOMERS

Our team is wholly dedicated to continuous improvement in the quality, safety, environmental and energy spheres throughout the entire value chain, from the smallest supplier to the end client. Bonfiglioli is committed to achieving the highest quality standards, and our products are intended to generate value for our customers while respecting both people and the environment. We design, manufacture and supply effective products and services that set a benchmark for quality in the industry.

Bonfiglioli management systems are certified ISO 9001: 2015, ISO 14001: 2015, ISO 45001: 2018 and ISO 50001:2018, while our products are covered by 7 international certifications. Responsibility, excellence and continuous improvement are the basic elements that make us the favored partner of our clients and suppliers.

HEALTH & SAFETY: SUSTAINABILITY STARTS WITH SAFETY

Prevention of accidents and incidents is a key element of our company's sustainability 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, thereby strengthening their contributions.

ENVIRONMENT & ENERGY: RESPECT THE PRESENT TO BUILD THE FUTURE

At Bonfiglioli, we believe that respect for the present and the adoption of environmental protection and energy efficiency policies are essential if we are to enjoy a better future.

OUR GLOBAL PRESENCE

Thanks to an international network of closely interconnected commercial and production sites, we can guarantee the same high standards of Bonfiglioli quality anywhere at any given time. We know that our direct presence in local markets is the key to long-lasting success, so our family includes 20 production sites, 26 commercial sites and more than 550 distributors around the world.

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

20PRODUCTION SITES

26
COMMERCIAL SITES







AUSTRALIA

Bonfiglioli Transmission (Aust.) Pty Ltd

2, Cox Place Glendenning NSW 2761 Locked Bag 1000 Plumpton NSW 2761 Tel. +61 2 8811 8000





Bonfiglioli Redutores do Brasil Ltda

Av. Osvaldo Fregonezi, 171, cjs 31 e 44 CEP 09851-015 - São Bernardo do Campo São Paulo

Tel. +55 11 4344 2322



CHINA

Bonfiglioli Drives (Shanghai) Co. Ltd.

#68, Hui-Lian Road, QingPu District, 201707 Shanghai Tel. +86 21 6700 2000



Motion & Robotics #568, Longpan Road, Jiading District, 201707 Shanghai



Bonfiglioli Trading (Shanghai) Co. Ltd.

Room 423, 4th Floor, #38, Yinglun Road, China (Shanghai) Pilot Free Trade Zone, Shanghai



Selcom Electronics (Shanghai) Co., Ltd

A7, No.5399, Waiqingsong Road, QingPu District, 201707 Shanghai

Tel. +86 21 6010 8100



A24, No.5399, Waigingsong Road, QingPu District, 201707 Shanghai

Tel. +86 21 6010 8100



FRANCE

Bonfiglioli Transmission S.A.S.

14 Rue Eugène Pottier Zone Industrielle de Moimont II 95670 Marly la Ville Tel. +33 1 34474510



GERMANY

Bonfiglioli Deutschland GmbH

Sperberweg 12 - 41468 Neuss Tel. +49 0 2131 2988 0



Bonfiglioli Vectron GmbH

Europark Fichtenhain B6 - 47807 Krefeld Tel. +49 0 2151 8396 0



O&K Antriebstechnik GmbH

Ruhrallee 8-12 - 45525 Hattingen Tel. +49 0 2324 2050 1



INDIA

Bonfiglioli Transmission Pvt. Ltd.

Mobility & Wind Industries AC 7 - AC 11 Sidco Industrial Estate Thirumudivakkam Chennai - 600 044 Tel. +91 844 844 8649



Discrete Manufacturing &

Process Industries - Motion & Robotics Survey No. 528/1,

Perambakkam High Road Mannur Village, Sriperumbudur Taluk Chennai - 602 105 Tel. +91 844 844 8649



Discrete Manufacturing & Process Industries

Plot No.A-9/5, Phase IV MIDC Chakan, Village Nighoje Pune - 410 501 Tel. +91 844 844 8649



ITALY

Bonfiglioli Riduttori S.p.A.

Discrete Manufacturing & **Process Industries** Via Cav. Clementino Bonfiglioli, 1 40012 Calderara di Reno Tel. +39 051 6473111



Discrete Manufacturing & Process Industries

Via Sandro Pertini, lotto 7b 20080 Carpiano Tel. +39 02985081



Discrete Manufacturing & Process Industries

Via Saliceto, 15 - 40010 Bentivoglio



Mobility & Wind Industries

Via Enrico Mattei, 12 Z.I. Villa Selva 47122 Forlì

Tel. +39 0543 789111



Motion & Robotics

Via Unione, 49 - 38068 Rovereto Tel. +39 0464 443435/36



Selcom Group S.p.A.

Via Achille Grandi, 5 40013 Castel Maggiore (BO) Tel. +39 051 6387111



Via Marino Serenari, 18 40013 Castel Maggiore (BO) Tel. +39 051 6387111



Via Cadriano, 19 40057 Cadriano (BO) Tel. +39 051 6387111



NEW ZEALAND

Bonfiglioli Transmission (Aust.) Pty Ltd

88 Hastie Avenue, Mangere Bridge, 2022 Auckland PO Box 11795, Ellerslie Tel. +64 09 634 6441



SINGAPORE

Bonfiglioli South East Asia Pte Ltd

8 Boon Lay Way, #04-09, 8@ Tadehub 21, Singapore 609964 Tel. +65 6268 9869



SLOVAKIA

Bonfiglioli Slovakia s.r.o.

Robotnícka 2129 Považská Bystrica, 01701 Slovakia Tel. +421 42 430 75 64



SOUTH AFRICA

Bonfiglioli South Africa Pty Ltd.

55 Galaxy Avenue, Linbro Business Park, Sandton, Johannesburg 2090 South Africa Tel. +27 11 608 2030



SPAIN

Tecnotrans Bonfiglioli S.A

Avinguda del Ferrocarril, nº 14, Polígono Industrial Can Estapé 08755 Castellbisbal - Barcelona Tel. +34 93 447 84 00



TURKEY

Bonfiglioli Turkey Jsc

Atatürk Organize Sanayi Bölgesi, 10007 Sk. No. 30 Atatürk Organize Sanayi Bölgesi, 35620 Çiğli - Izmir Tel. +90 0 232 328 22 77



UNITED KINGDOM

Bonfiglioli UK Ltd.

Unit 1 Calver Quay, Calver Road, Winwick Warrington, Cheshire - WA2 8UD Tel. +44 1925 852667



USA

Bonfiglioli USA Inc.

3541 Hargrave Drive Hebron, Kentucky 41048 Tel. +1 859 334 3333



VIETNAM

Bonfiglioli Vietnam Ltd.

Lot C-9D-CN My Phuoc Industrial Park 3 Ben Cat - Binh Duong Province Tel. +84 650 3577411









SALES





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

HEADQUARTERS

Bonfiglioli S.p.A Via Cav. Clementino Bonfiglioli, 1 40012 Calderara di Reno - Bologna (Italy) Tel. +39 051 6473111







