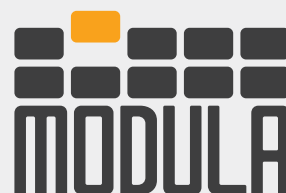




Modula Advantages

Think Vertical, Think Modula



THE ADVANTAGES OF A MODULA VLM

Do you need more space?

**Do you want to improve your
processes?**

Do you want to monitor your stock?

CHOOSE A VERTICAL SOLUTION!

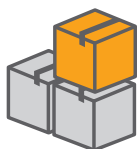
By choosing a Modula automated storage system, you can improve your logistics while at the same time speeding up productivity and improving flexibility.

Discover all the advantages of our technology for automated warehouse management. Modula storage systems enable the automation of inbound and outbound logistics, streamlining and guaranteeing more precise inventory control.

Fully automatic handling of loads, space savings and increased productivity are only some of the many advantages provided by Modula solutions for the optimization of storage systems.



ADVANTAGES



**SPACE
SAVINGS**



**TIME
SAVINGS**



**SAFE HANDLING
OF GOODS**



**ERGONOMICS AND
OPERATOR SAFETY**



**CUSTOM
CONFIGURATION**



**ERROR REDUCTION
AND EFFICIENT STOCK
MANAGEMENT**



**MAXIMUM LOAD
BEARING CAPACITY**



**DEDICATED
SOFTWARE**



**EASE
OF USE**

SPACE SAVINGS

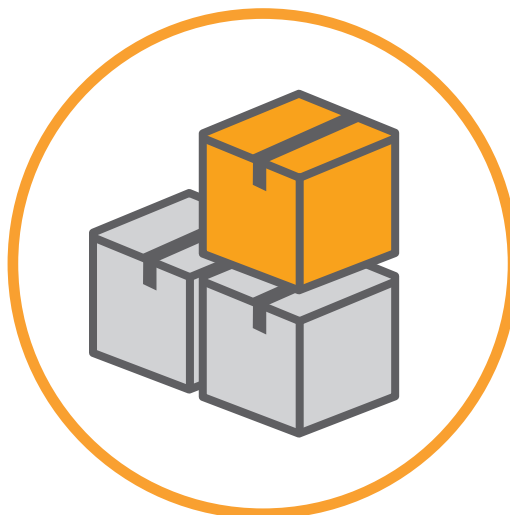
Space optimization is one of the main advantages of a vertical storage system.

By using the available vertical space to store goods, it is possible to decrease the footprint by up to 90%, thus storing larger quantities of goods in less space and achieving more efficient picking and placing operations.

Vertical storage systems can be up to 16 meters high and store finished/semi-finished products, spare parts and materials of any kind in a safe and organized manner.

The storage footprint is significantly smaller compared to that of traditional storage systems and the available surface area is much larger.

The vertical configuration, suitable for any industrial environment, is obtained by means of a steel structure containing a series of trays that are moved from the different levels to the picking and placing bays by a central lift.



CASE STUDY

INTERNET FUSION

The Internet Fusion Group is a fast growing e-commerce business that sells surf, skate, snow, equestrian equipment and products, as well as clothing and accessories.

PROBLEM

The Internet Fusion Group needed to optimize its warehouse space, improve storage conditions and reduce the time needed for the preparation of spare parts orders.

SOLUTION

With the integration of Modula automated storage systems, all the available space has been utilized. In addition, personnel now have no need to spend 70% of their time searching for products and are now able to prepare a much larger number of orders.



Without Modula



With Modula



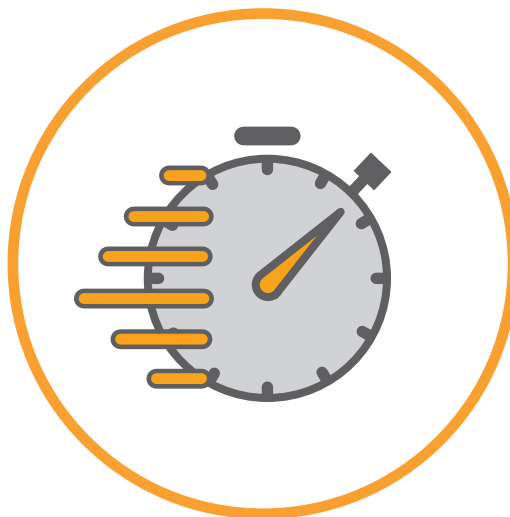
TIME SAVINGS

Choosing a storage solution based on a vertical storage system ensures significant time savings.

The stored goods are easily accessible and personnel no longer need to move around the warehouse; in fact, the required items are picked and placed from the same position.

Searching for an item takes much less time, since the goods stored in the Modula storage system are automatically delivered to the bay according to the "goods to person" concept.

The operating principle is simple, which allows personnel to be easily substituted. In addition, Modula storage systems are supplied with their own WMS software, so that information on the status of inventory, as well as the exact location of goods is always available.



CASE STUDY

AP LOGISTICS

AP Logistics has 10 distribution centers and distributes spare parts for the automotive sector.

PROBLEM

AP Logistics guarantees that its products are delivered within a few hours of being ordered.

Due to its continuous growth in terms of both new markets and new customers, the company needed to dispatch orders more quickly and accurately. However, traditional storage methods were not suited to current needs. That is why in 1998 AP Logistics opted for a Modula solution.

SOLUTION

AP Logistics currently has 46 Modula vertical storage systems, where low rotation materials accounting for 90% of the warehouse handling activities are stored. It is thus possible to deliver 7,500 items per day. Shipping is completed within 90 minutes of ordering. The alphanumeric LED bar provides information that is useful to improve picking time and accuracy.



The WMS plays an important role in order management as it controls every operation carried out by the Modula storage system. Online orders received from the ERP are sent to the WMS, which establishes the order sequence.

Next, it determines which trays must be brought to the bay so that the operator can pick the items needed for order preparation.



SAFE HANDLING OF GOODS

The solutions developed by Modula are designed not only to save space but also to track goods, keep them safe and facilitate picking operations.

Modula automatic vertical storage systems safeguard all goods against theft and damage.

Access to the items stored in a vertical storage system is allowed exclusively to authorized personnel through password login or advanced recognition systems (card readers or RFID).

This enables continuous monitoring of goods and operators.

Each individual access is recorded and can be limited to specific trays to increase security and prevent unauthorized operations.



CASE STUDY

SUNNY EUROPE

Sunny is part of Sunny Europe, a group engaged in duty free trade.

The company has a 1.600 square meter duty free store and 5.000 square meters of warehouse space located in the heart of the Port of Antwerp, and dedicated to the sale of duty free products for diplomats and ship crews.

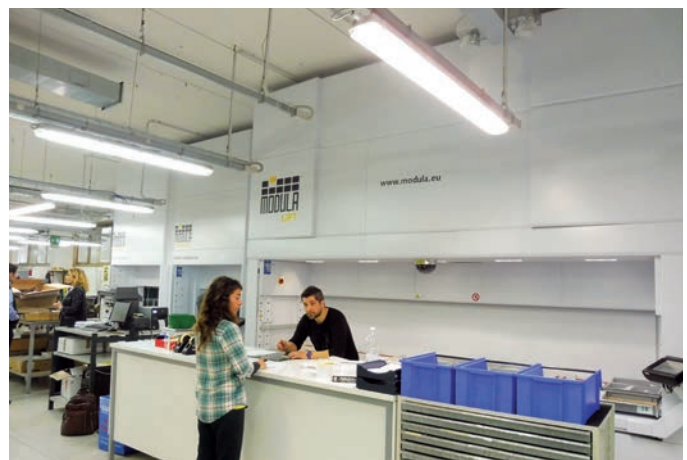
PROBLEM

Their order management is very complex and multifaceted, every order is diverse and varied.

SOLUTION

Thanks to the adoption of a Modula solution, the ground space needed in the warehouse has been halved, the systems are run by very few operators, and errors have been eliminated. Order preparation is now fast and precise.

Modula's vertical storage systems have enabled Sunny Europe to efficiently manage a warehouse with a complex workflow and multi-level order management, guaranteeing quick processing, precision and maximum care of products, even the most valuable.



ERGONOMICS AND OPERATOR SAFETY

Modula storage systems are designed to be safe and to always meet the customer's needs. The ergonomics of the vertical storage system enables operators to receive all items at a comfortable height, significantly reducing the risk of occupational injuries.

Modula vertical storage systems are equipped with physical and photoelectric barriers to guarantee the highest safety standards: Modula is TUV GS certified, which confirms compliance with the strictest safety standards enforced in Europe.

The structure of the storage system enables the operator to access all items stored in the trays, preventing potentially dangerous situations like those related to the use of ladders and forklifts.

Thanks to the use of bays at a suitable height for picking and placing operations, Modula avoids the need for the operator to bend down to lift heavy items and improves workplace ergonomics. It represents a remarkable step forward in terms of working conditions, because it drastically reduces the negative consequences of exhausting tasks.

To make the vertical storage system even more ergonomic, it is possible to equip the Modula systems with the sliding version of the Copilot console. The console can be easily slid along the bay enabling the user to interface with the system while carrying out picking or placing operations. The structure of the Modula vertical storage system is completely closed and optionally equipped with an automatic bay door which helps prevent humidity and dust from damaging the stored goods.



CASE STUDY

LYRECO

Lyreco is a leader in the distribution of office supplies and workplace products. The company has more than 9,000 employees in 26 countries.

PROBLEM

Lyreco had two major problems: it had no more ground space available in its warehouse and it wanted to make its picking operations more ergonomic.

SOLUTION

With the installation of the Modula storage systems, substantial improvements were noted in picking speed and system ergonomics.

Productivity and safety skyrocketed.



CUSTOM CONFIGURATION

By choosing a Modula automated storage system, you can improve your logistics while at the same time speeding up productivity and flexibility.

Learn about all the advantages of our technology for warehouse automation: Modula storage systems enable the automation of inbound and outbound logistics of an extremely wide range of products, streamlining and guaranteeing more precise inventory control.

That is without mentioning the fully automatic handling of loads with the consequent space savings and increased productivity.

In this way, vertical solutions provide multiple advantages for the optimization of storage systems, including shorter picking times and space savings.



CASE STUDY

RODO KETTEN

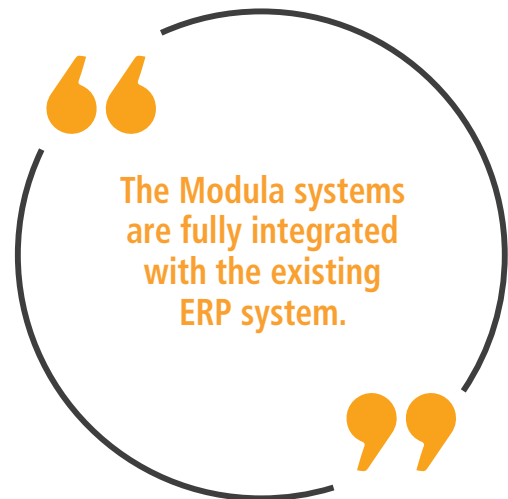
Rodo Ketten is one of the leading European manufacturers of ropes and chains. It produces 1 million meters every week.

PROBLEM

The requirement was to manage the logistics of the warehouse reliably and flexibly, in order to be able to coordinate complex orders requiring rapid shipping as well as orders for large clients in the textile industry.

SOLUTION

Thanks to the installation of 3 Modula Lift ML 75 D with double external bay interconnected with its ERP, Rodo Ketten can now handle an average of 200 orders per day, with at least 200 packages shipped by midday.



ERROR REDUCTION AND EFFICIENT STOCK MANAGEMENT

The solutions delivered by Modula facilitate efficient inventory management and significantly reduce errors.

Combined with the Modula WMS software, the storage system enables the monitoring of all incoming and outgoing goods, continuous control of the stock situation and improved inventory management.

Modula provides real time information regarding inventory, which is critical to optimize order preparation and production flow logistics.

After each picking or placing operation, the personnel in charge can obtain data about the virtual situation of inventory and compare it with the actual stock data, which facilitates information alignment.

Simple and intuitive visual aids are provided to ensure precise inventory management and reduce errors.

With these devices, any authorized operator, even without specific skills, can easily identify the products that must be picked from or placed in the automatic storage system.



CASE STUDY

GLOBAL O-RINGS AND SEAL

is a supplier of O-rings and other sealing products.

It also supplies other sealing solutions like spare seals and oil seals.

PROBLEM

The biggest challenge for Global O-Rings was inventory management.

A few years ago, the need arose for a better and more efficient picking method.

In the competitive market where Global O-Rings and Seal operates, it is very important to offer good customer service, with error-free and fast product delivery.

SOLUTION

Since the installation of the VLMs, order errors have almost disappeared and picking and placing operations have become much easier and more efficient.

Inventory storage and management has changed dramatically.

Everything is now tracked and we know the exact quantities in stock, on each shelf, or in each compartment.

Global O-Rings and Seal will most likely add 2 or perhaps 3 more units in the future, given the surface area available in their warehouse.

Global O-Rings and Seal consider Modula VLMs the best systems to combine data with real day-to-day operational effects.

With the installation of Modula's VLMs our accuracy skyrocketed.

Data is very important in our daily activities, because without data we would not be able to tell our clients what items are available, and we could not make deliveries in the correct quantities.

Modula's VLMs have made our work much easier.

MAXIMUM LOAD BEARING CAPACITY

Each Modula Lift vertical storage system guarantees a gross capacity of 90,000 kg regardless of the width and depth of the trays used.

Thanks to the reinforced steel toothed belt drive and the lift guide system with 16 HDPE wheels, it is possible to arrange partially unbalanced loads on the trays without affecting the smooth operation of the storage system.

That is true for all Modula trays up to 4,100 mm wide, including the OneTon model, which guarantees a tray capacity of up to 990 kg, the maximum capacity in the entire range.



CASE STUDY

WALSER

Walser is a BMW and Mini Cooper dealer located in Wichita, Kansas (USA).

PROBLEM

Walser BMW handles a considerable number of components that are very difficult to store and require a significant amount of space. They were in need of a modern and efficient storage method capable of speeding up delivery times.

SOLUTION

The installation of Modula storage systems has solved the problems related to storage and logistics. Components from window wipers to hoses as well as large parts are now stored in 40 trays containing 85% of the spare parts.



DEDICATED SOFTWARE

Modula also provides its own WMS, the warehouse management software designed to optimize the performance of vertical storage systems, which is also suitable for use as an independent tool in traditional warehouses with areas where the goods are handled manually.

Modula's WMS:

- improves neatness, efficiency and accuracy
- automates many procedures and reduces printed media
- streamlines procedures and improves process control
- speeds up order processing
- enables the full monitoring of order preparation procedures.

Configurable and customizable, the Modula WMS is available in different packages with different types of license and different software modules to meet the most varied demands.

The software includes a tool to design the tray layout and interfaces with ERP systems such as SAP, Oracle, Baan, Navision and many others.

Discover all the advanced features of Modula products and contact us for more information. Our team of professionals is available to illustrate the many possible custom configurations of the vertical storage system and explain the main functions of Modula's WMS.



CASE STUDY

LASAULEC

Lasaulec is a company operating in BeNeLux since 1947 as a wholesale distributor of PPE, power tools, and similar products.

PROBLEM

Inefficient order management.

SOLUTION

In addition to increasing the speed, precision and efficiency of order preparation, Modula was integrated with warehouse management software developed by VANAS that interfaces with the company's ERP and with the conveyor system on which orders are moved inside special containers.

It is a "foolproof" system where human errors are almost impossible. The vertical storage system is very easy to operate; not only is the process easy and intuitive but so is the calculation of gains.

The installation of the Modula system has allowed all the company's objectives to be achieved, including the return on investment in just 3 years.



EASE OF USE

Ease of use is one of the advantages guaranteed by the warehouse management software integrated in the Modula systems. Vertical storage systems are equipped with a touch screen operator interface (Copilot) designed for industrial environments, which allows all machine functions to be accessed in a simple and intuitive way.

It has a color graphic interface with highly intuitive icons that do not require any special training for those using it on a daily basis.

The Copilot touch screen is installed at an ergonomic height in the picking and placing bay.

The position is selected in such a way as to prevent any interference between the operators and the photoelectric safety barriers in the event that the control panels are located in an area other than the bay.



CASE STUDY

SOLIMÉ

Solimé is an Italian company based in the province of Reggio Emilia that manufactures natural herbal products.

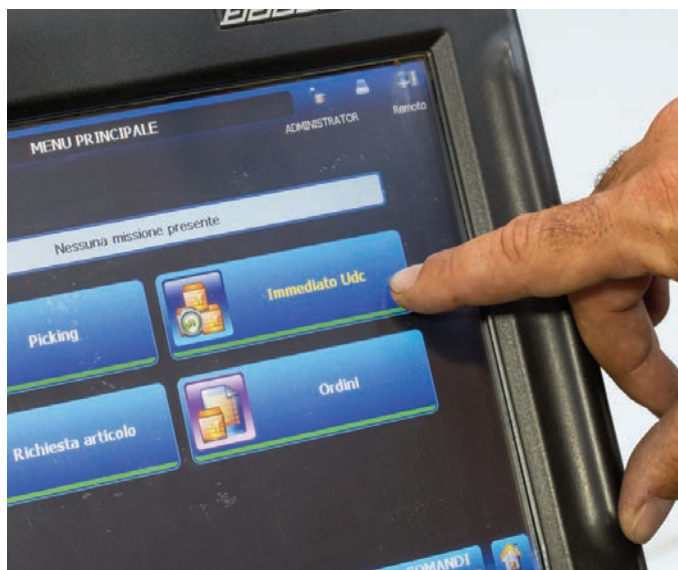
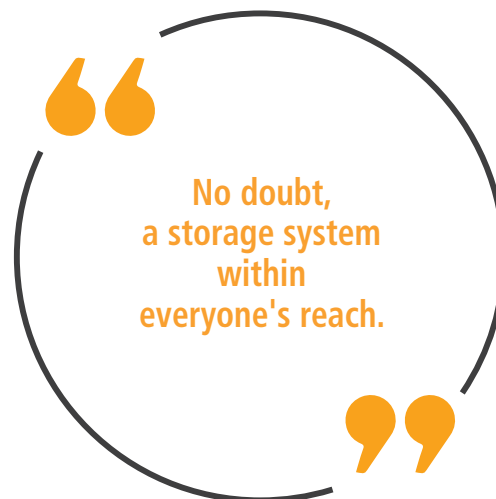
PROBLEM

Having to store a wide range of materials, some large, some small, some packaged, others not, with the primary need to reduce the ground space used for storage.

SOLUTION

With the installation of the Modula vertical storage systems, Solimé has optimized the available space by exploiting its height and has significantly reduced the time needed for order preparation.

Modula's solutions save time as order preparation is faster.



MODELS

LIFT

ME & ME-D



Model	Tray width (mm)	Tray depth (mm)	Tray edge height (mm)	Net capacity per tray (kg)	Layout with internal bay (W x D mm)	Layout with external bay (W x D mm)
ME25	1.500	654	45 / 70 / 120	250	1.917x2.556	1.917x3.246
ME25D	1.500	857	45 / 70 / 120	250	1.917x3.165	1.917x4.058
ME50	1.500	654	70 / 120	500	1.917x2.556	1.917x3.246
ME50D	1.500	857	70 / 120	500	1.917x3.165	1.917x4.058
ME75	1.500	654	70 / 120	750	1.917x2.556	1.917x3.246
ME75D	1.500	857	70 / 120	750	1.917x3.165	1.917x4.058
ME1000	1.460	654	70 / 120	990	1.917x3.165	1.917x4.058
ME1000D	1.460	857	70 / 120	990	1.917x3.165	1.917x4.058

MA & MA-D



Model	Tray width (mm)	Tray depth (mm)	Tray edge height (mm)	Net capacity per tray (kg)	Layout with internal bay (W x D mm)	Layout with external bay (W x D mm)
MA25	1.900	654	45 / 70 / 120	250	2.317x2.556	2.317x3.246
MA25D	1.900	857	45 / 70 / 120	250	2.317x3.165	2.317x4.058
MA50	1.900	654	70 / 120	500	2.317x2.556	2.317x3.246
MA50D	1.900	857	70 / 120	500	2.317x3.165	2.317x4.058
MA75	1.900	654	70 / 120	750	2.317x2.556	2.317x3.246
MA75D	1.900	857	70 / 120	750	2.317x3.165	2.317x4.058
MA1000	1.860	654	120	990	2.317x2.556	2.317x3.246
MA1000D	1.860	857	120	990	2.317x3.165	2.317x4.058

MC & MC-D



Model	Tray width (mm)	Tray depth (mm)	Tray edge height (mm)	Net capacity per tray (kg)	Layout with internal bay (W x D mm)	Layout with external bay (W x D mm)
MC25	2.500	654	45 / 70 / 120	250	2.917x2.556	2.917x3.246
MC25D	2.500	857	45 / 70 / 120	250	2.917x3.165	2.917x4.058
MC50	2.500	654	70 / 120	500	2.917x2.556	2.917x3.246
MC50D	2.500	857	70 / 120	500	2.917x3.165	2.917x4.058
MC75	2.500	654	70 / 120	750	2.917x2.556	2.917x3.246
MC75D	2.500	857	70 / 120	750	2.917x3.165	2.917x4.058
MC1000	2.460	654	120	990	2.917x2.556	2.917x3.246
MC1000D	2.460	857	120	990	2.917x3.165	2.917x4.058

MX & MX-D



Model	Tray width (mm)	Tray width (mm)	Tray width (mm)	Net capacity per tray (kg)	Layout with internal bay (W x D mm)	Layout with external bay (W x D mm)
MX25	3.100	654	45 / 70 / 120	250	3.517x2.556	3.517x3.246
MX25D	3.100	857	45 / 70 / 120	250	3.517x3.165	3.517x4.058
MX50	3.100	654	70 / 120	500	3.517x2.556	3.517x3.246
MX50D	3.100	857	70 / 120	500	3.517x3.165	3.517x4.058
MX75	3.100	654	70 / 120	750	3.517x2.556	3.517x3.246
MX75D	3.100	857	120	750	3.517x3.165	3.517x4.058
MX1000	3.060	654	120	990	3.517x2.556	3.517x3.246
MX1000D	3.060	857	120	990	3.517x3.165	3.517x4.058

ML & ML-D



Model	Tray width (mm)	Tray width (mm)	Tray width (mm)	Net capacity per tray (kg)	Layout with internal bay (W x D mm)	Layout with external bay (W x D mm)
ML25	4.100	654	70 / 120	250	4.517x2.556	4.517x3.246
ML25D	4.100	857	70 / 120	250	4.517x3.165	4.517x4.058
ML50	4.100	654	120	500	4.517x2.556	4.517x3.246
ML50D	4.100	857	120	500	4.517x3.165	4.517x4.058
ML75	4.100	654	120	750	4.517x2.556	4.517x3.246
ML75D	4.100	857	120	750	4.517x3.165	4.517x4.058
ML1000	4.060	654	145	990	4.517x2.556	4.517x3.246
ML1000D	4.060	857	145	990	4.517x3.165	4.517x4.058

MODELS
SLIM

SLIM



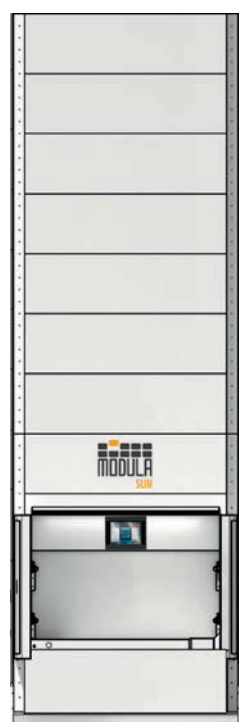
Model	Tray width (mm)	Tray width (mm)	Tray width (mm)	Net capacity per tray (kg)	Layout with Internal BAY (W x D mm)
SLIM 1.3	1.300	425	45	350	1.685x1.675

SLIM



Model	Tray width (mm)	Tray width (mm)	Tray width (mm)	Net capacity per tray (kg)	Layout with Internal BAY (W x D mm)
SLIM 1.9	1.900	425	45	350	2.285x1.675

SLIM



2,500 mm

Model	Tray width (mm)	Tray width (mm)	Tray width (mm)	Net capacity per tray (kg)	Layout With Internal BAY (W x D mm)
SLIM 2.5	2.500	425	45	350	2.885x1.675

SOME OF OUR CUSTOMERS



GARMENTS

GIORGIO ARMANI	Italy
HERMES	Italy
NIKE	USA, Belgium
PRADA	Italy
VALENTINO	Italy



AEROSPACE

BOMBARDIER	Germany
CHINA ACADEMY OF SPACE TECHNOLOGY	Cina
HINDUSTAN AERONAUTICS	India
LOCKHEED MARTIN	USA
LUFTHANSA	Cina



FOOD INDUSTRY

CHOBANI	USA
GRISSIN BON	Italy
OISHI - LIWAYWAY CHINA	Cina



FURNITURE

ALLIANCE LAUNDRY	Czech Rep.
BIG HOME SHOP	UK
INTERFACE	USA
SCAVOLINI	Italy
SMEG	Italy
SANA TRENNWANDBAU	Germany



AUTOMOTIVE INDUSTRY

AUDI	Mexico, Belgium, Spain
BMW	Cina, Belgium, Germany, Mexico, Canada, UK
BREMBO	Italy, Poland, Cina, Czech Rep., USA
BRIDGESTONE CANADA	Canada
CONTINENTAL	USA, Germany
DAIMLER	Germany, Mexico
FCA	Brasil, Poland, Italy, Serbia
FERRARI	Italy
GKN DRIVELINE	Mexico, USA
GOODYEAR	Germany, Canada
HARLEY DAVIDSON	USA
JAGUAR	Belgium
MASERATI	Italy
MICHELIN	France
MUBEA	Germany, Cina, Czech Rep., Mexico, USA, Poland
PEUGEOT-CITROEN	France
PORSCHE	Germany
RENAULT	France
SUBARU	USA, Canada
TRELLEBORG	Italy, Cina, UK, France
VALEO	France, Italy, Spain, Belgium
VOLKSWAGEN	Germany Cina, Spain, Argentina



DRINKS

AKIJ FOOD AND BEVERAGE	Bangladesh
BODEGAS JOSE ESTEVEZ	Spain
COCA COLA	Belgium, USA
COMPANIA CERVECERA DE COAHUILA	Mexico
CONTRI SPUMANTI	Italy
GINESTET	France
MOTHER PARKERS	USA
NATURAL WATERS OF VITI	Fiji
NESTLE WATERS	UK
PEPSICO	USA, Australia, UK, Germany, Brasil
SPENDRUPS	Sweden
SUNTORY	Mexico



PAPER AND OFFICE SUPPLIES

BIC ECRITURE	France
CCL LABELS	USA
INTERNATIONAL PAPER	USA
HACHETTE LIVRE	France



CERAMICS

FLORIM	Italy, USA
PORCELANOSA MEXICO	Mexico
PORCELANOSA NEW YORK	USA
ROCA SANITARIO S.A.	Spain
SACMI	Italy, Spain, Mexico



CHEMICAL AND PHARMACEUTICAL INDUSTRY

GLAXO SMITH KLINE	Italy, UK, USA
INNOMED	USA
INTAS PHARMACEUTICALS	India
JOHNSON & JOHNSON	USA, Brasil
ORFIT	Belgium
SYMRISE	USA
SYNTHES	USA



COSMETICS

AIR-VAL INTERNATIONAL	Spain
IBERCHEM AROMAS	Spain
L'OREAL	China
MARIA GALLAND	Germany
RUSI COSMETIC	Germany



ELECTRICAL SUPPLIES ELECTRONICS

BHARAT ELECTRONICS	India
EATON CONTROLS	Mexico
PT INFINEON	Singapore
SIEMENS	France, India, Mexico, USA
WURTH	Germany, Slovakia



ENERGY OIL AND GAS

BAKER HUGHES	Netherlands
GE ENERGY	USA, Canada
IMMERGAS	Italy
KUWAIT NATIONAL PETROLEUM COMPANY	UAE
PETRO CANADA	Canada
PETROLEO BRASILEIRO	Brazil, Poland, Italy, Serbia



OPTICS

ALCON	USA
BUHLER LEYBOLD OPTICS	China
CSO	Italy
LUXOTTICA	Italy
MEKRA LANG GMBH & CO.KG	Germany



MASS RETAILERS

CONAD DEL TIRRENO	Italy
CONSUM COOP	Spain
OTK KART USA CORP	USA
SUPERMERCATI TOSANO CEREAL	Italy
WOOLWORTHS SUPERMARKET	Australia



PACKAGING

AETNA GROUP USA	USA
POPLAST	Italy
SOFLOG	France
TETRA PAK	Italy



HYDRAULIC AND PNEUMATIC INDUSTRY

BOSCH REXROTH	Mexico, Germany, USA, Italy
WALVOIL	Italy, USA
GUNTER TATA HUOTECHNIKA	Hungary
MECANIZADOS ALCOY	Spain



PLASTICS

CONTITECH CHINA RUBBER & PLASTICS TECHNOLOGY	China
MILACRON PLASTIC TECH	USA
KLINTPACK	Thailand
WESTLAND GUMMIWERKE	Germany



AGRICULTURAL MACHINES

CNH INDUSTRIAL	Brazil, Italy, Spain, Belgium
KOMATSU	Italy
JOHN DEERE	USA
MANITOU	Italy
MASCHIO GASPARD	Romania, Italy
RANGER INDUSTRIES	USA



TOBACCO

DHAKA TOBACCO IND.	Bangladesh
PHILIP MORRIS	Italy, Poland



MECHANICS METALLURGY

ALSTOM TRANSPORT INDIA	India
BIESSE	Italy, USA, Malaysia
BONFIGLIOLI RIDUTTORI	Italy, India, USA, Cina
ROSSI MOTORIDUTTORI	Italy
SATURN FASTENERS	USA



LUXURY GOODS

LUCE BIANCA	Italy
MIDAS CHAIN	USA
OTTAVIANI INTERNATIONAL	Italy
PERLUNICA	Italy



MILITARY

DDDC DEFENSE DISTRIBUTION DEPOT CALCULATOR	USA
DLA-AVIATION	USA
DLA DISTRIBUTION NORFOLK	USA
U.S.A.F. - MCCONNELL AIR FORCE BASE	USA
U.S. AIR FORCE DOVER AFB	USA



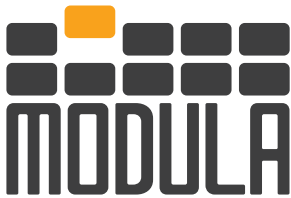
TRANSPORTATION

METROPOLITAN TRANSPORTATION AUTHORITY	USA
NEW YORK CITY TRANSIT AUTHORITY	USA
SNCF	France
TORONTO TRANSIT COMMISSION	Canada

MODULA WORLD



Modula is present in
more than **50 countries** worldwide
with distributors and subsidiaries



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www.modula.com



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