

# PACKAGING INDUSTRY





## A global partner with a specific know-how that translates into productivity and reliability.

The **Megadyne Group**, founded almost 60 years ago, is a global organization specialised in the development and production of a variety of systems: from power transmission belt to conveyor belting, from linear positioning to material handling systems.

Megadyne has a worldwide presence, with production and distribution centers in Europe, The Americas, Africa, Asia and Middle East. We can offer local recommendations, tailored to your individual requirements. This ensures bespoke solutions, delivered in a timely manner.

With many years' experience in the Packaging Industry, supported by constant research & development, Megadyne offers a wide range and depth of products. These all combine

to allow the widest, flexible approach to providing clients with a customised solution.

Three new covering materials have just been added to the range. Bluegrip, TNX and Redgrip are produced using "One Shot" technology, which allows the belt and cover to be manufactured in a single process.

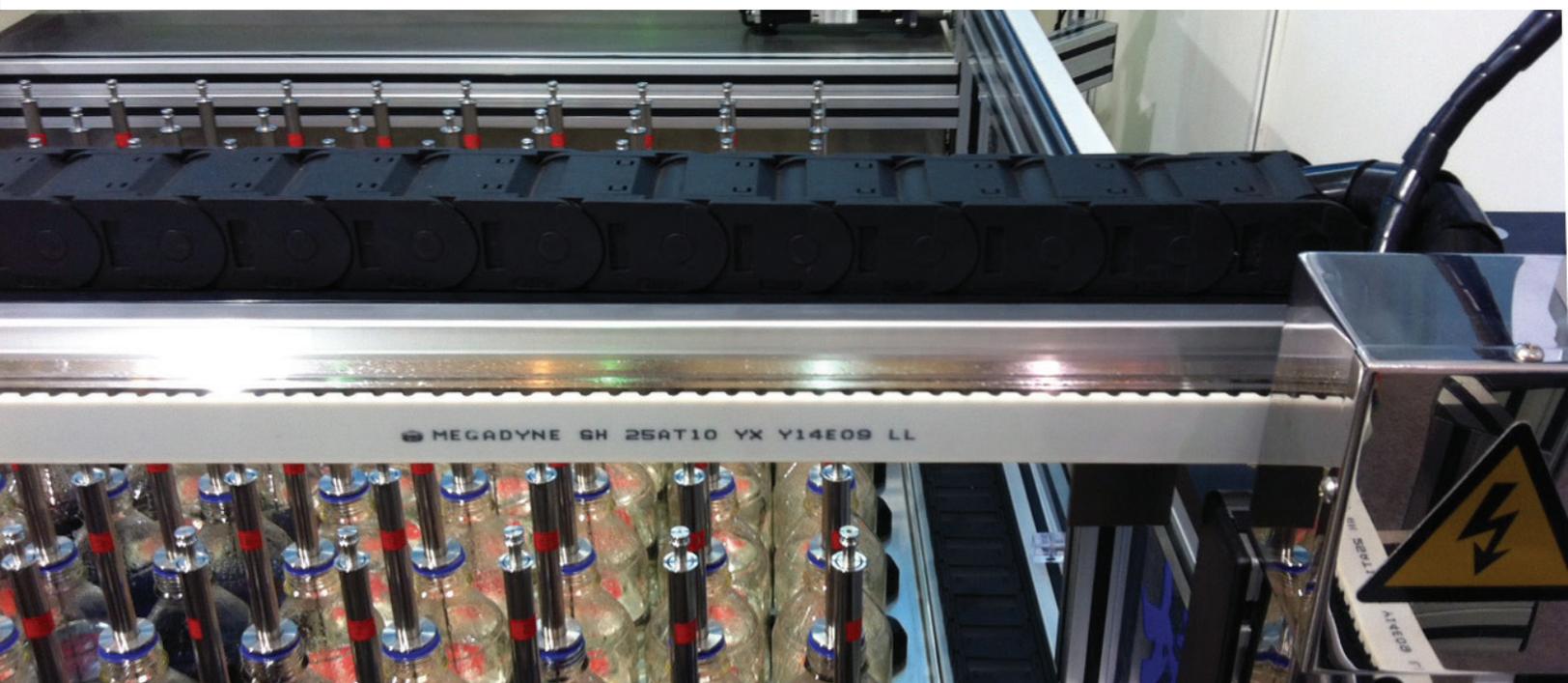
These special coatings are available in different hardness grades, that guarantee the correct amount of grip required. Due to the production process, performance and adhesion of the cover to the belt is second to none.

High humidity conditions, such as those found in capping machines, can cause a decrease in the coefficient of friction of the cover. Bluegrip overcomes these issues, offering a consistent grip rate that allows

enhanced production rates.

Versions are also available, that allow a vacuum to pass from a support manifold, through perforations in the belt. This causes the product to be firmly gripped by the belt during the production process, which brings benefits in higher processing speeds and increased overall productivity.

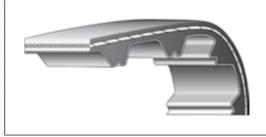
All Megadyne products are certified and conform to all the relevant international standards.



# Packaging industry



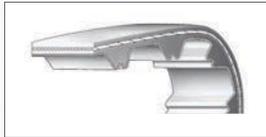
The **DRYBACK V-BELTS** has been created for drives with small pulley diameters and high temperature peaks, combined with a high grade of moisture and humidity. It withstands the harshest environmental conditions, such as oil and grease contaminated drives.



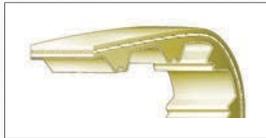
## **ISORAN RUBBER SYNCHRONOUS BELTS**

Megadyne Isoran RPP belts are high power and high precision class of belts.

This kind of belt uses a parabolic profile with the purpose to transmit more power and reduce tooth jump and noise.



The **ISORAN RPP SILVER** offers performances up to 300% higher than other deep or parabolic profile systems while maintaining effective interchangeability.



The **ISORAN RPP GOLD** system can be used in a virtually limitless range of applications where a high torque synchronous drive is required, offering power ratings up to 100% higher than RPP SILVER.



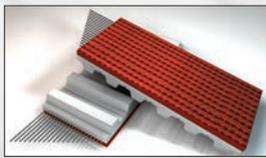
**MEGALINEAR** open length timing belts are manufactured in thermoplastic polyurethane, that gives superior wear and abrasion resistance. Various grades of steel cords offer good running characteristics, even with high tractive loads. Manufactured to tight tolerances, Megalinear delivers reliability and excellent dimensional stability. The addition of a Nylon coating on the tooth and/or on the back of the belt during production, enhances the running properties for specific applications. An extra thickness of polyurethane is also possible on the back of the belt, offering extra protection against aggressive or heavy materials.



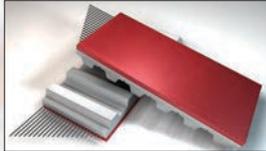
**MEGAFLEX TIMING BELTS** are manufactured in thermoplastic polyurethane, with continuous spiral steel cords.

They are especially suited for power transmission and conveying with high loads and high speeds (up to 70 m/s). The addition of a nylon coating on the teeth during production enhances the running properties for specific applications, reduces the noise and the friction coefficient.

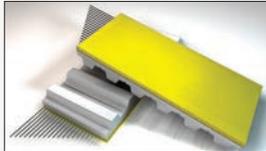
Megaflex belts are truly endless, enabling them to deliver exceptional performance.



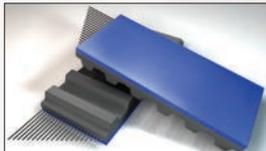
**SPECIAL COVERS** Megadyne offers a variety of coverings in polyurethane, elastomer, foam, PVC and other unique solutions, designed for special requirements.



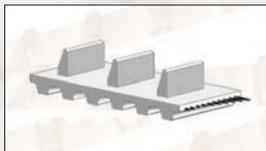
**TENAX** Coating used for conveying abrasive materials, with high friction coefficient and high cutting resistance, good resistance to wear and water.



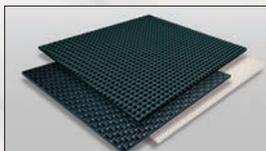
**FOAMED POLYURETHANE** Coating used for vacuum conveying systems, with good resistance to friction, good resistance to oil and to abrasion.



**BLUEGRIP** Cover is based on a natural rubber mixture which enables to have high abrasion resistance and a good

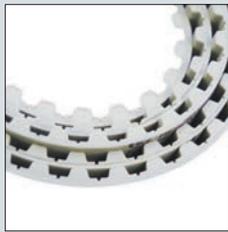
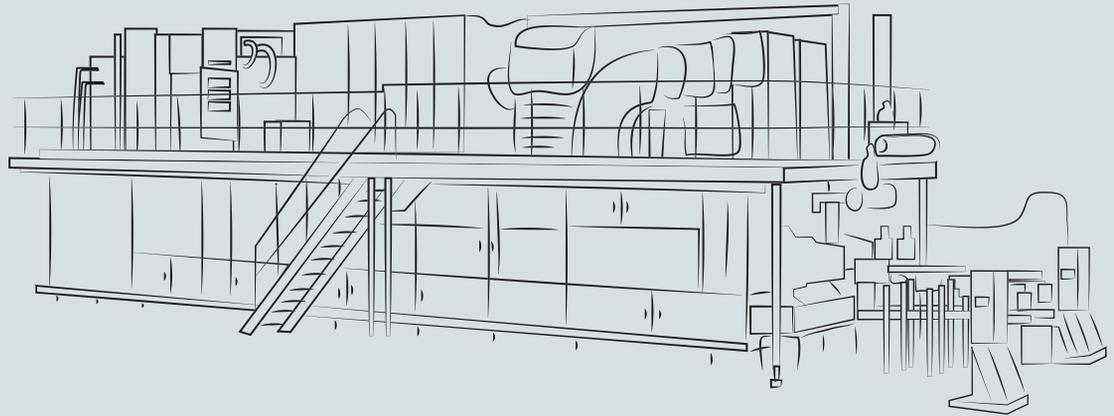


**CLEATS** Megadyne timing belts can be customized by welding profiles on their back. All the cleats are made using thermoplastic polyurethane. The cleats are attached using high frequency vibration welding.



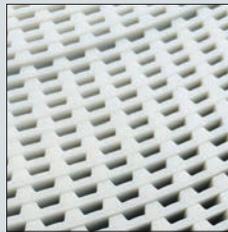
**CONVEYOR BELTS** can be manufactured with tensioned fabric inside and with various coating materials on top and interlayer. In addition to the general conveying types, the belts which have bare fabric surfaces are used in the packaging machines where accumulation is the main issue. Besides, "Basket Weave" and "Super Grip" patterns provide good grip to keep the conveyed products correctly positioned on the belt and are also a good solution for incline - decline applications.

# Filling machine



MEGAFLEX BELT

Truly endless belt with thermoplastic polyurethane. Continuous spiral steel cords.



OPEN END TIMING BELT

Open length timing belts manufactured in thermoplastic polyurethane. Various grades of steel cord. High positioning precision suitable for linear movement and lifting systems.



COATED MEGAPOWER BELT

Molded thermoset polyurethane belt. Customizable back cover.

# Cap sealing station



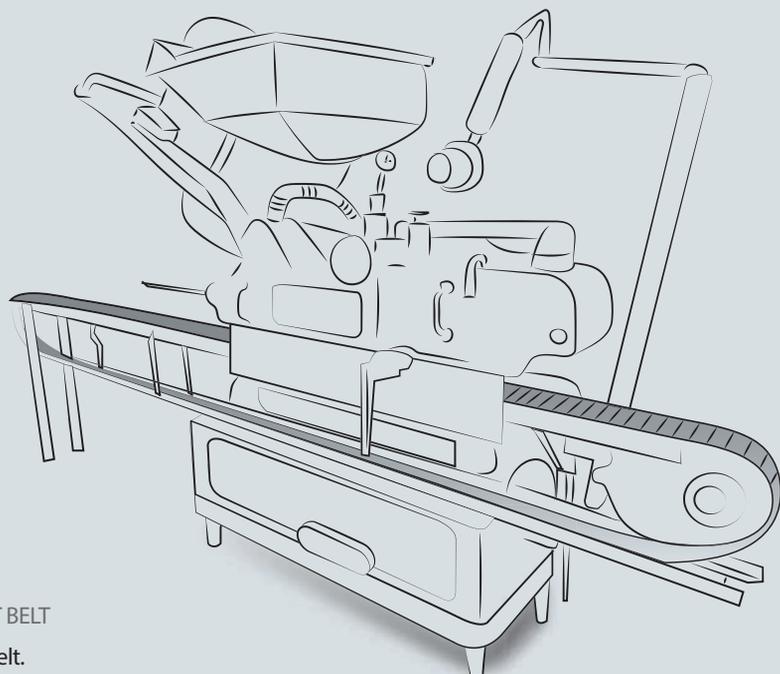
DRY BACK V-BELT

Rubber belt with no marking wrapped fabric. High resistance to oil and steam.

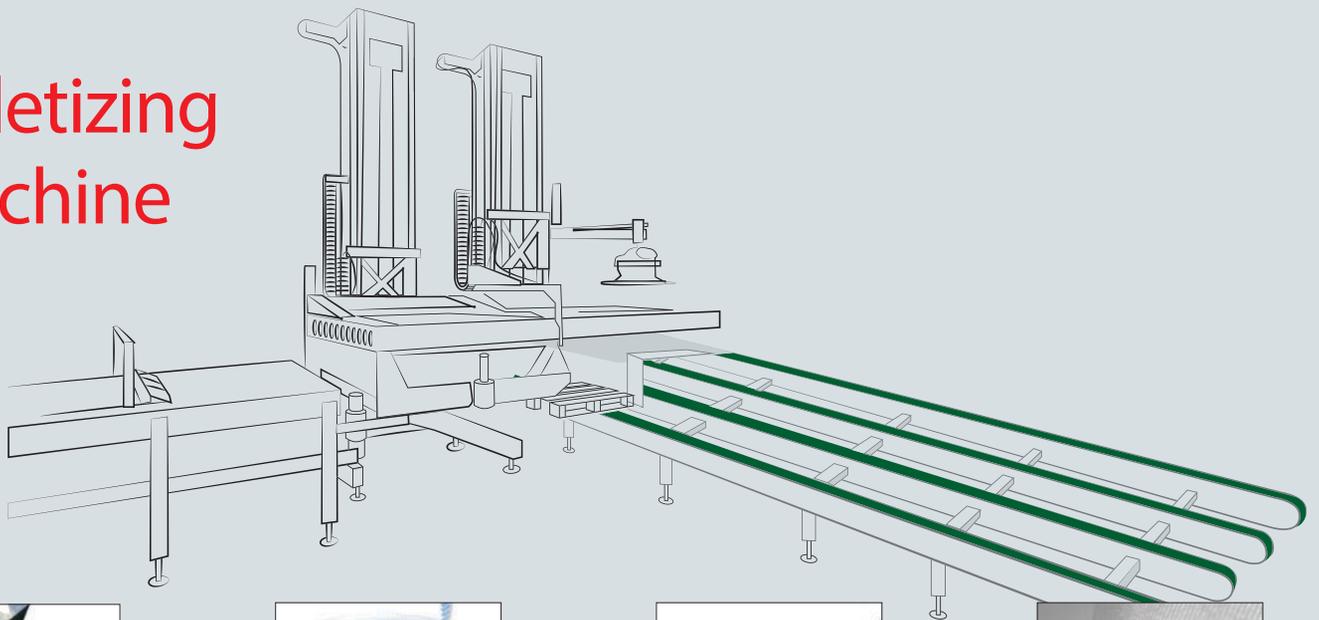


SPECIAL RUBBER FLAT BELT

Endless molded flat belt. Low friction fabric. No marking with high friction cover.



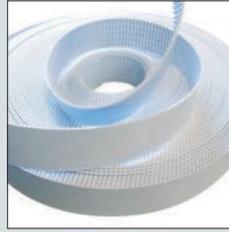
# Palletizing machine



## RUBBER TIMING BELTS

Molded rubber belts available in different lengths.

Suitable for high power transmission drives.



## OPEN-END TIMING BELTS

Open length timing belts manufactured in thermoplastic polyurethane.

Various grades of steel cord.

High positioning precision suitable for linear movement and lifting systems.

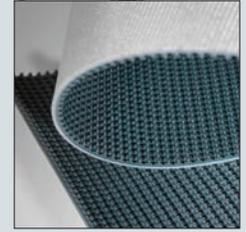


## JOINTED BELTS

Endless belt that can be produced in any length.

Suitable for conveying.

High resistance to fatigue.



## CONVEYORS

PVCCON belt types with basket weave and supergrip patterns on top for keeping the conveyed products in line.

# Vertical fill form sealing machine

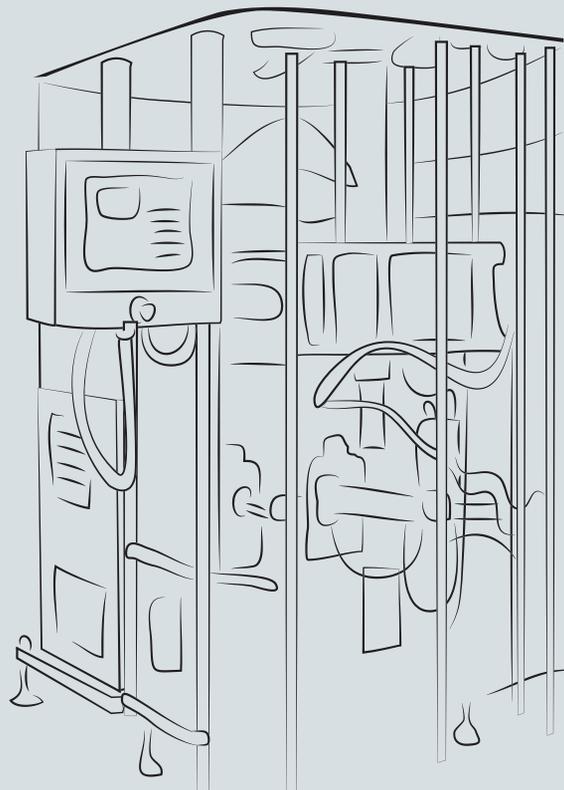
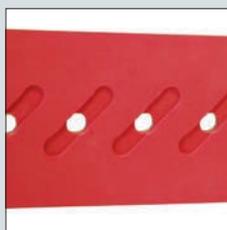


## MEGAPOWER VACUUM (GRINDING+HOLES)

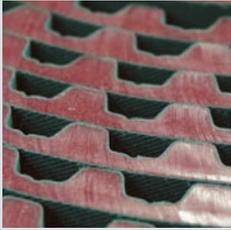
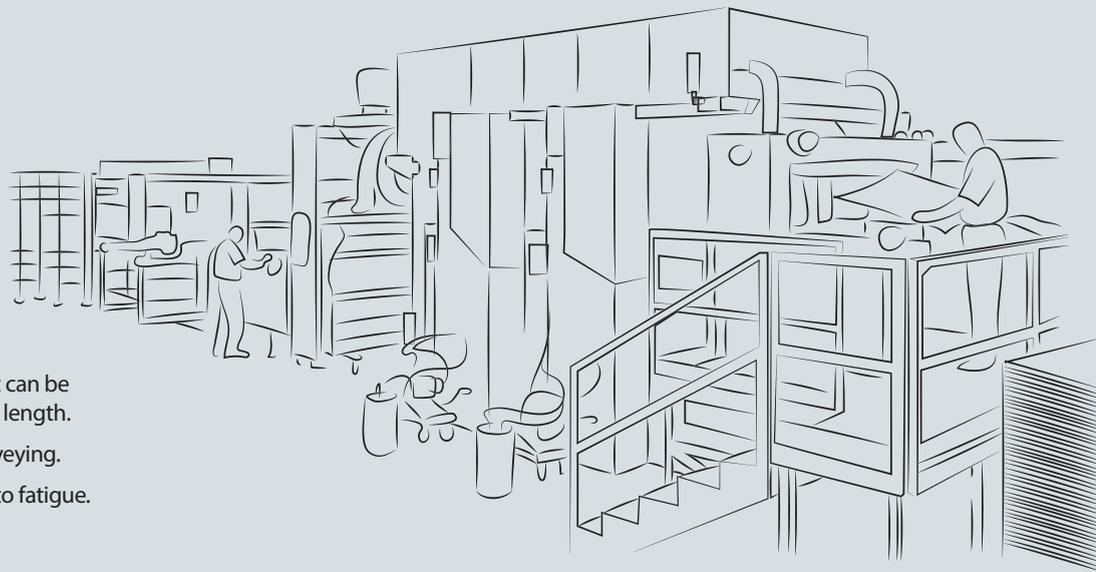
Special molded endless belt.

Back cover with high friction.

Special holes and grinding for VACUUM applications.



# Carton machine



## JOINED BELTS

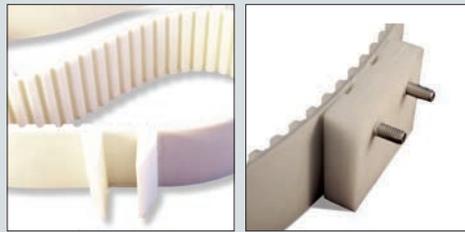
Endless belt that can be produced in any length.  
Suitable for conveying.  
High resistance to fatigue.



## COATED BELT

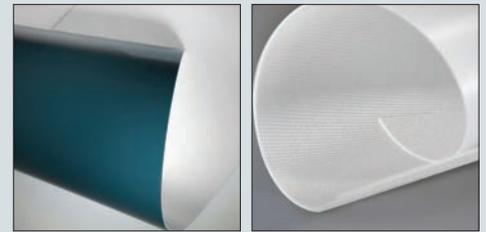
Thermoplastic polyurethane belt available in different pitches and with different types of cord.

No marking and high friction covers available for material conveying.



## POLYURETHANE BELTS WITH CLEATS

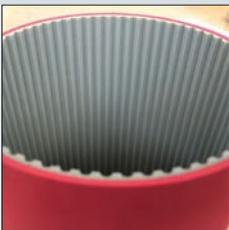
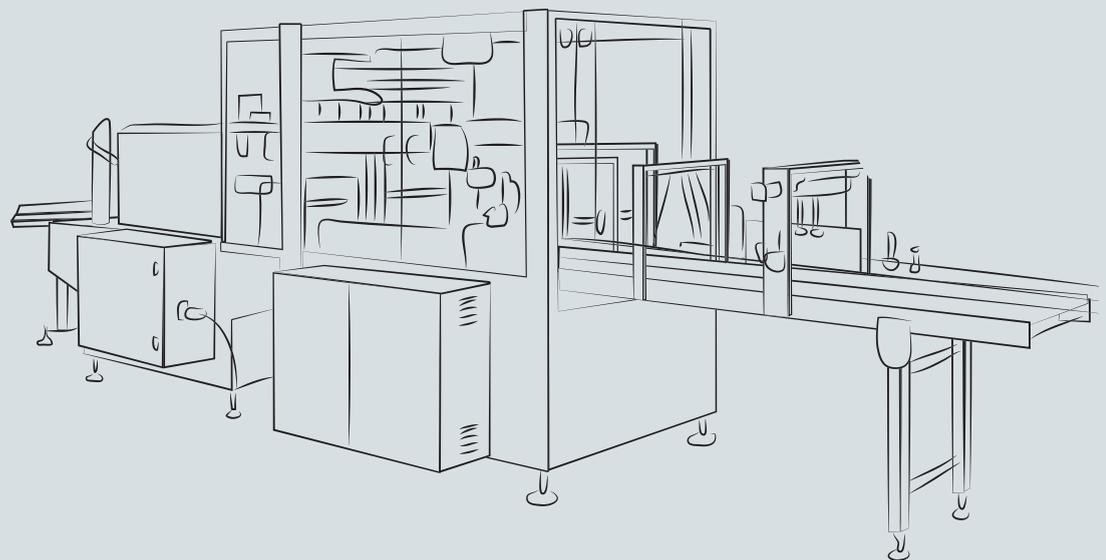
Joined belt with welded cleats.  
High frequency welding for maximum precision and adhesion.  
Customizable cleats profile.



## CONVEYORS

FABCON Belt types with bare top surface and PVCCON belt types for general conveying.

# Wrapping and shrinking machine



## COATED MEGAPOWER BELT

Molded thermoset polyurethane belt.

No marking and high friction covers available for material conveying.



## DOUBLE SIDED MEGAFLEX

Thermoplastic polyurethane truly endless belt.  
Continuous spiral steel cord.  
Backside teeth for synchronization of counter-rotation pulleys.



## CONVEYORS

FABCON Belt types with bare top surface and PUCON belt types with matte surface structure.

# CASE STUDIES

**Application:**

**Ceramic packaging machine**

**Previous drive:**

Chain Drive

**Previous drive problems:**

Slippage of the ceramic on the chains in presence of moisture or water.  
Occasional marks on the tile due to the chain.

**Solution:**

**JOINED PU BELT with APL:** cover on the back; the softer material eliminates the problem of the mark on the tile.  
The APL cover offers a very good grip even in humid environments.



**Application:**

**Food packaging**

**Previous drive:**

Flat conveyor belt

**Previous drive problems:**

Belt slippage, synchronization, expensive replacement and cost of spare parts.

**Solution:**

**MEGALINEAR TIMING BELT with FDA CLEAT:** jointed with PPJ joint system for a total length of 30m. Easy replacement of just one portion of the belt, if braking occurs, and perfect belts synchronization.

