# ATEFI

Italian Design Conveyor Belts

## PRODUCTS



The data contained in this catalogue, are to be confirmed when submitting our quotations.

# Standard Belts

**This series of belts was specially designed on the basis of general market demand, the commonly requested sizes and types are readily available.**

The following working loads are provided for: 16, 21, 26, 32, 40 and 52 kg/cm wide.
The series is built by joining 2, 3, 4, 5 polyester polyamide (plies) suitable for high spcific loads with low elongation, with high transverse flexibility capable of absorbing local deformation from impact loads over transition zones, vertical curves, etc.
The belts are covered with rubber blend materials with specific features for withstanding external agents, wear, tears and cuts even in the presence of heat, oily residues or acids from the transported materials.

The **Standard** series meets the principal domestic and foreign standards. Therefore, it is capable of providing a high quality response to the needs of various users, quickly and efficiently.

Some major applications are:
- cement factories and brickyards
- foundries, cokeries, steel plants
- chemical plants
- mines and quarries
- glass factories
- sugar mills, salt silos
- waste recycling plants.

The standard widths readily available for immediate use are: 300, 400, 450, 500, 600, 650, 700, 800, 1000, 1200, 1400, 1600 mm, other widths are available upon request.
Standard lenght belts, up to a maximum of 200 meters are delivered: open, in the desired size with sufficient additional lenght for jointing at the time of installation; closed, with a guaranteed, vulcanized joint.

## Normalgum

These conveyor belts consist of several EP plies with blended coatings, able to resist abrasions, lacerations, cuts and ageing due to external agents, and for service at temperatures ranging from –35 to +80°C. They are built for the transport of: limestone, cement, concrete, coke, clinker, fossil materials, inert materials, minerals, glass cullet, salt, green sand, etc., in medium or heavy pieces, according to the number of plies used.

| Characteristics | Normalgum | | | | | |
|---|---|---|---|---|---|---|
| **Style** | **160** | **200** | **250** | **315** | **400** | **500** |
| N° plies | 2 | 2 | 2 | 3 | 3 | 4 |
| Covers thickness mm | 2+1 | 3+2 | 4+2 | 4+2 | 4+2 | 5+2 |
| Belt thickness mm | 4,5 | 6,2 | 7,4 | 8,0 | 8,3 | 10,5 |
| Belt weight Kg/m² | 5,2 | 7,4 | 8,8 | 9,6 | 10 | 12,6 |
| Working tension Kg/cm | 16 | 20 | 25 | 32 | 40 | 52 |
| Elongation % | 1,3 | 1,3 | 1,3 | 1,3 | 1,3 | 1,3 |
| Drive pulley ø mm | 200 | 250 | 250 | 315 | 315 | 500 |
| Take up % | 2 | 2 | 2 | 2 | 2 | 2 |

## Oilgum

These conveyor belts, comprised of several plies, are coated with elastomers that are highly oil resistant and made to withstand contact with any type of oil or grease; they are also resistant to aromatic and aliphatic solvents, as well as wear due to rubbing and cutting; they can be successfully used at temperatures ranging from – 35° to +80°C. They are ideal for transporting oil seeds, petroleum coke, urban wastes, additivated fossils, fertilizers, lubricated metal parts.

## Temperoilgum

These belts, made of several plies are coated with polyvalent material for contact with oily and hot products in an outdoor environment, with abrasive action, and risk of cutting and lacerations due to the mechanical effects of the materials carried at temperatures of 110°C with peaks of 130°C.

| Oilgum | | | | Temperoilgum | | | | |
|---|---|---|---|---|---|---|---|---|
| **250** | **315** | **400** | **500** | **200** | **250** | **315** | **400** | **500** |
| 2 | 3 | 3 | 4 | 2 | 2 | 3 | 3 | 4 |
| 4+2 | 4+2 | 4+2 | 5+2 | 3+2 | 4+2 | 4+2 | 4+2 | 5+2 |
| 7,4 | 8,0 | 8,5 | 10,5 | 6,5 | 7,6 | 8,2 | 8,5 | 10,5 |
| 8,9 | 9,5 | 10 | 12,5 | 7,4 | 8,5 | 9,5 | 9,7 | 12,3 |
| 25 | 32 | 40 | 52 | 20 | 25 | 32 | 40 | 52 |
| 1,3 | 1,3 | 1,3 | 1,3 | 1,5 | 1,5 | 1,5 | 1,5 | 1,5 |
| 250 | 315 | 315 | 500 | 250 | 250 | 250 | 250 | 250 |
| 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |

## Tempergum

These belts are comprised of several plies coated with heat and abrasion resistant material suitable for carrying hot products at 110°C with maximum localized points of up to 130°C. These belts are ideal for knock-out earth, coke, sinter, lime, slag, etc., sizes proportional to the number of plies used.

| Characteristics | Tempergum | | | | |
|---|---|---|---|---|---|
| **Style** | **200** | **250** | **315** | **400** | **500** |
| N° plies | 2 | 2 | 3 | 3 | 4 |
| Covers thickness mm | 3+2 | 4+2 | 4+2 | 4+2 | 5+2 |
| Belt thickness mm | 6,2 | 7,4 | 8,3 | 8,3 | 10,5 |
| Belt weight Kg/m² | 7,5 | 8,8 | 10 | 10 | 12,2 |
| Working tension Kg/cm | 20 | 25 | 32 | 40 | 52 |
| Elongation % | 1,5 | 1,5 | 1,5 | 1,5 | 1,5 |
| Drive pulley ø mm | 250 | 315 | 315 | 315 | 500 |
| Take up % | 2 | 2 | 2 | 2 | 2 |

## Ardentgum

These conveyor belts, comprised of several plies with elastomeric coatings are specifically made to withstand temperatures of 130°C and localized peaks of 150° with excellent abrasion resistant characteristics. They are suitable for transportating hot or chemically aggressive products such as: sulphur, superphosphates, roasted minerals, pellets, coke and Kullman processes in medium and fine sizes.

## Superardentgum

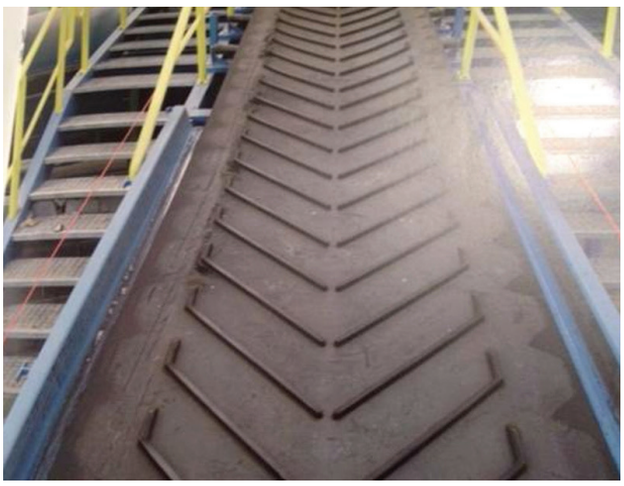
These belts made of 2-3-4 plies with special elastomeric heat resistant coatings can withstand temperatures of 150°C with peaks of over 200°C for transporting fine materials, including acids at speeds specifically limited because of the nature of the products.

**Ardentgum**

| 250 | 315 | 400 | 500 |
|---|---|---|---|
| 2 | 3 | 3 | 4 |
| 4+2 | 4+2 | 4+2 | 5+2 |
| 7,5 | 8,2 | 8,5 | 10,7 |
| 9,0 | 9,8 | 10,2 | 12,5 |
| 25 | 32 | 40 | 52 |
| 1,5 | 1,5 | 1,5 | 1,5 |
| 315 | 315 | 400 | 500 |
| 2 | 2 | 2 | 2 |

**Superardentgum**

| 250 | 315 | 400 | 500 |
|---|---|---|---|
| 2 | 3 | 3 | 4 |
| 4+2 | 4+2 | 4+2 | 5+2 |
| 7,5 | 8,2 | 8,5 | 10,7 |
| 9,9 | 10 | 10,2 | 12,7 |
| 25 | 32 | 40 | 52 |
| 1,3 | 1,3 | 1,3 | 1,3 |
| 315 | 315 | 400 | 500 |
| 2 | 2 | 2 | 2 |



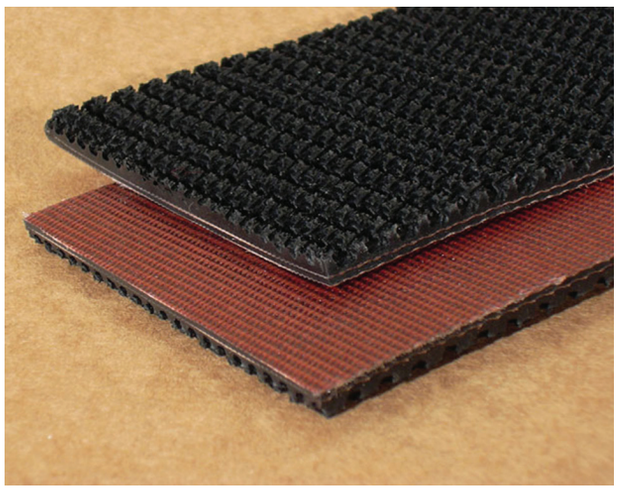
## Gummiflat

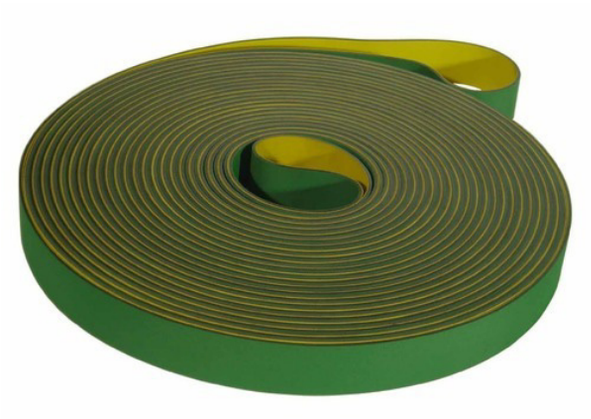
A rubber belt made for conveyors on sliding planes. The remarkable resistance to abrasion and atmospheric agents, the low friction coefficient of the lower (sliding) surface, guarantee perfect operation according to the needs of these systems. Working temperature: –20 to +80 °C.
Suitable for transportation of: ceramic, tile brick factories, marble industries, stocking systems, torage systems, etc.

## Chevrongum

These conveyor belts, made of several plies are covered with pressed, 15 mm high strips arranged in a reverse chevron pattern. They are capable of holding transported materials on 20° to 40° grades. The abrasion and cutting resistant rubber is suitable for difficult environments.

| **Characteristics** | **Gummiflat** | | | | **Chevrongum** | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **Style** | **200** | **250** | **315** | **400** | **200** | **250** | **315** | **400** | **500** |
| N° plies | 2 | 2 | 3 | 3 | 2 | 2 | 3 | 2 | 4 |
| Covers thickness mm | 2+0 | 3+0 | 3+0 | 3+0 | 3+2 | 3+2 | 3+2 | 3+2 | 4+2 |
| Belt thickness mm | 3,8 | 4,2 | 5,4 | 5,7 | 6,2 | 6,4 | 7,0 | 7,3 | 9,5 |
| Belt weight Kg/m² | 4,6 | 5,0 | 6,4 | 6,8 | – | – | – | – | – |
| Working tension Kg/cm | 20 | 25 | 32 | 40 | 20 | 25 | 32 | 40 | 52 |
| Elongation % | 1,5 | 1,5 | 1,5 | 1,5 | 1,5 | 1,5 | 1,5 | 1,5 | 1,5 |
| Drive pulley Ø mm | 150 | 200 | 250 | 315 | 250 | 315 | 400 | 500 | 630 |
| Take up % | 2 | 2 | 2 | 2 | 1,8 | 1,8 | 1,8 | 1,8 | 1,8 |





## Apegum

These belts, made of several plies, are suitable for use in warehouses and shipping departments.
The honeycomb surface and underside with its low friction coefficient for smooth sliding on flat surfaces, rollers etc., are ideal for carrying bags, boxes, packages, crates etc.

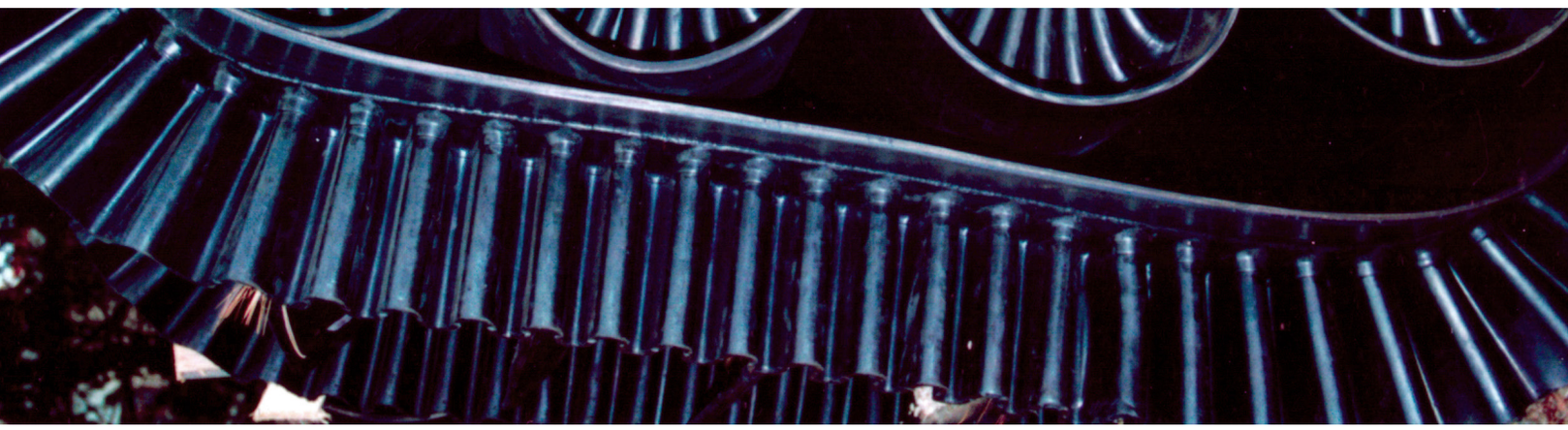
## CNT

These are flat belts comprised of several plies without rubber coating and are suitable for indoor transport of semi-finished products either on rollers or sheet metal. They are also used as bucket lifts for raising small materials such as grit, screws, paste, with limited food-product feature (D.M. 21.3.73 Group V). When used as belts in the oil resistant versions they are suitable for transporting sheet metal, metal parts, skins and for sorting benches.

| Apegum | | | |
|---|---|---|---|
| **200** | **250** | **315** | **400** |
| 2 | 2 | 3 | 3 |
| 3+0 | 3+0 | 3+0 | 3+0 |
| 5,4 | 5,7 | 6,4 | 6,8 |
| 5,0 | 5,3 | 6,2 | 6,5 |
| 20 | 25 | 32 | 40 |
| 1,5 | 1,5 | 1,5 | 1,5 |
| 200 | 200 | 315 | 315 |
| 1,7 | 1,7 | 1,7 | 1,7 |

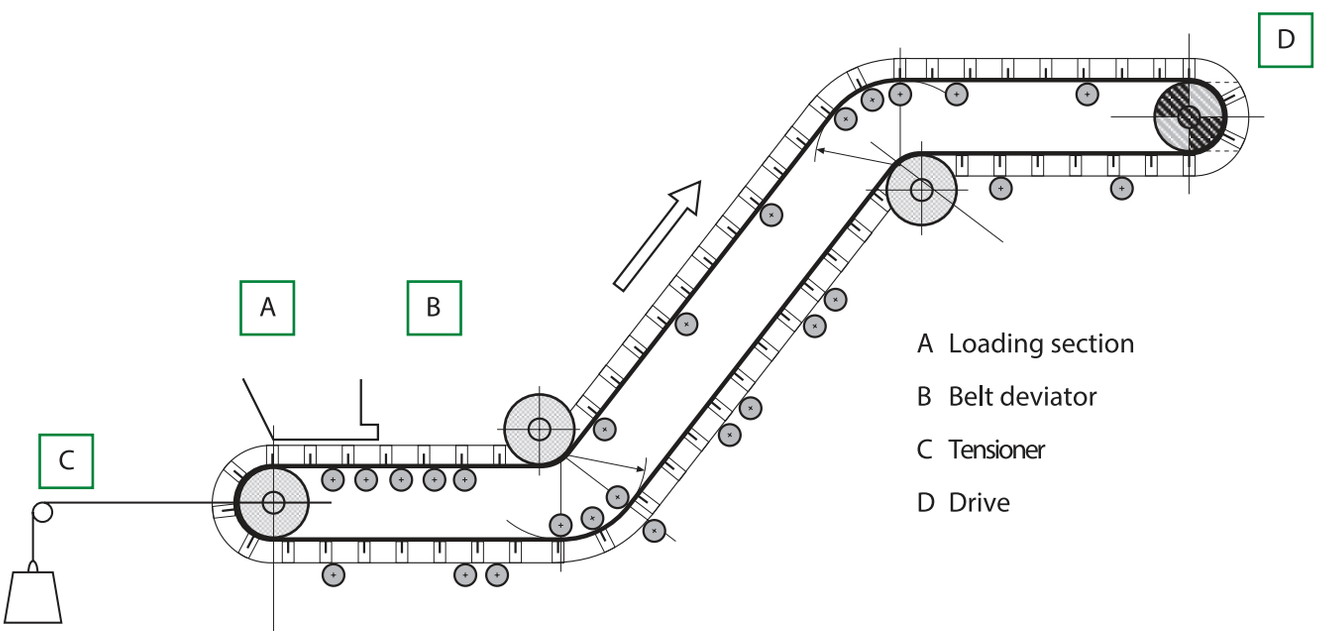
| CNT | | | | | |
|---|---|---|---|---|---|
| **120** | **180** | **240** | **300** | **360** | **420** |
| 2 | 3 | 4 | 5 | 6 | 7 |
| – | – | – | – | – | – |
| 2,5 | 3,7 | 5,1 | 6,5 | 8 | 10 |
| 2 | 3 | 4 | 5,2 | 6,5 | 8 |
| 12 | 18 | 24 | 30 | 36 | 42 |
| 2,5 | 2,5 | 2,5 | 2,5 | 2,5 | 2,5 |
| 90 | 120 | 160 | 230 | 300 | 370 |
| 4 | 4 | 4 | 4 | 4 | 4 |

# Bandabord



**The handling of materials in the phases of crashing, classification, drying and storing are generally located in buildings where availability of space and strict limit of admitted powder and noise, are widely conditioning the use of traditional conveyor belt systems.**

The userfulness of this type of belt is evident in presence of high duties conveyors on sinuous ways, with inclination between 0° and 90°, with possibility of noise and powder reduction barriers, together with a limited speed transport.
This catalogue shows the principal characteristics of the belts with continuous side-walls and transversal cleats, in order to permit a first choice of the type and to evaluate the dimensions, related to the required application.



# Metal Belts

*Any transverse reinforcements are built into the thickness of the top surface coating of the belt.*

## Longitudinal Belts

**Metal conveyor belts are built according to DIN 22131 standards with harmonic galvanized steel cables coated with galvanized steel cables coated with a rubber mixture having excellent mechanical-chemical strenght properties. This feature is extremely important for distributing loads among the cables, absorbing local deformations, long service life and joint strenght.**

To provide insulation from the outside environment and from contact with the transported products, the staurdy metal core is covered with layers of rubber having special properties that even provide protection along the edges (heels).
The rubber covering protects the cables from corrosive agents, mechanical and chemical attack, heat, gaseous environment and flammables. If necessary, the covering can be fitted with synthetic or metal rip protection which have an "anti-cutting" function.
The metal belts are built in a wide range of standard strenghts, so they can be added to existing systems with standard DIN 22131 joints in lenghts proportional the classes and loads.
Elongation of metal belts is limited to 0,2% of the working lenght under loads of up to 500 Kg/cm of width and higher.
These features render this series suitable for long distances of 10, 12 or more km and elevations of hundreds of meters and dual controls according to the tension on the belt.
They are used along the coast, at unloading prots, deep mines, sterile quarry evacuation, blast-furnace loading systems etc.

## Characteristics

| Style | ST800 | ST1000 | ST1250 | ST1600 | ST2000 | ST2500 | ST3150 | ST4000 | ST5000 |
|---|---|---|---|---|---|---|---|---|---|
| Working tension daN/cm | 100 | 125 | 156 | 200 | 250 | 312 | 393 | 500 | 600 |
| Elongation % | 0,2 | 0,2 | 0,2 | 0,2 | 0,2 | 0,2 | 0,2 | 0,2 | 0,2 |
| Cables diameter mm | 4,1 | 4,1 | 4,9 | 5,6 | 5,6 | 7,2 | 8,1 | 8,9 | 10,9 |
| Distance between cables mm | 15 | 12 | 14 | 15 | 12 | 15 | 15 | 15 | 17 |
| Rubber edges mm | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 |
| Top/bottom covers mm | 5+4 | 5+5 | 5+5 | 6+5 | 6+5 | 6+6 | 7+7 | 7+7 | 8+8 |
| Belt thickness mm | 13 | 14 | 14 | 17 | 17 | 19 | 22 | 23 | 26 |
| Belt weight kg/m² | 17 | 20 | 20,5 | 25 | 26,5 | 31 | 38,5 | 43 | 47,5 |

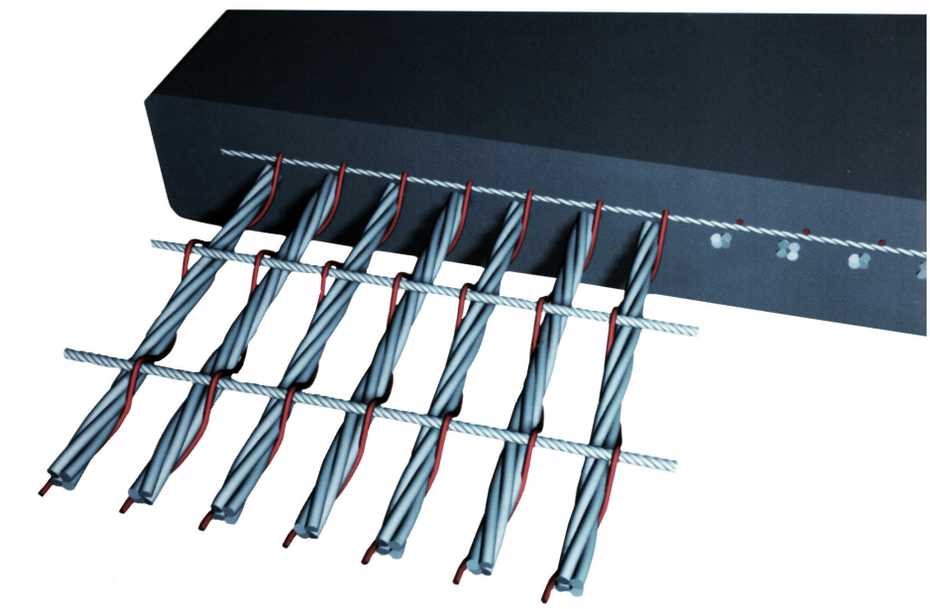
Indicated belt working tension safety grade 8 (normal operation)

## Joints

The need to connect several belt rolls, in order to cover the enormous possible lengths with the use of the metal belts, requires an utmost joint technology. The joints must be highly reliable, simple and perfect, as only ATEFI Srl experience can offer and grant.
The suitable scheme of these operations are conform to standard of reference (DIN22131) and dimensioned to class of resistance of the belt, and proportionally long to safety grade of the application.

## Type

| Style | ST800 | ST1000 | ST1250 | ST1600 | ST2000 | ST2500 | ST3150 | ST3500 | ST4000 | ST5000 |
|---|---|---|---|---|---|---|---|---|---|---|
| Steps | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 3 | 3 | 3 |
| Overlaps **L** | 600 | 600 | 650 | 750 | 1150 | 1350 | 1650 | 2350 | 2650 | 2800 |
| Reduced overlaps **LR** | 500 | 500 | 600 | 700 | 900 | 1200 | 1500 | 2050 | 2250 | 2300 |



## Metal Weft

**Metal Weft conveyor belts with transverse metallic inserts which reduce the risk of breaking or cutting the belts are the ideal alternative to conveyor belts with fabric inserts especially in situations when the materials transported create major impact stresses on the loading section.**

The metallic inserts, which are elastic and compressible, allow the belts to support such loads, damping stresses and local deformations caused by impact. They are comprised of metallic fibers made of many, small diameter longitudinal cords which cross transverse elastic wefts that are connected with polyester threads.
The result is a sturdy insert that is difficult to penetrate and resistant to shearing, with a maximum elongation in operation of 0,5%. The even gauge metallic wefts are able to withstand tensile and compression stresses, giving the entire unit the ability to adapt to transverse deflections on very concave rollers arranged in groups of three.
Any cuts or penetrations of the belt are counteracted by the inserts which can cause the belt to "detour" onto the lateral limit stops and shutdown the system.
The **Metal Weft** series is produced in the standard strenght classes listed below:
Classes, 630, 800, 1000, 1250, 1400, 1600 and 1800 N/mm, in the following version: **IW** with single, overlaid flexible bottom weft.

## Characteristics

### Metal Weft

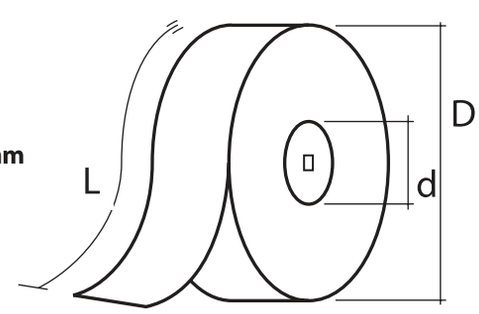
| Style | 630R | 800R | 1000R | 1250R | 1400R | 1600R | 1800R |
|---|---|---|---|---|---|---|---|
| Working tension daN/cm | 78 | 100 | 125 | 156 | 175 | 200 | 225 |
| Elongation % | 0,4 | 0,4 | 0,4 | 0,4 | 0,4 | 0,4 | 0,4 |
| Cables/pitch mm | 3 · 14 | 3,6 · 15 | 3,6 · 12 | 4,4 · 14 | 4,4 · 13 | 5,2 · 15 | 5,2 · 13 |
| Top/bottom covers mm | 5+3 | 6+3 | 8+3 | 8+4 | 8+4 | 10+4 | 10+4 |

### IMPACT WEFT

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Weft cord/pitch tip./pas. | 2 · 14 | 2 · 14 | 2 · 14 | 2 · 14 | 2 · 14 | 2 · 14 | 2 · 14 |
| Belt thickness mm | 13 | 14,6 | 16,6 | 18,4 | 18,4 | 21,2 | 21,2 |
| Belt weight kg/m² | 17 | 19,4 | 22 | 24,7 | 25,2 | 29 | 31 |

## Roller belt diameter

**Beam diameter d: 500mm**
Roller belt diameter: **D**
Belt thickness: **S**
Belt length: **L**



# ATEFI

**Italian Design Conveyor Belts**

**Our company operates in several market sectors, mainly in the import/export sector for wholesale of rubber conveyor belts and elevators, accessories for the same, iron rolls and materials for mines, quarries, cement production plant and airports.**

We have been on the Italian and international market for over 30 years now, thanks to the appropriate knowledge of the work and the extensive organization of the services, with the provision of work teams (on site 24 hours a day) for the assistance and the maintenance of conveyor belts, drum liners and on-site vulcanization.

We are able to make all kinds of junctions on site. Our equipment, for the Maghreb countries, consist of vans, trucks with cranes for transporting and handling heavy materials.
Our teams are trained from European-level technicians, continuously.

**ATEFI Srl** is the representative of **Gummilabor Spa Italia** for France and for French speaking countries of Maghreb, Algeria in particular.
We represent the brand **Aramine France** for the supply of materials for underground mines.
We are also the representative of the **Tyco** Firefighter brand, the world leader in civil and industrial firefighting service.

Gummilabor

Aramine
Groupe Melkonian

tyco
Fire Protection Products

ATEFI

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