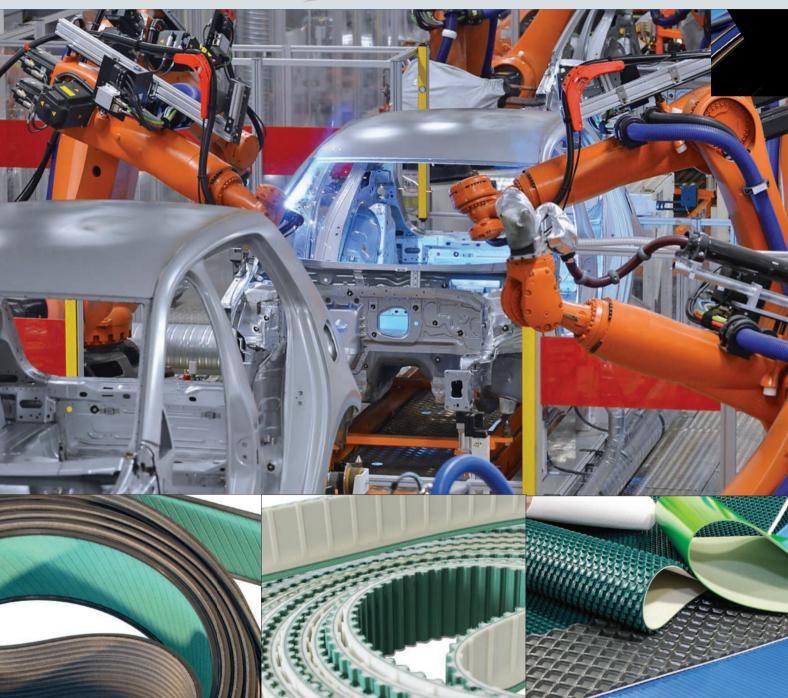
# **AUTOMOTIVE & TIRE PRODUCTION LINE**







### **Automotive & tire production line**

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

Megadyne has a worldwide presence, with production and distribution centers in Europe, the Americas, Africa, Asia and the Middle East. We can offer local recommendations, tailored to your individual requirements. This ensures custom-made solutions, delivered on time.

With many years' experience in Automotive and Tire manufacturing sectors, supported by ongoing, research, Megadyne offers a wide range and depth of products. These all combine, to allow the widest, most flexible approach to providing clients with a customised solution.

From our wide range of products, in rubber, PU and fabric, Megadyne can supply innovative solutions to the market. Megadynes polyurethane ranges are able to provide open ended belts with customised cords, for high traction resistance and superior flexibility. This guarantees the best life cycle and precision in the field. Megadyne R&D has developed several different solutions with a wide range of materials able to stand extreme conditions and aggressive chemical attack. Megadyne is able to manufacture silicone free timing belts.

### Belt features

MEGADYNE® ISORAN SYNCRONOUS RPP			
SUPPLIED AS Endless			
LENGTH	248 - 4956 mm		
WIDTH	12-170 mm		
THICKNESS	5,4 - 9,7 mm		
Pitch	RPP8 - RPP14		
Tensioning member	Fiberglass		
Advantage & characteristic	High stability and resistance		

MEGADYNE® PLATINUM	
SUPPLIED AS	Endless
LENGTH	248 - 4956 mm
WIDTH	12-170 mm
THICKNESS	5,4 - 9,7 mm
Pitch	RPP8 - RPP14
Tensioning member	Dual Core
Advantage & characteristic	Highest power transmission

MEGADYNE® MEGAPAIN	Г
SUPPLIED AS	Endless
LENGTH	248 - 4956 mm
WIDTH	12-170 mm
THICKNESS	5,4 - 9,7 mm
Pitch	RPP8 - PLT14
Tensioning member	Fiberglass/Dual Cord
Advantage & characteristic	Silicone and contaminants free

MEGADYNE® V-BELT	
SUPPLIED AS	Endless
LENGTH	450 - 12530
Sections	SPZ/SPA/SPB/SPC/XPZ/XPA/ XPB/XPC
Compound	EPDM - SBR
Advantage & characteristic	Long lifetime and small pulley diameters

MEGADYNE® POLYURETHA	NE WIDE BELTS
SUPPLIED AS	Open end rolls, joined
LENGTH	from 1.2 m
WIDTH	200 - 500 mm
Pitch	T5-T10/H
Tensioning member	Kevlar cord
Coatings	NFT - NFB
Advantage & characteristic	High precision and convey capability

MEGADYNE® SPECIALTY	
SUPPLIED AS	Open End Rolls, Endless, Joined
LENGTH	0,5 - 100 m
WIDTH	6 - 150 mm
Pitch	T5-T10-T20-AT5-AT10-AT20-RPP8-RPP14-HTD8 HTD14
Tensioning member	Standard steel/HF Steel/HP steel/HPF steel/Kevlar
Covers & special reworking	Avafc/Tenax/Red Grip/NFT/Grinding/Holes
Advantage & characteristic	Custom made solutions for high performances level

MEGADYNE® POLYURETHANE TIMING BELTS				
SUPPLIED AS Open End Rolls, Endless, Joined				
LENGTH	Megalinear: 0,5 - 100 m Megaflex: 1,5 - 22,77 m			
WIDTH	6 - 150 mm			
Pitch	T5-T10-T20-AT5-AT10-AT20-RPP8-RPP14-HTD8 HTD14-TG10-ATG10-TG20-ATG20			
Tensioning member	Standard steel/HF Steel/HP steel/HPF steel/Kevlar			
Coatings	Avafc/Tenax/Red Grip/NFT			
Advantage & character	istic High resistance belts available also in silicone free compounds			

MEGADYNE® MEGALINEAR P3-P4			
SUPPLIED AS Open End Rolls			
LENGTH	100 m		
WIDTH	30 - 120 mm		
THICKNESS	3 - 4 mm		
Tensioning member	Standard steel/HP steel		
Advantage & characteristic	Extreme tension resistance for industrial lifting systems		

MEGADYNE® MEGALINEAR PS4.8			
SUPPLIED AS	Open End Rolls		
LENGTH	1900 - 22770 mm		
WIDTH	80 mm		
Pitch	PS4.8		
Tensioning member	Steel cord		
Coatings	NFT		
Advantage & characteristic	High resistance to wearing and reduction of the maintenance costs		

MEGADYNE® ACCU-LINK	
SUPPLIED AS	Rolls
LENGTH	7 - 30 m
Sections	Z/3L - A/4L - B/5L - C
Fabric	Multilayer woven polyeste
Advantage & characteristic	Accu-Link can be assembled without any tool and in a matter of seconds.

These are particularly critical in the automotive body painting process.

Our depth and breadth of experience, achieved during decades of partnership with automotive and tire manufacturers, gives Megadyne the capability and experience to manufacture specially fabricated belts, for vacuum, magnetic applications and the transport of the raw rubber stock.

Our rubber drive belts are available in many different compounds and constructions, according to your drive requirements.

The belts are available in the RPP profile that provides high power capacity with low noise and smooth running. Megadyne can supply: Isoran standard, Silver, Gold and Platinum.

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

### Conveyor belts features

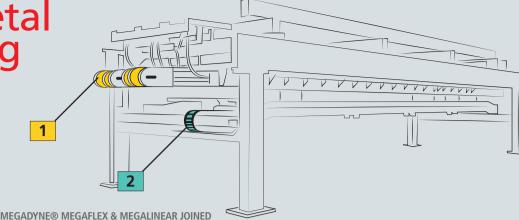
SAMPLA® FABCON				
	B31 (3F/14 PG35 U0/U0)	R13 (2LR/6 TR10 U0/00 AS FA)	R16 (2R-RX/14 TR15 00/00 AS FA)	R30 (3FC/8 TR30 00/00 FA)
TOTAL THICKNESS APPROX (mm)	3,5	1	1,5	3
WEIGHT APPROX. (kg/m²)	4	1,1	1,8	3,5
EFFECTIVE PULL AT 1% ELONGATION (N/mm.width)	14	6	14	8
MAX.BELT WIDTH WITHOUT LONGITUDINAL seam(mm.)	3000	3000	3000	3000
D. MIN APPROX. (mm.)	80	10	40	60
PERMITED OPERATING TEMPERATURE (C°)	-10 /+80	-10 /+80	-10 /+80	-10 /+80
RESISTENT, OIL AND GREASE	Yes	Yes	Limited	Limited

SAMPLA® PUCON			
	PN20/A (2R/13 B25 00/ U05A AR)	PN30/A (3R/50 B25 00/ U04A AR)	P24/A/DG (2R-RX/14 DG40 U0/U20A AS FA AR )
TOTAL THICKNESS APPROX (mm)	2,4	2,6	4
WEIGHT APPROX. (kg/m²)	2,75	2,9	4,8
EFFECTIVE PULL AT 1% ELONGATION (N/mm.width)	13	50	14
MAX.BELT WIDTH WITHOUT LONGITUDI- NAL seam(mm.)	3200	3200	3000
D. MIN APPROX. (mm.)	80	100	70
PERMITED OPERATING TEMPERATURE (C°)	-30 /+80	-30 /+80	-30 /+80
RESISTENT, OIL AND GREASE	Yes	Yes	Yes

SAMPLA® FELTCON	
S, IIII EX TELECON	SAM 040/A (1K/17 GR40 00/00 AS)
TOTAL THICKNESS APPROX (mm)	4
WEIGHT APPROX. (kg/m²)	2,5
EFFECTIVE PULL AT 1% ELONGATION (N/mm.width)	17
MAX.BELT WIDTH WITHOUT LONGITUDINAL seam(mm.)	2000
D. MIN APPROX. (mm.)	80
PERMITED OPERATING TEMPERATURE (C°)	-10 /+120
RESISTENT,OIL AND GREASE	Yes

SAMPLA ® PVCCON		
	U35 (3R/16 PG45 00/ V15 AS)	U91V ( 3F/50 PG70 V0/V)
TOTAL THICKNESS APPROX (mm)	4,5	7
WEIGHT APPROX. (kg/m²)	5,4	7,6
EFFECTIVE PULL AT 1% ELON-GATION (N/mm.width)	- 16	50
MAX.BELT WIDTH WITHOUT LONGITUDINAL seam(mm.)	3000	2400
D. MIN APPROX. (mm.)	150	350
PERMITED OPERATING TEMPI RATURE (C°)	E10 /+80	-10 /+80
RESISTENT, OIL AND GREASE	Yes	Yes

Sheet Metal Processing





- Megaflex are suitable as truly endless belts with thermoplastic polyurethane and continous spiral cord
- Megalinear Joined are open end joined belts in thermoplastic polyurethane and S & Z parallel cord
- Available with special polyurethane and covers for oil, chemical resistance and high grip requirements
- Can be reworked with custom-made grinding operations. Suitable for high speed conveyors in high capacity production areas
- Non marking surface materials



#### SAMPLA® FABCON

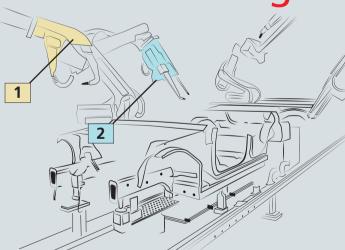
- B31 (3F/14 PG35 U0/U0)- R13 (2LR/6 TR10 U0/00 AS FA) R16 (2R-RX/14 TR15 00/00 AS FA) R30 (3FC/8 TR30 00/00 FA)
- Abrasion and cut resistant
- Using as accumulating conveyor
- Conveyor belts with excellent release properties suitable for rubber mixture conveying
- Available with cotton fabric, polyester fabric
- Impregnations if required



#### **SAMPLA®FELTCON**

- High temperature resistant
- Used for conveying steel sheets before the painting and pressing stages
- Manufactured of needle felt that provides a cut resistant soft surface that ensure the steel sheets are not damaged

Robotic Manufacturing





#### **MEGADYNE® MEGAPOWER**

- Truly endless belt manufactured in thermoset polyurethane with spiral
- High positioning precision



#### MEGADYNE® ISORAN

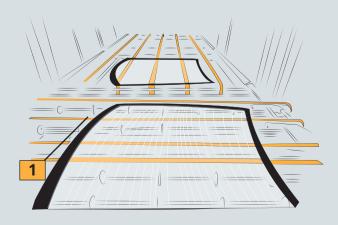
- Endless rubber belts
- Spiral fiberglass cord for high speed
- High precision drives

## Glass tempering line and storage

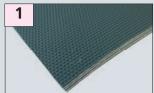


### MEGADYNE® POLYURETHANE NO MARKING

- Polyurethane Endless and open end belt
- Non marking coating
- Smooth drive
- AVAFC (urethane) and Z (Foam urethane) cover coating provide high fiction







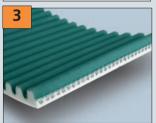


- U35 (3R/16 PG45 00/V15 AS)
  U91V (3F/50 PG70 V0/V)
  Abrasion and cut resistant
- Special covers stucture



#### SAMPLA® PUCON

- PN20/A (2R/13 B25 00/U05A AR) PN30/A (3R/50 B25 00/U04A AR) P24/A/DG (2R-RX/14 DG40 U0/U20A AS FA AR)
- Abrasion and cut resistant
- Low noise fabric back
- Permanently antistatic and oil resistant



#### **MEGADYNE® MEGALINEAR**

- The frameworks lifting systems are commonly equipped with Megalinear open end belts
- Designed to ensure precise position on heavy loads
- The most suitable belts are RPP14, RPP14 XP
- P3 and P4 have been developed for the vertical lifting system and are available in several widths and with different tensile member



#### **MEGADYNE® MEGAFLEX FLAT BELT**

- PS4.8 have been specifically developed for chassis production
- Truly endless belts with high resistance steel cord
- Suitable for skid conveyors applications



#### MEGADYNE® PLATINUM

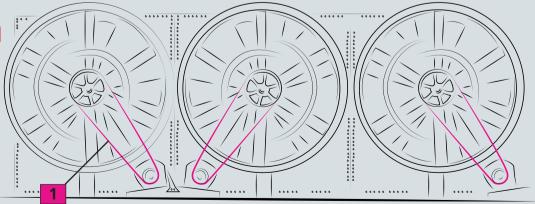
- PLATINUM represents the highest level of power transmission performances
- High resistance and long life cycles, even in the most extreme operating conditions

# Fan System



#### MEGADYNE® V-BELT

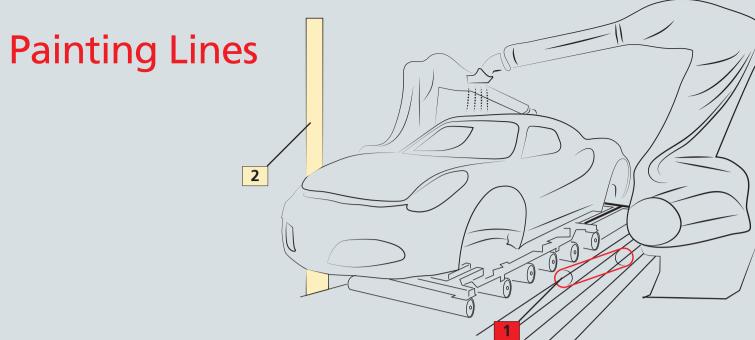
- Grinded sidewalls for smoothrunning operation, with no vibrations and reduced noise levels
- The longer and reliable service life reduces the material and labor cost for drive maintenance





#### MEGADYNE® ACCU-LINK

- Link-belt, created and developed as an alternative to classical rubber V-belts
- Made with a polyurethane elastomer reinforced by a multilayer woven polyester fabric
- Easy installation; reduced downtime
- Low vibration level





#### **MEGADYNE® MEGAPAINT**

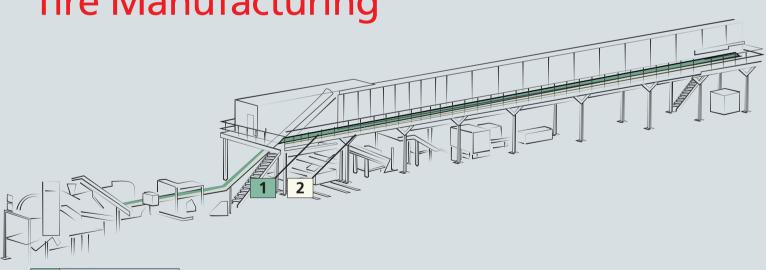
- Special compounded power transmission belts that are able to conform to the strict requirements related to non-contamination
- Supplied in special sealed packaging
  - Silicone Free

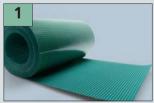


#### MEGADYNE® MEGALINEAR SILICON FREE

- All the open ended and endless belts in thermoplastic polyurethane. Available in silicon free material and in different compounds, according to the requirements of the painting process

Tire Manufacturing





#### **MEGADYNE® MEGALINEAR WIDE JOINED**

- Synchronized conveying with low friction conveying surface
- Joining process insures perfect flatness
- T5, T10 and H pitch
- NFT offers low friction conveying surface



#### SAMPLA® FABCON

- B31 (3F/14 PG35 U0/U0)- R13 (2LR/6 TR10 U0/00 AS FA) R16 (2R-RX/14 TR15 00/00 AS FA) R30 (3FC/8 TR30 00/00 FA)
- Abrasion and cut resistant
- Used in applications where product accumulation occurs
- Conveyor belts with excellent release properties suitable for rubber mixture conveying
- Reinforced with cotton fabric, polyester fabric
- Water saturation if required

### **CASE STUDIES**

Application: Roller system for heavy duty van frames.

Previous drive: Rubber flat belts

Previous drive problems: High quantity of dust particles and necessity of frequent maintenance

**Solution:** PS4.8 eliminated the problem of the powder and increased significantly

the lifetime of the belt. The customer did not report failures and

strongly reduced the maintenance actions



Application: Vacuum conveying systems.

Previous drive: Polyurethane standard belt joined T20 with 85 ShA PU overthickness

Previous drive problems: Low resistance to synthetic oils used in the application

**Solution:** Special polyurethane cover made in high chemical resistance material.

Megadyne increased of five times the resistance and the lifetime

of the belts in the same conditions.

