



**MEGADYNE**



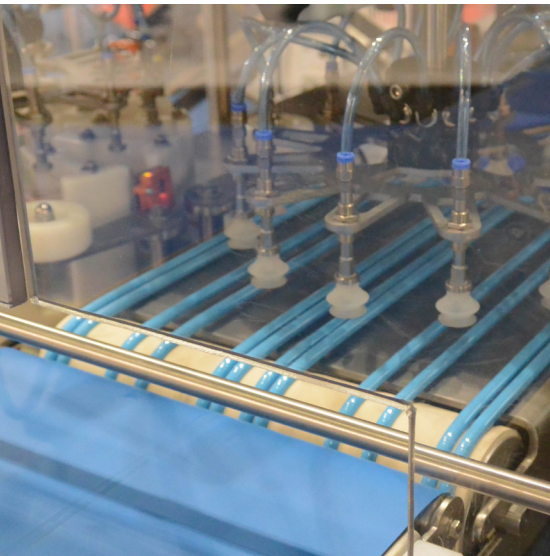
*EN*

**MEGAWELD**

TECHNICAL  
HANDBOOK

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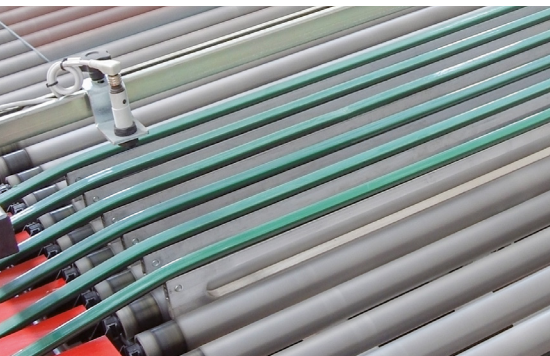
# INTRODUCTION

## TO MEGAWELD BELTS

MEGAWELD thermoplastic polyurethane, trapezoidal and round belts are manufactured by a unique extrusion process. They are suitable for a wide range of applications and industries.

MEGAWELD are used for conveying or for light power transmission in the following areas:

- Ceramic industry
- Glass industry
- Wood industry
- Brick and tile industry
- Gardening and horticulture
- Packagin industry
- Paper and board industry
- Pharmaceutical industry
- Food industry
- Robotic systems
- Automotive



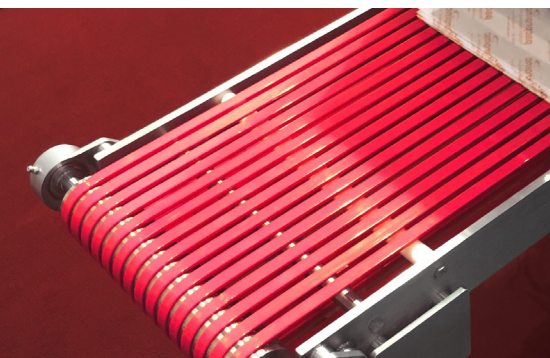
### MEGAWELD MATERIALS

Megadyne uses only virgin polymers to guarantee the best quality and the outstanding performance in all industrial applications.

### MEGAWELD MAIN FEATURES

- High flexibility
- High resistance to pollution
- Good abrasion resistance
- Good welding characteristics
- Smooth running

Special features as hydrolysis resistance and high modulus of elasticity (e.i.) on request.



### MEGAWELD TYPES (STANDARD & MADE TO ORDER)

- Blue FDA approved polyurethane
- Water and chemical resistance
- Metal detectable polyurethane on request with m.o.q.
- UV resistant materials
- Fiber glass reinforced
- Standard reinforced Kevlar® cords. Polyester cords on request.
- Other colours on request
- Soft grip cover

### MEGAWELD FINISHES

- Gloss finishing
- Matt finishing
- Rough finishing
- Textured finishing
- Metallised finishing.

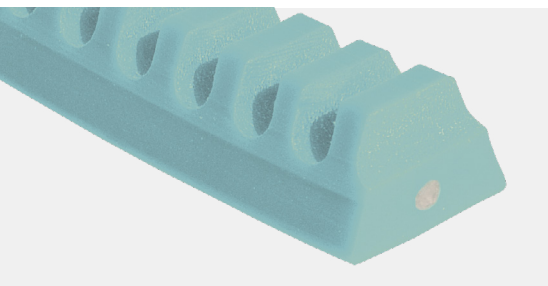


# PRODUCT RANGE

## POLYURETHANE V-BELTS

Trapezoidal thermo-welded polyurethane belts are available in different hardnesses and colours. Available with polyester\* or aramide reinforcements. They are suitable for many industrial sectors including the food industry.

<b>85 ShA</b>	Z-A-B-C
<b>85 ShA reinforced</b>	A-B-C
<b>85 ShA FDA</b>	Z-A-B-C
<b>85 ShA reinforced FDA</b>	A-B-C
<b>90 ShA</b>	Z-A-B-C
<b>90 ShA reinforced</b>	Z-A-B-C

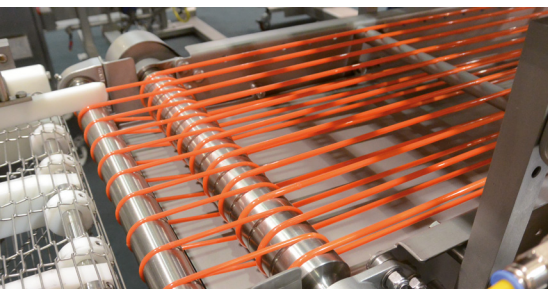


## POLYURETHANE COGGED V-BELTS

Cogged trapezoidal thermo-welded polyurethane belts are available in different hardnesses and colours. Available with polyester\* or aramide reinforcements

Cogged version allows the use of smaller pulleys.

<b>90 ShA</b>	Z-A-B-C
<b>90 ShA reinforced</b>	A-B-C



## POLYURETHANE ROUND BELTS

Round thermo-welded polyurethane belts are available in different hardnesses and colours. Available with polyester\* or aramide reinforcements. Particularly effective, thanks to the torsion characteristics, for line-shaft and powered-roller conveyor application.

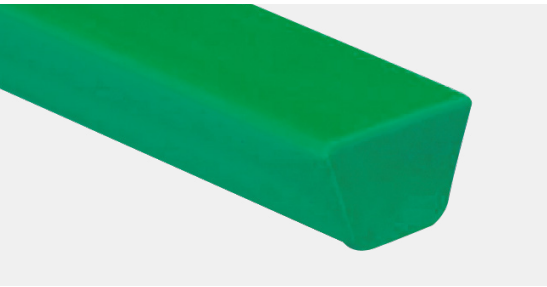
<b>PR 85 ShA</b>	ø (mm): 2*-3-4-5-6-7*-8-9-10-12-15-18*-20*
<b>85 ShA reinforced</b>	ø (mm): 6*-7*-8-9*-10-12-15*-18*

\*on request

# POLYURETHANE

## V-BELTS

### PT 85



CODE	CROSS SECTION	TRACTION FORCE	CORRESPONDING ELONGATION (%)**	MINIMUM PULLEY DIAMETER
	BxH (mm)	(N)		
<b>PT 85 Z</b>	10x6	60	8	55
<b>PT 85 A</b>	13x8	120	8	70
<b>PT 85 B</b>	17x11	220	8	110
<b>PT 85 C</b>	22x14	360	8	130



### PT 85 RK

CODE	CROSS SECTION	TRACTION FORCE	CORRESPONDING ELONGATION (%)**	MINIMUM PULLEY DIAMETER
	BxH (mm)	(N)		
<b>PT 85 RK A</b>	13x8	250	0,5	80
<b>PT 85 RK B</b>	17x11	400	1	125
<b>PT 85 RK C</b>	22x14	600	1,5	200



### PT 85 FDA (blue)

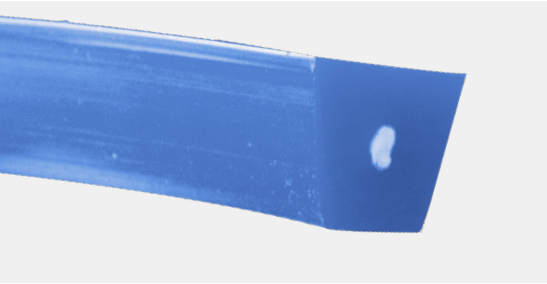
CODE	CROSS SECTION	TRACTION FORCE	CORRESPONDING ELONGATION (%)**	MINIMUM PULLEY DIAMETER
	BxH (mm)	(N)		
<b>PT 85 FDA Z</b>	10x6	60	8	55
<b>PT 85 FDA A</b>	13x8	120	8	70
<b>PT 85 FDA B</b>	17x11	220	8	110
<b>PT 85 FDA C</b>	22x14	360	8	130

\*\*Indicative values based on the average of test results.

# POLYURETHANE

## V-BELTS

### PT 85 RK FDA (blue)

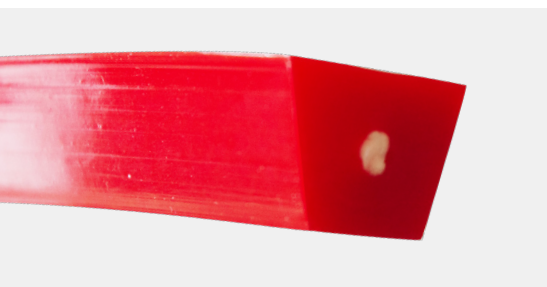


CODE	CROSS SECTION	TRACTION FORCE	CORRESPONDING ELONGATION (%)**	MINIMUM PULLEY DIAMETER
	BxH (mm)	(N)		
<b>PT 85 RK FDA A</b>	13x8	250	0,5	80
<b>PT 85 RK FDA B</b>	17x11	400	1	125
<b>PT 85 RK FDA C</b>	22x14	600	1,5	200



### PT 90

CODE	CROSS SECTION	TRACTION FORCE	CORRESPONDING ELONGATION (%)**	MINIMUM PULLEY DIAMETER
	BxH (mm)	(N)		
<b>PT 90 Z</b>	10x6	110	5	65
<b>PT 90 A</b>	13x8	200	5	80
<b>PT 90 B</b>	17x11	360	5	130
<b>PT 90 C</b>	22x14	600	5	180



### PT 90 RK

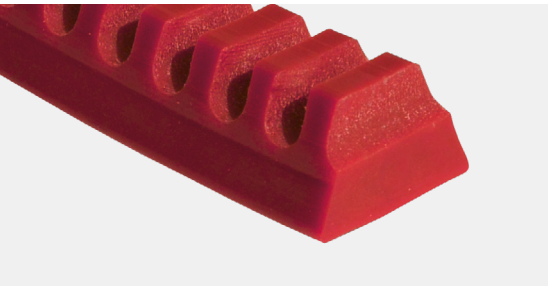
CODE	CROSS SECTION	TRACTION FORCE	CORRESPONDING ELONGATION (%)**	MINIMUM PULLEY DIAMETER
	BxH (mm)	(N)		
<b>PT 90 RK A</b>	13x8	300	1	110
<b>PT 90 RK B</b>	17x11	500	1,5	140
<b>PT 90 RK C</b>	22x14	750	1,5	230

\*\*Indicative values based on the average of test results.

# POLYURETHANE

## COGGED V-BELTS

### PTD 90



CODE	CROSS SECTION	TRACTION FORCE	CORRESPONDING ELONGATION (%)**	MINIMUM PULLEY DIAMETER
	BxH (mm)	(N)		
<b>PTD 90 A</b>	13x8	140	5	65
<b>PTD 90 B</b>	17x11	250	5	90
<b>PTD 90 C</b>	22x14	420	5	120



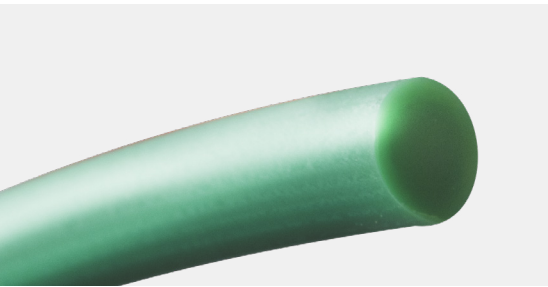
### PTD 90 RK

CODE	CROSS SECTION	TRACTION FORCE	CORRESPONDING ELONGATION (%)**	MINIMUM PULLEY DIAMETER
	BxH (mm)	(N)		
<b>PTD 90 RK A</b>	13x8	300	1	70
<b>PTD 90 RK B</b>	17x11	500	1,5	110
<b>PTD 90 RK C</b>	22x14	750	1,5	150

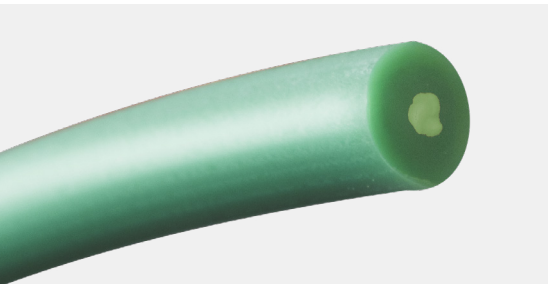
# POLYURETHANE

## ROUND BELTS

### PR 85 NL (rough)



CODE	CROSS SECTION	TRACTION FORCE	CORRESPONDING ELONGATION (%)**	MINIMUM PULLEY DIAMETER
	Ø (mm)	(N)		
PR 85 NL 2*	2	4,7	8	10
PR 85 NL 3	3	10	8	15
PR 85 NL 4	4	19	8	25
PR 85 NL 5	5	29	8	30
PR 85 NL 6	6	42	8	40
PR 85 NL 7*	7	57	8	50
PR 85 NL 8	8	75	8	55
PR 85 NL 9	9	95	8	65
PR 85 NL 10	10	118	8	75
PR 85 NL 12	12	170	8	90
PR 85 NL 15	15	265	8	120
PR 85 NL 18*	18	381	8	150
PR 85 NL 20*	20	462	8	200



### PR 85 NL RK (rough)

CODE	CROSS SECTION	TRACTION FORCE	CORRESPONDING ELONGATION (%)**	MINIMUM PULLEY DIAMETER
	Ø (mm)	(N)		
PR 85 NL RK 6*	6	70	0,5	50
PR 85 NL RK 7*	7	100	0,5	60
PR 85 NL RK 8	8	120	0,5	75
PR 85 NL RK 9*	9	170	1	85
PR 85 NL RK 10	10	230	1	90
PR 85 NL RK 12	12	330	1,5	120
PR 85 NL RK 15*	15	500	1,5	150
PR 85 NL RK 18*	18	680	1,5	180

\*On request | \*\*Indicative values based on the average of test results.



# SPECIAL FABRICATIONS

## ON REQUEST

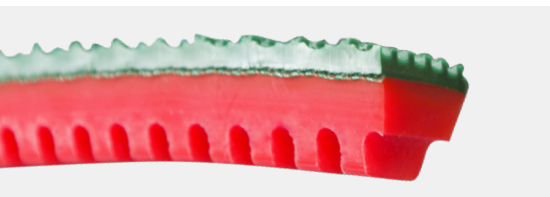
Megadyne can offer varied specialist fabrications processes, increasing MEGAWELD features like grip, temperature range and wear resistance. Megadyne's technical department is available for design advice, to reach the optimal design solution.



## V-BELT WITH PVC NAP COATING

Available in the trapezoidal or cogged versions.

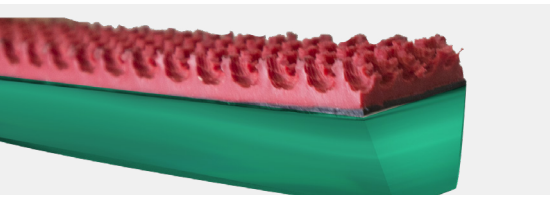
The Gripface coating is used to gain an increased surface coefficient of friction. This is particularly useful to control products at high speeds or in inclined or declined applications. This cover is resistant to common lubricant oils and water.



## V-BELT WITH RUBBER NAG COATING

Available in the trapezoidal or cogged versions.

The Gripface coating is used to gain an increased surface coefficient of friction. This is particularly useful to control products at high speeds or in inclined or declined applications. Widely used on packaging machines. This cover is very wear resistant.



## V-BELT WITH ARAMIDE FELT SURFACE

Available in the trapezoidal or cogged versions.

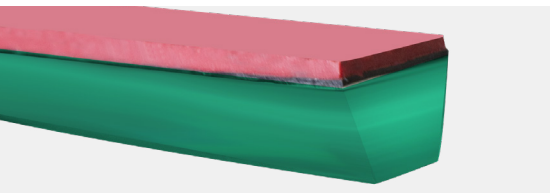
The coating used for conveying hot products, giving high heat resistance and a lower friction coefficient.

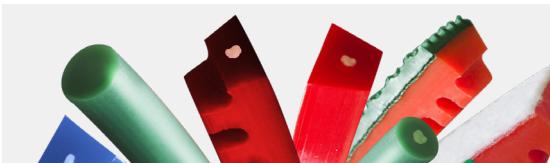


## V-BELT WITH TENAX SURFACE

Available in the trapezoidal or cogged versions.

The coating is used for conveying abrasive materials. The coating offers a high friction coefficient and excellent wear resistance.





# SPECIAL FABRICATIONS

## SPECIAL MATERIALS ON REQUEST

### **HIGH UV RESISTANT MATERIAL**

- Resistant to UV light
- Reduces fading, yellowing and premature ageing

### **REINFORCED MATERIALS**

- Standard reinforced Kevlar cords. Polyester cords on request.
- Higher loadings
- Lower elongation

### **DETECTABLE FOR THE FOOD INDUSTRY**

- Materials that can be sensed by metal detectors on request with m.o.q.
- Blue and orange increases visual detection rates

### **EXTRA CLEAR**

- High clarity transparent grades available
- Can also be UV resistant to prolong the clarity level

### **CO-EXTRUSION**

- Materials of different types and hardness can be extruded together

### **SURFACE FINISH**

- Special surface finishes
- Profiling the surface

## SPECIAL TREATMENT ON REQUEST

### **POST MANUFACTURE PROCESSING**

- Profiles can be treated after extrusion
- Oven heating to pre-defined temperatures over 24 hours
- Improves the mechanical properties and stability



# SPECIAL FABRICATIONS

## SPECIAL FABRICATION ON REQUEST

### **COGGED**

- All Vee profiles can be cogged
- Increases flexibility
- Improves the minimum pulley rating
- Add "D" as a suffix to the belt code

### **ADDED COVERS**

- PU Soft grip
- PVC Super grip
- Ultra grip rubber
- Polyester
- Felt
- Cellular foams
- Linatex

### **ENDLESSING**

- We can supply individual belts, endlessed to your specified lengths
- Equipment available for clients to endless weld in house

### **CALENDERED SHEET**

- Sheet at 400 mm and 700 mm available
- These can be endlessed to produce tapes and bands for special applications
- Finished belts can also be profiled with different surface finishes

## CHEMICAL PRODUCT RESISTANCE\*

Megadyne thermoplastic polyurethane V-belts, have many varied industrial applications and may be in contact with different contaminants. The TPU resistance to chemical depends on many factors, such as temperature, chemical concentration and TPU hardness.

*\*Chemical resistance declaration on request.*



The data and information contained in the present catalogue are updated to the date of the catalogue's printing. Ammega Italia S.p.A. reserves the right to modify the specifications, performances and other information relating to the belts described in the present catalogue, at any time at its own discretion, without any prior notice.

For updating refer to our website [www.megadynegroup.com](http://www.megadynegroup.com).

Technical specifications, performances and other information provided in the present catalogue are indicative and do not bound Ammega Italia S.p.A. unless such specifications, performances or other information are expressly agreed in the agreement with the customer.

We also recommend to read carefully the following documents on our web site [www.megadynegroup.com](http://www.megadynegroup.com):

- Ammega Italia S.p.A. General Conditions of Sale (comprising the warranty)
- Theoretical Belt Life.
- Drive Components: Storage, Installation, Maintenance and Troubleshooting Handbook
- Belts standard use condition and temperature.

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# Discover Your Local Contacts

The local partner of choice  
for sustainable power transmission belting solutions  
around the globe.



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Scan the QR code  
and find your local  
contact

