PRODUCTION
PROCESSING
& MOUNTING

EPC

Engineering Plastic Center

PRODUCTION
AND DISTRIBUTION
OF PLASTIC
COMPONENTS

MICAR

EXPERIENCE AND LEADING TECHNOLOGY

PRODUCTION
PROCESSING
& MOUNTING

PRODUCTION PROCESSING & MOUNTING

Micar developed a new business unit and presents PPM with our own operative centers fully dedicated to in-house production, processing and mounting of new product lines.

Based on the experience gained in over fifty years of continuous research of innovative solutions, **Micar faces a new challenge and invests in technology and know-how**.

Through PPM business unit - **Production, Processing & Mounting** - Micar is able to offer new products and services, complementing our traditional commercial vocation with the **skills typical of production**.

PPM consists in **advanced operative units**, equipped with the latest available technologies and perfectly organized to reach the best efficiency.

The entire project is supported by our **excellent human resources**. We operate with the **utmost attention to every detail**: dynamic and highly skilled teams are our most important investment.

"Micar have laid a solid foundation for growth in increasingly close cooperation with our customers".

EPC
ENGINEERING PLASTIC CENTER

Production and distribution of machined plastic components

EPC center comes to satisfy growing request of high quality components produced in serie or single units.

In EPC center Micar executes processing of technical plastic material and produces **machined parts made to drawing for any kind of application**.

Our **flexible organization** and **careful quality control**, allows to keep **constant standard and high reliability either for series production and single units** made as per customer's drawing and specifications.

The center is fully equipped with a complete set of machinery including **CNC machines** and state of the art software – **3D scanner, Advanced Nesting, new generation CAD station**.

Thanks to our technology and investments we are able to guarantee **reliable tolerances** and **optimal surface finish**.

In order to keep regular supplies and fast delivery terms, Micar has a **big stock of various formats** and **colours** made exclusively from **top quality and certified plastic materials**.

Finally Micar is able to offer **special products and materials** in different colours and formats **on request**.

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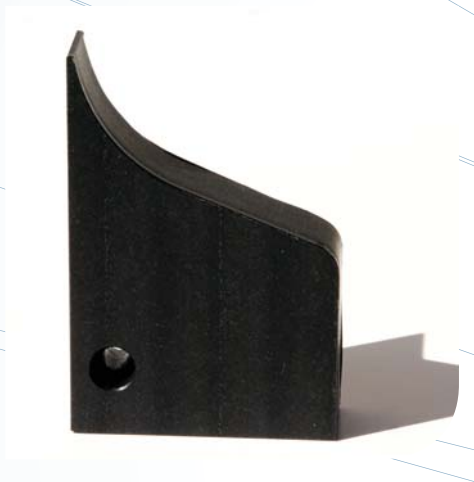
Items produced in single units or in serie but all “unique”

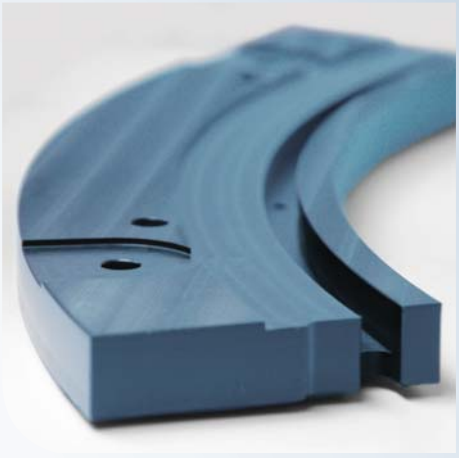
Straight/Corner tracks

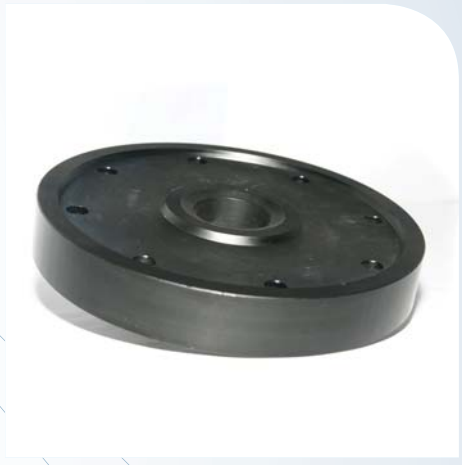
Designed components



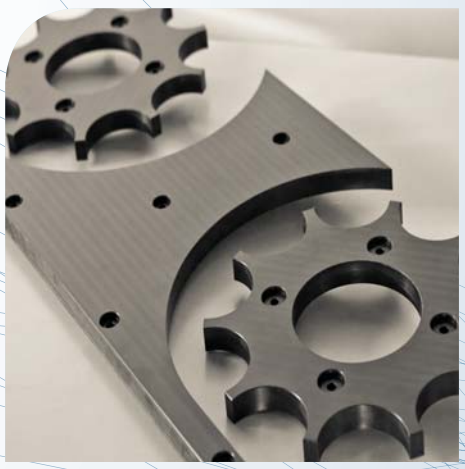
Milled wheels

Screws

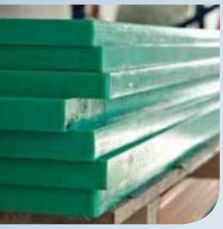
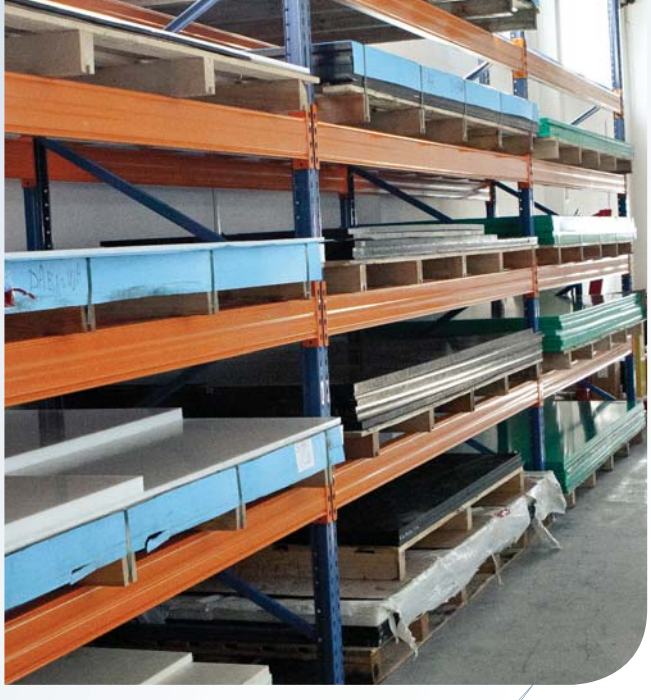


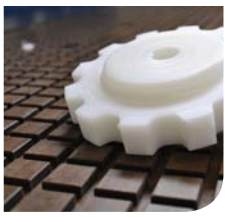


Bottling and packaging



Guide chains

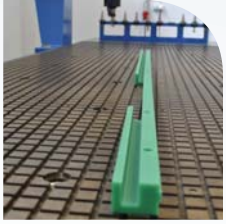






Materials basic and special features

MATERIAL	Overall Information		Mechanical Properties						Thermal Properties						
	ρ		σ	ε_R	E								1		
	g/cm³	%	MPa	%	MPa	kJ/m²	MPa	scale D	°C	W/(m*K)	kJ/kg*K	10-6K-1	°C	°C	°C
PA 6	1,14	3	80	≥50	3200	≥3,0	170	82	220	0,23	1,7	90	-40÷85	160	75
PA 6G	1,15	2,5	75	≥45	3400	≥3,0	180	83	216	0,25	1,7	80	-40÷110	170	95
POM	1,41	0,2	67	30	2800	6	150	81	165	0,31	1,5	110	-50÷100	140	110
PE 1000	0,93	<0,01	20	>200	680	-	-	63	135	0,4	1,9	150÷230	-250÷80	130	79
PE 1000 R	0,94	<0,01	22	>200	700	-	-	65	135	0,4	1,9	150÷230	-150÷80	130	79
PE 500	0,96	<0,01	27	>50	1200	-	-	65	135	0,4	1,9	150÷230	-100÷80	100	79
PE 500 R	0,95	<0,01	25	>50	1100	-	-	65	135	0,4	1,9	150÷230	-100÷80	100	79
PE 300	0,95	<0,01	22	>50	800	12	-	63	135	0,4	1,9	150÷230	-50÷80	100	67
PP	0,91	<0,1	32	>50	1300	4	-	72	162-167	0,2	1,7	120÷190	0÷100	150	90

- ρ Density
- Water absorption
- σ Yield stress / Tensile strength
- ε_R Elongation at break
- E Tensile modulus of elasticity
- Notched impact strength (Charpy)
- Ball indentation hardness
- Melting temperature
- Thermal conductivity
- Specific thermal capacity
- Coefficient of linear thermal expansion
- 1 Service temperature, long term
- Service temperature, short term
- Shore Hardness
- Heat deflection temperature
- Flame retardant
- Chemical resistance
- Antibacterial action
- UV UV resistance
- Antystatic
- Electric conductivity



MATERIAL	GENERAL FEATURES									SPECIAL FEATURES						
	Overall Information		Mechanical Properties				Thermal Properties									
	ρ		σ	ε_R	E			1					UV			Other Properties
	g/cm³	%	MPa	%	MPa	scale D	°C	°C	°C							
PA6G glide	1,14	2	75	≥35	3400	81	215	-40÷110	160							self-lubricating
PA6G | ESD 90	1,19	2,5	75	5	4000	80	216	-40÷110	170					✓		
PA66 GF 30	1,32	1,7	100	5	5000	86	260	-20÷120	200							high mechanical properties
POM ESD 60	1,4	0,25	40	30	1900	79	165	-20÷100	140				✓		✓	
PC	1,2	0,2	65	80	2300	82	-	-40÷115	140							high stiffness good insulation properties
PET	1,38	0,25	85	15	3000	84	255	-20÷115	180							good electrical insulation high dimensional stability
PVDF	1,78	0,04	55	30	2100	80	178	-20÷140	15		✓			✓		high resistance to weather condition
PVDF plus	1,78	<0,04	55	30	2200	77	172÷175	-20÷140	150		✓			✓		
PEEK MOD	1,46	0,15	75	4	4900	85	343	-30÷250	310	✓						high dimensional stability
PEI	1,27	0,5	110	12	3100	86	-	-50÷170	210	✓						high dimensional stability

MATERIAL	GENERAL FEATURES									SPECIAL FEATURES						
	Overall Information		Mechanical Properties				Thermal Properties									
	ρ		σ	ε_R	E			1					UV			Other Properties
	g/cm³	%	MPa	%	MPa	scale D	°C	°C	°C							
PE 1000 AST	0,95	<0,01	22	>200	700	63	135	-150÷80	130				✓		✓	
PE 1000 EL	0,97	<0,05	20	>200	700	63	135	-250÷80	130						✓	
PE 1000 slide	0,96	<0,01	21	>200	680	64	135	-250÷80	130				✓			self-lubricating
PE 1000 slide AST	0,97	<0,01	22	>200	700	64	135	-250÷80	130				✓	✓		self-lubricating
PE 1000 flametech	0,99	<0,05	22	>200	700	63	135	-250÷80	130	✓			✓	✓		
PE 1000 microbloc	0,93	<0,01	20	>200	680	63	135	-250÷80	130		✓	✓				
PE 500 AST	0,97	<0,01	20	>50	900	63	135	-100÷80	130				✓	✓		
PE 500 EL	0,98	<0,01	22	>50	900	65	135	-100÷80	130				✓		✓	
PE 500 microbloc	0,96	<0,01	27	>50	1200	65	135	-100÷80	100		✓	✓				
PE 300 blackB	0,95	<0,01	22	>50	850	63	135	-50÷80	100		✓		✓			
PE 300 AST	0,95	<0,01	23	>50	800	63	135	-50÷80	100		✓			✓		
PE 300 black EL	0,99	<0,01	26	>50	1100	67	135	-50÷80	100		✓		✓		✓	
PP black EL	1,22	<0,1	16	>50	1400	68	162÷167	-15÷100	150	✓			✓	✓	✓	
PP white micro AST	0,92	<0,1	32	>50	1300	70	162÷167	0÷100	150					✓		
PP grey B	0,91	<0,1	30	>50	1300	70	162÷167	0÷100	150		✓					
PP-C	0,91	<0,1	23	>50	1100	69	162÷165	-30÷100	150		✓					
PE 1000 XSlide S	0,93	<0,01	19	>50	500	60	133-135	-150÷80	130		✓					self-lubricating ultra low coefficient of friction
PE 1000 XSlide C	0,93	<0,01	19	>50	500	60	133-135	-150÷80	130		✓					self-lubricating ultra low coefficient of friction

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