



▶▶ PROtect tapes<sup>®</sup>  
2019



**DONGFENG**  
RACE TEAM

PROtect tapes is Technical Supplier  
to Dongfeng Race Team

“PROtect tapes range is a one stop shop for all chafe/impact protection areas required around the boat, whether on deck, rig or below deck. It's tough as old boots, so I know it's capable of being able to stand up to the rigours of the Volvo Ocean Race.....and keeps my job list down when the boat arrives!”

[Graham Turrell, Boat Captain Dongfeng Race Team]



# NEW

- BOW #** PBW001 Compostable and  
PBW002 biodegradable films for  
bow numbers and  
advertising
- SKID** PAC030 smooth antiskid
- KIT** PML008 traveller blocks deck  
protection
- CUSTOM** Die cut and plotting service for  
CHAFE, SHOCK, SHOCK PSX,  
SHIELD, MASK (limited to  
products on liner)

Benoit Stichelbaut / Dongfeng Race Team

## ▶▶ PROtect tapes®

Explorers of innovation

**PROtect tapes** are a broad range of protective tapes and solutions for dinghies, racing, cruising and super yachts. Our products address serious chafing, abrasion, scratches, damages, ageing and wear.

The critical factor to success has been the combination of unique technical film experience from polymer and adhesive specialists and sailing expertise of professional sailors.

They are effective solutions for the owners, captains, mast and boat builders, shore teams, riggers and sailmakers looking for superior and competitive product to enhance performances and ultimately win the race or simply reliability and have a safer cruising.

The years since **PROtect tapes** was established in 2008 have been extraordinary.

We have grown from a tiny startup to become a leading company focused on the niche area of tapes and solutions for the yachting industry.

Today, it is young, vigorous, brash, ambitious, full of ideas and dreams due to smart people, unique equipment, steady hands and smiling faces.

We use our bikes as much as we can, drink squeezed orange juice and gossip about life.

We are **PROtect tapes**.



Excellence in safety,  
health and  
environmental  
performance



Focus on customer  
satisfaction, total  
quality and reliability



Continuous  
improvement to  
become a cost  
effective producer  
of high quality  
products



Encouragement  
of innovation,  
entrepreneurship  
and reward  
for achievement



Empowerment of  
employees to create  
real value for our  
customers and  
ourselves

DO NOT USE PROtect tapes for HUMAN SUSPENSION





**CHAFE** is a pressure sensitive tape using UHMWPE (ultra high molecular weight polyethylene) film with a very strong acrylic adhesive. It has high resistance to abrasion (15 times more resistant than carbon steel), self-lubricating properties and extremely low coefficient of friction. The result is a very tough material, with the highest impact strength of any thermoplastic presently made. The product is available in black and translucent and various standard widths. Custom slitting, cutting and die cutting on demand.

#### Typical applications:

- dragging lines over the deck
- mooring ropes area
- mast (front and shave box) and leading edge spreaders
- under the boom to protect it from spinnaker/gennaker sheet
- pad eyes on the deck for blocks and hardware
- daggerboards and bearings
- stanchions
- battens and sails

Part code	Color	Adhesive	Thickness		Width		Length			
			mm	mil	mm	in	m	ft		
PCB076	Black	Acrylic w/liner	0.076	3	25 51 152 min 7 max 660	1 2 6 min 1/4 max 26	16.5	54		
PCB125			0.125	5						
PCB250			0.250	10						
PCB500			0.500	20						
PCB1000			1.000	40	min 6.35 max 610	min 1/4 max 24			30.5	100
PCB1570			1.570	60						
PCB2360			2.360	93						
PCB3170			3.170	120						
PCT076	0.076		3	min 6.35 max 610			min 1/4 max 24	30.5		
PCT125	0.125		5							
PCT250	0.250		10							
PCT500	0.500		20							
PCT1000	1.000		40							
PCT1570	1.570		60							
PCT2360	2.360		93							
PCT3170	3.170		120							

CHAFE above 500 micron (20mil) are normally without adhesive; available with adhesive on demand.

# SHOCK & SHIELD

**SHOCK** is a further evolution of CHAFE products, to resist to abrasion and shocks from blocks, press locks, snap and halyards shackles.

The first evolution is made of aliphatic polyurethane resin film laminated between CHAFE and a modified acrylic adhesive and finally protected by a siliconised paper to make easy and friendly handling, die cut and application.

Any CHAFE film can be used, ideally 250 or 500 micron (10 or 20 mil).

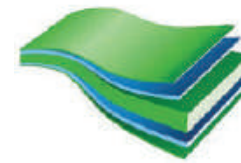
The product is made on demand and tailor made in the width, length and shape required.

The further step is PSX made of lightweight, flexible, microcellular, open cell suitable for multiple high impact protection. It absorbs more energy than comparable materials, nearly twice. The impact is also distributed over a greater area without through the material and to the other side.

**SHIELD** have been specially developed for protecting susceptible areas of the boat from damage from shock, chafe and scuffing. The films are produced from high grade polyurethane, which has excellent high impact resistance, excellent transparency and high gloss. The films are coated with quality acrylic adhesive with very good long term ageing properties. Tested in most extreme climatic conditions, the films will not crack, discolour or shrink.

Typical applications:

- soft loops and pad eye areas
- mast, boom and spreaders
- bowsprit
- windows/hatches



Liner  
Acrylic adhesive  
Open Cell  
Acrylic adhesive  
UHMWPE

PSX structure

## SHOCK

Part code	Color	Adhesive	Thickness		Width		Max Length	
			mm	mil	mm	in	m	ft
PSB076	Black	Acrylic w/liner	0.076	3	min 38 max 660	min 1 1/2 max 26	16.5	54
PSB125			0.125	5				
PSB250			0.250	10				
PSB500			0.500	20				
PST076	Translucent		0.076	3				
PST125			0.125	5				
PST250			0.250	10				
PST500			0.500	20				
PSX250XXXXY	Black		0.250	10	PSX: Extreme impact protection are made on demand using different materials listed on table on the right			
PSX500XXXXY			0.500	20				

Plotting service available on all SHOCK and SHIELD products

## SHIELD

Part code	Color	Adhesive	Thickness		Width		Max Length	
			mm	mil	mm	in	m	ft
PSC190	Clear	Acrylic w/liner	0.190	7.5	max 1524	max 60	50	54.6
PSC225			0.225	8.86	max 500	max 20	15	16.4

## PSX code XXXYY

Density g/l lb/ft <sup>3</sup>	Thickness mm mil	PSX code XXXYY							
		2	3	4	5	6	9.5	12.7	
144	9			14404		14406	14410	14413	
192	12	19202	19203	19204		19206	19210	19213	
240	15	24002	24003	24004		24006	24010	24013	
320	20	32002	32003			32006	32010		
400	25	40002	40003						









**MASK** is the rigging tape.

Riggers and sailors call our best seller PMG050 *the millionaire tape* or *gecko tape*, a mast have into the sailor trousers pockets.

The tape combines highly tensilized skived modified PTFE (a synthetic fluoro-polymer) with a high temperature silicon or acrylic adhesives.

They have the highest tensile strength per unit, toughness and high temperature resistance of any PTFE product.

The low friction coefficient together with the resistance to abrasion offers an efficient solution to many wearing and tearing issues.

Typical applications:

- running rigging
- bobstays and strops
- standing rigging, spreaders and turnbuckles
- forestay, backstay, runners and other cables
- all uneven or irregular surfaces
- ideal for wrapping parts where build up can occur

Part code	Color	Adhesive	Liner	Thickness				Elongation at break	Width		Length		
				film		adhesive			mm	in	m	yds	
				micron	mil	micron	mil						
PMO064	Orange	Silicon	--	64	2.5	38	1.5	140	12 25 32 51 102 min 7 max 564	1/2 1 1 1/4 2 4 min 1/4 max 21.5	33	36	
PMB064	Blue		--	64	2.5	45	1.8						
PMG050	Grey		--	50	2	38	1.5						
PMG076			--	76	3								
PMH125L	Light Grey		yes	125	5			300					140
PMH250L			yes	250	10								
PMH500L			yes	500	20								
PML050			--	50	2								
PML125			--	125	5								
PML250L			yes	250	10								
PML500L		yes	500	20									
PMA050		Grey	Acrylic	--	50				2	140			

L at the end of the part codes means product with liner. PMG050, PML050 and PML125 are available with liner on request.

# HEADFOIL

**HEADFOIL** is the ideal protection against damages to plastic, composite or metallic headfoil from severe contact abrasion of rotating spinnaker/guy or gennaker sheets during internal gybe or kite drop.

It is a combination of modified UHMWPE polymers films and strong acrylic or silicon adhesives.

The standard product is suitable for small boats up to 12m (40') and available in two colors: translucent (PHTxxx) or black (PHBxxx).

PHPxxx (high performances), available in light grey with silicon adhesive only, is strongly recommended for larger and grand prix yachts or whenever a superior resistance is required.

The differences between the two versions are the polymers, the temperature resistance of the films and the type of the adhesives.

All products are very easy to use and apply because already cut to the standard sizes of any headfoil systems.

Custom widths and lengths are available on demand.



xxx stands for the standard width (001-002-003)

Part code	Color	Thickness		Width		Length		Compatible headfoil system
		micron	mil	mm	in	m	yds	
PHT001	Translucent	250	10	34	1.34	1.5	1.64	Harken Unit 0
PHB001	Black							J-Lift 5085
PHP001	Light grey							Tuff Luff 1205 and 1706
PHT002	Translucent			40	1.57	2.0	2.19	Harken Unit 1
PHB002	Black							J-Lift 5100 and 5095/R
PHP002	Light grey							Tuff Luff 2206 and 2506
PHT003	Translucent			51	2.00	4	4.37	Harken Unit 2&3
PHB003	Black							J-Lift 5115 and 5164
PHP003	Light grey							Tuff Luff from 3007 to 7608 and TL1003/4

PHT, PHB and PHP are available on request in any width and length







**LOOPX** are the strongest man made adhesive tapes.

Tapes are available in two versions, reinforced with Endumax<sup>®</sup>, a lightweight, highly effective and flexible UHMWPE tape and another one with Dyneema<sup>®</sup> Fibers, an ultra high strength fiber made of UHMWPE.

In the PLT series the thin and strong adhesive has two functions: to hold either the fibers or tapes in the desired position and to guarantee the adhesion between the layers when the loop is manually made.

PLS series has been designed to make laminated loops because the surface of the tape is treated for heatsealing.

With LOOPX high load and small loops no longer require skills and expertise, complex sequence of operations, complicated steps and tools.

Anybody can make his own loop in the length required, even very small and in just few minutes. It is very practical, translucent, strong and light.

Typical applications:

- bobstays
- runner attachments
- soft attach block

Part code	Color	Adhesive	Liner	Gauge		Width tape		Length		Working load*		qty	Fibers/tape type
				micron	mil	mm	in	m	yds	Kg	Lbs		
PLT0760120613T	Translucent	Acrylic	WKr	76	3	12	1/2	3	3.3	515	1134	1 x 6mm (1/4")	Endumax <sup>®</sup> tape
PLT0760191213T						19	3/4			1030	2269	1 x 12mm (1/2")	Endumax <sup>®</sup> tape
PLT0760250233T						515	1134			3 x 2mm (5/64")	Endumax <sup>®</sup> tape		
PLT0760250133F						25	1			1130	2489	3	Dyneema <sup>®</sup> long fibers
PLT0760250133W						4120	9075			3x5	Dyneema <sup>®</sup> twisted fibers		
PLS000012X1						--	--			210	8	--	--
PLS000019X1	--	--	210	8	--	--	3040	6695	1 x 19mm (3/4")	Endumax <sup>®</sup> tape			

Endumax<sup>®</sup> is an ultra high molecular weight polyethylene (UHMW-PE), produced by Teijin. Endumax<sup>®</sup> is a lightweight, highly effective and flexible PE-tape. Dyneema<sup>®</sup> and Dyneema<sup>®</sup>, the world's strongest fiber<sup>TM</sup> are trademarks of DSM. Use of these trademarks is prohibited unless strictly authorized.

Liner WKr = White Silicon Kraft

# KIT

**KIT** are a selection of tapes and disks fully compliant with class rules, die cut, ready to apply on the small boats and dinghies.

They have been designed with the support of professional coached and sailors such as Fernando “Happy” Alegre (Optimist), Simon Payne (Moth) or Nathan Outtridge and Iain Jensen (49er) and contain a large selection of CHAFE, MASK, SHRINK and WRAP to cover all possible needs.

On top of the above ready made products, CHAFE is the material used for patches kits available in different sizes (from A6 to A4) and quantity ready to be applied on the boat. Kits currently available:

- Optimist
- Laser
- Moth
- 29er, 49er/49er FX
- Nacra 17
- SB20
- Topper
- Dinghy 12'
- J70
- Melges 20 & Melges 32



Boat	Part code	Pieces	Bowspit	Pole lancher	Kite throat	Jib luff/H-headfoil	Cross beam	Centreboard	Traveller Blocks	Rudder	Mast step	Mast collar	Top mast section	Lower mast section	Mast front	Sprit	Gaff	Outhaul	Boom	Vang	Turmbuckles	Mast bench	Tiller	Compartway	Wing	Cambers	Rigging	Hayard exit/Furler	Spreaders/Tips	T Ball	Tip bells	Main sheet racket	Control lines moles	Trapeze stockcord	Foot straps	Stanchions/lifelines	Pupit	Kite pad eye	D1/V1	Hatch	Interior/Kite drop											
Optimist	PMK066	29						•	•	•					•		•																																			
Laser®	PML001	2									•	•																																								
Laser®	PML002	1									•													•																												
Laser®	PML003	13						•			•	•	•	•				•						•																												
Laser®	PML004	2											•	•																																						
Laser®	PML007	5						•																																												
Laser®	PML008	4							•																																											
Moth	PMK001	8						•		•								•	•		•				•	•		•	•																							
29er®	PMK029	10	•	•	•	•																																														
49er/49er FX	PMK029	28	•	•	•	•	•	•	•	•					•			•	•		•					•	•		•	•		•	•	•	•	•	•															
Nacra 17	PMK062	31	•	•	•	•	•	•	•						•			•	•		•						•	•		•	•																					
Nacra 17	PMK063	2						•																																												
Nacra 17	PMK064	8	•																																																	
SB20	PMK020	10	•	•	•										•												•																									
Topper	PMK078	1									•																																									
Dinghy 12'	PMK120	28						•	•	•					•		•	•		•								•	•																							
J70®	PMK067/PMK067T	10/14													•													•	•																							
Melges 20	PMK910	1													•																																					
Melges 32	PMK912	1													•																																					
Melges 32	PMK999	9	•	•	•				•	•					•																																					

## PIECES PER PACK

Part code	Thickness micron		125		250		500	
	micron	mil	5	10	10	20	20	20
PMK002	2	51 x 152	A5	A4				
PMK040			1					
PMK050							1	2
PMK060			1					2
PMK070								4
PMK080								4

## MAST PAD CODES FOR MELGES 20 AND 32 upon technology

CHAFE (p. 5)	SHOCK (p. 6)	PSX(p. 6)
PMK010	PMK910	PMK510
PMK012	PMK912	PMK512

All kits contain item list (see SB20 next page) and pokayoke instructions.

#	Part code	Gauge	Color	Width	Length	Qty	Details
1	PCB500	500	Black	180	0,18	2	Front kite block wearing and tearing the gealcoat
2	PCB500	500	Black	180	0,18	2	Rear kite block wearing and tearing the gealcoat
3	PCT250	250	Translucent	60	0,40	1	Improve exit and drop of the kite/sliding over the deck
4	PCB250	250	Black	150	0,80	1	Bottom part of the mast
5	PML125	125	Ligth Grey	51	1,65	2	Cover both sides of the bowsprit case to improve the sliding
6	PML125	125	Ligth Grey	120	1,85	1	Wrap the bottom of bowsprit for sliding improvement
7	PML050	50	Ligth Grey	19	10,00	1	All purposes/rigging







# WRAP & FUSING



**WRAP** tapes are self-amalgamating modified polyisobutylene tapes, designed to stretch and stick to itself, forming a very strong and waterproof bond without leaving sticky stains on boat fittings.

Products are available in black or white.

The narrow tape is ideal for rigging, screw terminals, electrics whereas the special wide rolls create a flexible, long lasting, good looking instant welding waterproof mast collar that will not leak.

It is easy to apply and fast and friendly to be removed.



**FUSING** tape is an affordable and highly functional, silicone, self fusing tape. It resists to moisture, oxygen, and ozone to assure continuous high insulation values and conforms smoothly when wrapped around complex forms and bonds to itself at room temperature within 24 hours.

This tape remains non-tacky to the touch and does not adhere to other surfaces, or substrates and insulates with single wrap, thereby reducing labor time and cost.

Typical applications:

- rigging
- hardware
- spreader pins and turnbuckles
- electrics
- mast collar
- ideal for wrapping parts where build up can occur



## WRAP

Part code	Color	Thickness		Elongation at break	Width		Length	
		micron	mil		mm	in	m	yds
PWB500	Black	500	20	700	25, 100	1, 4	2, 10	2.2, 11
PWB800		800	31.5	900	150, 250	6, 10	10	11
PWW500	White	500	20	800	25, 100	1, 4	3, 5	3.3, 5.5
PWW800		800	31.5	900	150, 250	6, 10	10	11

## FUSING

PFB500	Black	500	20	500	25	1	3	3.3
PFG500	Grey							
PFW500	White							
PFC500	Clear							

**BOW #** is a new range of stickers for bow number and advertising made of bioplastic films that use renewable resources to reduce environmental impact. The solution has been designed for a sustainable end of life while guaranteeing similar performances of traditional products.

At the end of the racing series the sticker removed from the boat can be disposed with the organic waste because made of biodegradable and compostable materials.

Unfortunately some stickers do peel off from the hull while racing because of poor application, water splashes and sprays, then dragged by the waves, currents and tides and generally end up on the beaches or deposit on the bottom of the sea.

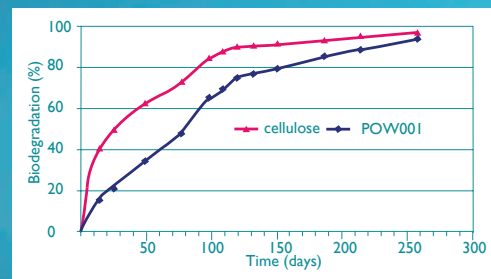


The potential damage caused by the stickers released at sea is mitigated by rapid biodegradation.

The marine biodegradation of material used for PROtect **BOW #** takes place even in natural conditions, such as the marine environment, relatively quickly. In fact, samples of were exposed to marine sediments taken from the coastal area and the biodegradation was followed by monitoring the metabolization carried out by bacteria that “digest” the bioplastic and the biodegradation have been achieved relatively quickly, less than 1 year.

In particular, the biodegradation of the materials tested was more than 90% absolute or relative to a reference material, such as cellulose.

Bioplastic films are suggested for 7/10 days events while for shorter event we recommend stickers made of special paper deriving from residue of sugar cane, highly sustainable from the point of view of the production process compared to FSC and recycled papers.



We offer a turn key solution for racing event organizers by printing, including variable data and die cutting to supply the whole stickers set event.

### Typical applications

- Bow numbers
- Hull advertising

Part code	Color	Face		Adhesive	Liner		Recommended events
		Composition	Thickness		Type	Thickness	
PBW001	White	Compostable film	60	Acrylic	Glassine	50	7/10 days
PBW002		Compostable paper	50				short events

For more info on ETV



The front is a white adhesive film or paper deriving from sugar cane, the adhesive is a permanent acrylic on the cold and the whole sets are biodegradable and compostable with OK compost according to the European standards UNI EN 13432. The laboratory tests supervised by the Italian Institute of Plastics (IIP) were verified by Certiquality, as part of the European Commission's "Environmental Technology Verification" (ETV) pilot program

## CUSTOM PROJECTS

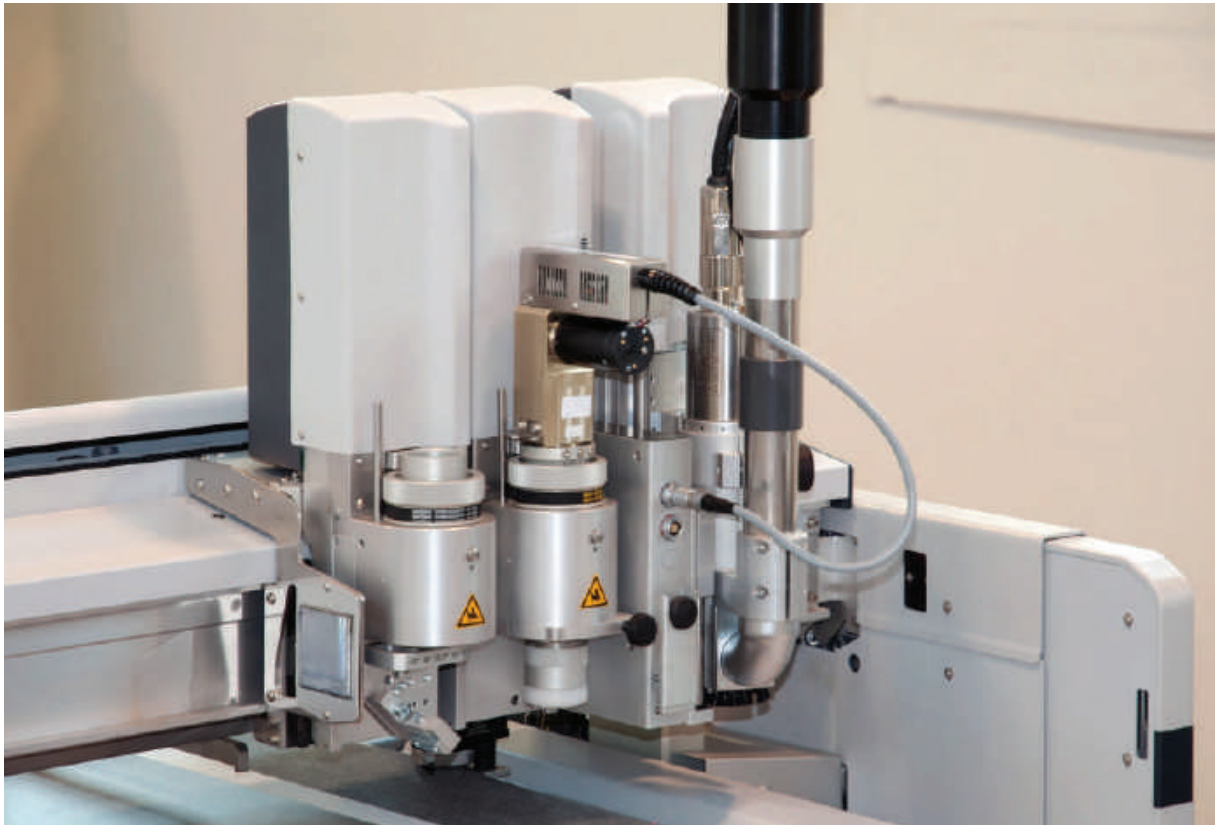
**CUSTOM PROJECTS** is a new service of PROtect tapes for our demanding clients looking for tailor made solutions.

Mast, boom, spreaders, deck, pad-eyes very often require unique sizes and shapes, we have therefore decided to create a team totally dedicated to focus to convert our produycts in special parts perfectly matching your needs.

Our team is closely work with you and design the parts you need, eventually modify them after a preliminary test and when approved, we will plot and die cut them using the most advanced technology available on the market.

Each part will be on file for further orders.

CHAFE, SHOCK, SHOCK PSX, SHIELD, MASK (all products on liner) can be cut by **CUSTOM PROJECTS**.

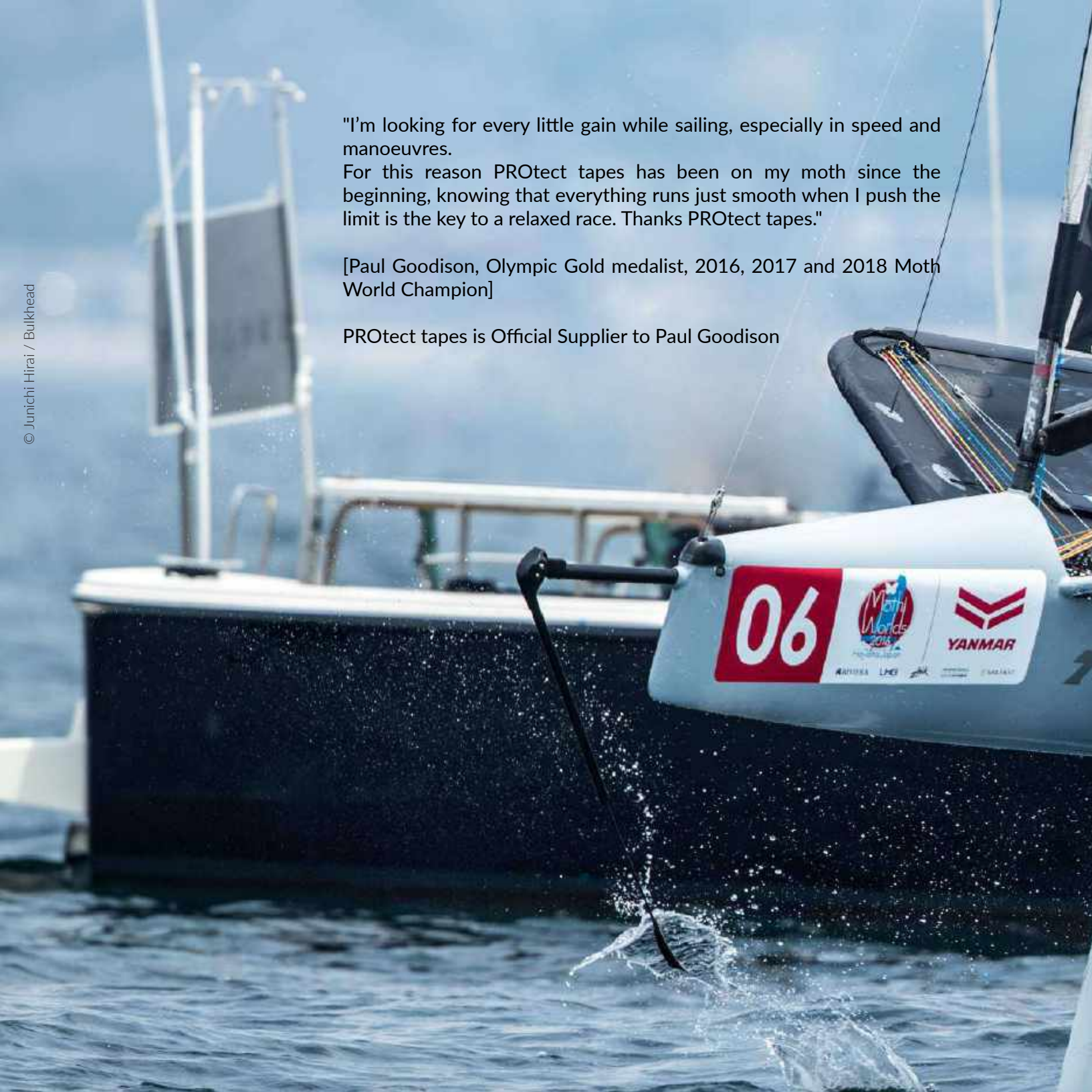


"I'm looking for every little gain while sailing, especially in speed and manoeuvres.

For this reason PROtect tapes has been on my moth since the beginning, knowing that everything runs just smooth when I push the limit is the key to a relaxed race. Thanks PROtect tapes."

[Paul Goodison, Olympic Gold medalist, 2016, 2017 and 2018 Moth World Champion]

PROtect tapes is Official Supplier to Paul Goodison





PROtect tapes

Artemis



# ROPE & SHRINK

**ROPE** is a smart and clever idea to identify forever ropes, halyards, running rigging and sheets on-board, into the container or van.

It is a heat shrink polyolefine tube with shrink ratio 2:1, available in different diameters to cover all possible needs.

Simply insert the tube at the end of rope, gently heat the tube using a suitable heat gun, hair dryer or just boiling water and the tube will wrap up it.

The material is writable with a permanent marker pen to have handy some relevant information (use, manufacturer, configuration, sailing hours, etc) and log it using the unique serial number.

Printing of your logo, variable data and other colors on demand.

Typical applications:

- mooring lines
- ropes
- halyards, running rigging and sheets

**SHRINK** are PTFE heat shrink tubes providing a state of the art method for the application of a tight, protective covering to items that will be subjected to the tough conditions.

It is the ideal method for the application of a tight, protective jacketing to items that ultimately will be subjected to extremes of heat, corrosion, shock, moisture, or other critical environmental conditions.

Provided in the expanded state, heat shrinkable tubing shrink wraps intricate and irregular shapes with a simple application of heat.

The application of heat shrink tubing extends life, increases reliability, and improves performance of the boat hardware.

SHRINK has ratio 4:1. The product requires at least 650°F/340°C to recover.



## ROPE

Part code	Color	Diameter unshrunk		Diameter shrunk		Length	
		mm	in	mm	in	mm	in
PRW125-2	White	12.50	1/2	6.25	1/4	100	4
PRW190-2		19.50	3/4	9.75	3/8		
PRW254-2		25.40	1	12.70	1/2		
PRW125-2S		12.50	1/2	6.25	1/4		
PRW190-2S		19.50	3/4	9.75	3/8		
PRW254-2S		25.40	1	12.70	1/2		

## SHRINK

Part code	Color	Diameter unshrunk		Diameter shrunk		Min length	
		mm	in	mm	in	m	ft
PHST125-4	Clear	12.70	1/2	3.66	1/8	1	3.3
PHST158-4		15.88	5/8	4.52	5/32		
PHST190-4		19.05	3/4	5.70	3/16		
PHST222-4		22.23	7/8	6.20	7/32		
PHST254-4		25.40	1	7.06	1/4		
PHST317-4		31.75	1 1/4	8.82	5/16		
PHST381-4		38.00	1 1/2	10.20	3/8		
PHST508-4		50.80	2	14.12	1/4		

CHASE BOAT # 1

▷▷ JIB DX

06377

▷▷ H MAIN

02850

ROPES & RIGGING

01789

▷▷ MAIN

07433


▷▷ PROtect tapes

▷▷ VANG

01104

▷▷ FURLER CO

02855

An aerial, top-down view of a racing yacht on the open ocean. The yacht is white with a dark hull and is moving towards the bottom left of the frame, leaving a white wake. A long line of crew members, all wearing bright orange life jackets, is lined up along the deck. The water is a deep blue, and the sky is not visible. The overall scene conveys a sense of speed and professional maritime activity.

"We used PROtect tapes and they always performed exceptionally well. It's great to work with a company that will develop products to suit your needs. Thanks PROtect tapes."  
[Don Cowie, Momo]





**SKID** series are anti slip tapes designed for racing yachts and boats. Series 80 and 60 are solutions when heavy duty slip resistance is required because made of tough, durable, special stones capable to last longer, embedded in extremely strong, all weather polymer substrate coated with a powerful, high bond rubber pressure sensitive adhesive and liner. Series 45 and 54 are anti slip resilient tape with low and heavy embossed anti-slip rubber coated PVC that has been engineered with an aggressive acrylic adhesive and liner. Light weight, easy installation, conformability and durable anti slip qualities. Available in a wide range of colors to match you needs. The offer is wide: narrow rolls and jumbo rolls that can be cut to size on site or easily create templates specifically for your boat.

**NIGHT** series are photolumiscent adhesive tapes suitable for signage.

Typical applications:

- boat deck and cockpit
- stairs and ladders
- any slippery surface that is walked on

## SKID & NIGHT

Part code	Color													Width		Length	
	Black	Grey	Light grey	White	Green	Orange	Red	Brown	Clear	Blue	Light Blue	Yellow	Photoluminescent	mm	in	m	yds
													day	night			
80	PAB080													51	2		
														1219	48		
																3	3.3
60	PAB060	PAG060	PAL060	PAW060	PAV060	PAO060	PAR060	PAN060	PAC060	PAU060	PAE060	PAY060	PAP060	51	2		
														1067	42		
																18.29	20
30 Smooth									PAC030							10	11
54 Resilient	PAB054	PAG054		PAW054					PAC054							3	3.3
																18.29	20
46 Coarse resilient	PAB046	PAG046		PAW046					PAC046								
227 Photoluminescent													PNP227				
557 Premium Photoluminescent													PNP557			18.29	20

# WING

**WING** is all you need for wingsails.

WINGLAR™ is a special membrane available in different gauges, all very strong, tough, clear or pigmented, biaxially oriented, heat shrinkable, printable film. The films have high shrink force for superior bundling capability, high tear, impact and abrasion resistance, high gloss, clarity, excellent printability and UV stability.

A strong membrane is useless without an equally strong double sided tape with carrier and asymmetrical acrylic adhesive to perfect match the properties of the membrane and the carbon fiber frame.

The final seamless touch is given by a clear, thin layer to cover and protect the edges of the film.



Typical applications:

- Wing sails
- Cross beams

## MEMBRANES

Part code	Color	Thickness		Width		Applications
		micron	mil	m	ft	
PWC013	Clear	13	0.50	1.6	5.25	Small wings
PWC016		16	0.65			
PWC019		19	0.75			
PWC025		25	1.00			
PWC032		32	1.25			
PWC038		38	1.50			
PWC050		50	2.00	3.3	10.8	Cross beam of smaller than 40'
PWC075		75	3.00			Cross beam of 40' and above
						AC45/48 and bigger

Available pigmented as well, MOQ applies. PWC075 is ACM Committee for the America's Cup approved.

## SINGLE AND DOUBLE SIDED ADHESIVE TAPES

Part code	Carrier	Color	Adhesive	Thickness				Width		Length		Purpose	Notes
				carrier		adhesive		mm	in	m	ft		
				micron	mil	micron	mil						
PWD04739	Polyester	Clear	Acrylic	25	1.0	88	3.45	19, 25, 50	3/4, 1, 2	50	164	Link between the membrane and the wing	Double sided adhesive tape
PWD04839				13	0.5	95	3.75						
PWD01357				13	0.5	38	1.50	19, 25	3/4, 1	55	180		
PWS01328							23	0.9	37	2.36	50, 100	1, 2	66

On PWD series the adhesive quantity is per side



# SNAP & SPIRAL

**SNAP** and **SPIRAL** are solutions to protect the composite standing rigging, frequently damaged by jib and gennaker sheets increasing the risk of equipment failure and esponential cost for replacement.

**SNAP** is a special profile made of PTFE that can be apply on any cable at any time with the mast completely rigged. It can be applied and removed in few minutes because of the design of the hook.

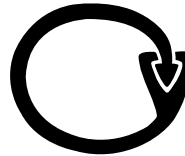
**SPIRAL** is a spiral cut cable wrap made of PTFE, resistant to abrasion, expandable and applicable on standing rigging as it is or wrapped by MASK for more durable protection.

Typical applications:

- Standing rigging (V1, D1, stays, etc)
- Lifelines

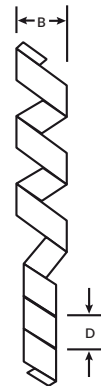
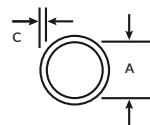
## SNAP

Part code	Color	Internal Diameter		wall		Max Diameter		Lenght	
		mm	in	mm	in	mm	in	m	ft
PPC0250	Tranlucent	6.35	1/4	0.76	0.030	5.08	0.200	1.5, 3.0	5, 10
PPC0437		11.11	7/16			10.16	0.400		
PPC0562		14.29	9/16			12.70	0.500		
PPC0625		15.88	5/8	0.89	0.035	15.24	0.600		
PPC0812		20.64	13/16			19.05	0.750		
PPC1000		25.40	1			24.77	0.975		
PPC1275		34.93	1 3/8			34.29	1.350		



## SPIRAL

Part code	Color	Internal Diameter A		Max Diameter B		Wall C		Pitch of helical cut D	
		mm	in	mm	in	mm	in	mm	in
PRSO318	Tranlucent	1.59	1/16	12.70	1/2	0.76	0.030	6.35	1/4
PRSO476		3.18	1/8	25.40	1			6.35	1/4
PRSO635		4.76	3/16	50.80	2			9.53	3/8
PRSO794		6.35	1/4	63.50	2 1/2			9.53	3/8
PRSO953		7.94	5/16	76.20	3	11.11	7/16		
PRS1270		11.11	7/16	101.60	4	14.29	9/16		
PRS1588		14.29	9/16	127.00	5	15.88	5/8		
PRS1905		17.46	11/16	152.40	6	0.81	0.032	22.23	7/8
PRS2540		23.81	15/16	203.20	8	1.02	0.040	25.40	1



The length required is equal to the ration between the ID and the cable diameter. If the cable is 5mm and SPIRAL is PRSO476, 1 meter will cover 0.64m. ID of PRSO476 is 3.18, therefore  $3.18 : 5 = 0.64$ . If the cable is 7mm, PRSO476 will cover just 0.45m because  $3.18 : 7 = 0.45$ . The best ration is between 0.80 and 0.40.



"PROtect tapes have worked with us over many years in forming solutions to the vast range of chafe problems experienced on maxi yachts. They have been helpful in the extreme. Always prompt with supply and very amenable to adapting their products to suit our needs. We rely on their products extensively."  
[Mike Atkinson, Open Season]



PROtect tapes is Official supplier of  
EPFL Hydrocontest Team

"Without the official support of PROtect tapes, our boats would have never done so well in the HydroContest.

Thanks to the exceptional quality and durability of the products, we managed to achieve high levels of performance.

Whether it was during the production and assembly of the boats, or during the intense rushes before the races, PROtect tapes products were always a reliable, safe and efficient solution."

[Lucas Bouffort, EPFL Hydrocontest Team]



**COMPOSITE** are PTFE tapes either glass coated or plain suitable for mold release in demanding composite constructions. Tapes and adhesive (silicon or acrylic) can withstand the most challenging requirements and extreme operating conditions. The thickness range is wide matching applications requiring excellent release, dimensional and superior thermal stability. Release of composite part from the tooling on ejection is also key benefit of a properly designed mold and release characteristics normally relate to the coefficient of friction of the molding surfaces and release tapes play an important role. In fact, the lowest coefficient of friction is not a material property, but a result of the contact system therefore influenced by the hardness, thickness, uniformity and smoothness of the surfaces, even more critical for small or negative draft angles.

#### Typical applications:

- male or female mold release

Part code	Color	Adhesive	Liner	Gauge				Adhesion		Elongation at break %	Width		Length	
				film		adhesive		N/cm	oz/in		mm	in	m	in
				micron	mil	micron	mil							
PMF076L	Brown	Silicon	Yes	76	3	51	2	4.37	40	3	up to 1000	up to 39.37	33	36
PMF125L				125	5									
PMF150L				150	6									
PMC050	Grey		--	50	2	38	1.5	3.28	30	140	25 51 102 min 7 max 564	1 2 4 min 1/4 max 21.5		
PMC050L			Yes											
PMC076			--											
PMC076L			Yes	76	3									

PMF and PMC series available with acrylic adhesives too.

# DUCT & SEAL & NO LEAK

**DUCT** tapes are a high quality general purpose colored tapes made from polyethylene-coated cloth coated with a natural rubber and synthetic resin adhesive system.

Tapes will conform well to irregular surfaces and will not twist or curl during application, hand tearable and tears evenly across the web of the cloth and provides excellent water and abrasion resistance.

Available in the standard silver and seven other colors.

It can be used as a quality moisture and waterproof tape and for easy and quick fix, reinforcing, color coding, ductwork sealing and seaming.

**SEAL** are tapes are specialty masking tapes combining LDPE films and HDPE cloth coated with acrylic adhesive. They are hand tearable, resistant, residue free and highly weather resistant and waterproof, free residual after removal. These features offer many solutions for masking, protection, holding, splicing, seaming, sealing. Since they does not leave residue on floors and surfaces, it makes maintenance operation easier.

**NO LEAK** is similar to SEAL but especially designed for airtightening and waterproofing. Permanent bonding.

Typical applications:

- moisture, waterproof and airtightening
- reinforcing
- color coding
- sealing
- seaming

## DUCT

Part code	Color	Adhesive	Thickness		Width		Length	
			micron	mil	mm	in	m	yds
PDS290	Silver	Rubber	90	3.5	50	2	10	11
PDW290	White							
PDB290	Black							
PDR290	Red							
PDY290	Yellow							
PDO290	Orange							
PDL290	Blu							
PDG290	Green							



## SEAL

Part code	Color	Adhesive	Thickness		Width		Length	
			micron	mil	mm	in	m	yds
PEW190	White	Acrylic	190	7.5	50	2	50	55
PEC190	Clear							
PEG190	Green							

## NO LEAK

Part code	Color	Adhesive	Thickness		Width		Length	
			micron	mil	mm	in	m	yds
PNR220	Black	Acrylic	220	8.86	100	4	2	2.2







## INTERIOR & EXTERIOR



**INTERIOR** is the ideal solution for protection of delicate surfaces such as the boat interiors whether in construction, delivery, boat maintenance or racing. The product is a foam PE film laminated with LDPE and a removable acrylic adhesive.

The low grammage adhesive is strong enough to guarantee a good adhesion and at the same time the low tack do not damage the surfaces protected; additionally no stain or adhesive residual once removed.

The product available is in the 2050 version with extremely low tack for very delicate surfaces, alcantare and leather.

The film is conformable therefore suitable to protect uneven and round surfaces, very easy to apply.

**EXTERIOR** is a clear polyolefins UV treated with low tack acrylic adhesive for the protection of the deck, hull and any part exposed to atmospheric agents and easy peel.

It is suitable for the protection of surface finishes from dirt and scratches and available in two versions with medium and low tack.

Part code	Color	Adhesive	Gauge				Adhesion		Elongation at break	Width		Length	
			film		adhesive		N/cm	oz/in		mm	in	m	yds
			micron	mil	micron	mil			%				
PIW2000	White	Acrylic	2000	80	10	0.4	1.0	9.1	<200	250, 625, 1250	10, 25, 50	25	27,3
PIW2050			1100	43			0.4	3.6		250, 625, 1250	50	50	54,7
PEC205094	Clear		80	3.15	0.8	9.1	>300	300, 600	12, 24	500	546		
PEC208001			0.5	4.6									



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Our recommendations on the use of our products are based on tests believed to be reliable but we would advise you to conduct your own test to determine their suitability for your applications.  
This is because we cannot accept any responsibility or liability direct or consequential for loss or damages as results of our recommendations.  
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