Main Catalog 2018





Buoys, Fenders and Floats

- since 1955





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Inflatable Buoys and Fenders

People associate Polyform's inflatable buoys and fenders with the easily recognizable blue, rib reinforced ropeholds of the A- and F-series. No wonder, this has been Polyform's hallmark for almost 60 years.

Today, Polyform offers much more, like the extensive range of inflatable buoys and fenders that can be supplied in a wide variety of different colors. The reasons for Polyform's leading edge are the in-house developed molding technologies and the unique raw-materials formulations.

At the end of 2005, after several years of research and development, we launched the first ever fully automated and robot assisted production machinery, built for molding of inflatable fenders. The revolutionary new production machine and method was named POLYMATIQ[®] and was patented. Simultaneously with the invention of the POLYMATIQ[®] production machine and process, we developed what we named WELCOTEC[©], a welding control technology that guarantees the optimal control over the wall thickness throughout the roto-molding process.



All-plastic valves The flexible all-plastic Polyform[®] valve is

fitted into every inflatable Polyform[®] product. The V-10 valve is a non-return type of valve, fitted with a protective valve screw. For inflation, the screw has to be removed. Air is blown into the valve, and the valve screw has to be set back in place in order to fully secure any loss of air from the valve! The V-40 valve is designed for easy inflation

and deflation of our largest products. This is not a non-return valve. To inflate the product, the valve is opened by turning the valve screw anticlockwise 3-4 times. Inflate through the center hole of the valve screw itself, and tighten the screw.

Inflation

Do not overinflate. The flexible all-plastic Polyform[®] valve is fitted into every inflatable Polyform[®] product.

The V-10 valve is a non-return type of valve, fitted with a protective valve screw.

V10 valve inflation adapter



Replace the valve screw with the adapter's threaded end.

Inflate through this end of the adpter by using a standard tire nozzle.

Screwdriver for removing the valve screw.



Foam filling

The majority of our products, soft- as well as hard-shell buoys may be filled with either Polystyrene (EPS) or Polyurethane (PUR) foams. Please read more about foam filling on page 38 in this catalogue.



Extreme strength

As part of our in-house quality assurance procedures, destructive testing of products is carried out at regular intervals and at random. This picture shows (the destructive) testing for pulling strength for one of our standard blue, rib-reinforced ropeholds. Please note: Over-inflation will reduce the strength of the products and void guarantee.

polymatiq[®] ROTOMOLDING

In-house developed roto-molding technology.



In-house developed welding control technology.

A-series A-s

All purpose Buoys and Fenders

Ribbed, reinforced ropehold Extra strong ropehold material Recessed valve screw Perfectly seamless construction Extra flexible body material Sturdy, uniform wall thickness Smooth surface Glossy finish



The world's first inflatable plastic buoy.

The professional's choice since 1955

In late 1955, the world's very first inflatable, all-plastic buoy was produced in Aalesund, Norway. This was the first buoy in a series of buoys that was to become the Polyform® A-series. The buoys soon were to be found in most corners of the world, and they established the standard for buoy design and quality. Since 1955, thanks to our innovative staff of engineers and technicians, design and production

technology has been further developed and improved. But still today the tough, ribreinforced ropehold and the seamless construction of the Polyform® buoys and fenders are part of the reasons why professional users all over the world prefer the Polyform® A-series buoys - and why these buoys have become synonymous with **"the best buoy money can buy"**.







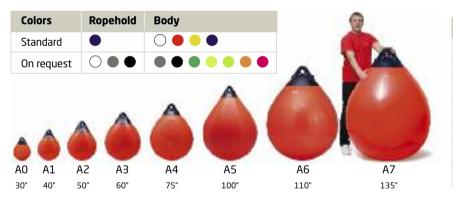
The Polyform A-series have been trusted by fishermen all over the world since 1955.



Polyform A-series are produced in 8 different sizes. Each model is designed and molded in order to offer a maximum of strength in combination with highest possible buoyancy. The wide range, from the smallest to the largest buoy, makes them useful in a wide variety of maritime sectors.

		\bigcirc	\oslash	Ø	Ê
Art.No.	Buoyancy kg*	Length mm	Diameter mm	Eye diameter mm	Weight kg
AO	5,7 / 3,4	280	210	22	0,60
A1	13,0 / 7,8	380	295	22	1,15
A2	32,0 / 19,2	500	390	25	2,10
A3	52,0 / 31,2	575	460	28	3,10
A4	90,0 / 54,0	710	550	28	4,10
A5	215,0 / 129,0	940	710	28	8,30
A6	405,0 / 243,0	1120	850	35	11,30
A7	670,0 / 402,0	1420	1100	60	21,00

*Gross Buoyancy / Recommended maximum Load. Do not over-inflate! Maximum 0.15 - 0.20 bar of pressure at 20° Celsius. Allowance +/-5%.



Welcotec

Polyform A-series are specially designed and produced by use of Polyform's inhouse Welcotec[™] molding technology ensuring controlled wall thickness, seamless true one-piece products and reliable product quality.

Inflation valves

The A-series buoys from size A1 to A5 are fitted with the V-10 valve. The A6 and A7 are fitted with the larger V-40 valve. The A7 has the Polyform® Double Valve System for more easily deflation.

Foam filled A-series

The Polyform A-series are intended as air inflated floats and fenders, but may alternatively - for special applications be offered filled with Polyurethane foam (PUR). See page 38.

Boat size	Recommended A fender
- 10′	AO
11' - 16'	A1
17' - 23'	A1 / A2 / A3
24' - 30'	A3 / A4
31' - 45'	A4 / A5
46' - 60'	A5 / A6
60' -	A7

Photo: Technip



From the largest to the smallest, the Polyform A-series are always reliable.







Heavy duty Fenders

Ribbed, reinforced ropehold Recessed valve screw Extra strong ropehold material Perfectly seamless construction Extra flexible body material Sturdy, uniform wall thickness Smooth surface Glossy finish

F-series cylindrical fenders have set the standard for heavy duty fenders for close to 60 years. The newest generation are made by use of Polyform's unique, inhouse developed and patented **POLYMATIQ®** technology.

Highest breaking strength is taken care of by the two multiple rib-reinforced rock solid ropeholds. Tested for strength and flexibility in temperatures ranging from - 30° C to + 60° C, these most heavy duty fenders feature high abrasive resistance and high energy absorption (up to 3.8 ton meter for F-13), making them suitable for ships of up to 1500 ton d/w (F-13). In addition to be a must for recreational crafts and yachts, the F-series cylindrical fenders are widely used by

- Coast guard and navy vessels
- Pilot boats
- Commercial ships
- "ALMOST ANY KIND OF BOATS AFLOAT"

Appreciated by dedicated yachtsmen for its superb quality

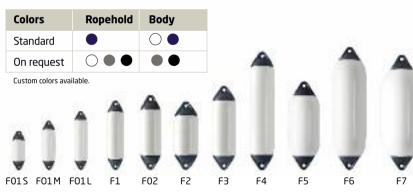


From the smallest dinghy up to the largest yachts, there is a suitable Polyform F-series fender.



			\bigotimes	Ø	Ĺ
Art.No.	Volume liter	Length mm	Diameter mm	Eye diameter mm	Weight kg
F01S	2,8	370	130	18	0,62
F01 M	4,0	465	130	18	0,68
F01L	5,3	560	130	18	0,75
F1	8	610	150	22	1,00
F02	15	660	200	25	1,65
F2	16	610	220	28	1,75
F3	22	745	220	28	2,10
F4	35	1040	220	28	2,90
F5	35	775	290	28	3,00
F6	60	1090	290	28	4,20
F7	85	1020	375	28	5,30
F8*	135	1440	375	28	7,60
F11**	275	1455	590	28	10,50
F13	700	1880	750	40	23,00

* F8 optional double valve system on request. ** F11 supplied with double valve system as standard. Do not over-inflate! Maximum 0.15 - 0.20 bar of pressure at 20° Celsius. Allowance +/-5%.



polymatiq[®] ROTOMOLDING

Polyform F-series fenders are made by our unique, in-house developed and patented POLYMATIQ® technology that ensures supreme control over the fusion process and warrants for the most consistent quality available anywhere for such molded, soft Vinyl fenders.

Inflation valves

from size F01 to F11 are fitted with the V-10 valve. The F13 fenders are fitted with the larger V-40 valve.

Double Valve System. The F11 (and optional F8) is fitted with the Polyform® Double Valve System for more easily deflation.



F-series cylindrical fenders are offered in as many as 12 different sizes to fit vessels ranging from the smallest dinghy up to commercial ships and Navy vessels.

Boat size	Recommended F fender
- 10′	F015 / F01M
11 - 16′	F01S / F01M / F01L / F1
17' - 23'	F1 / F02 / F2
24' - 30'	F2 / F3 / F4
31' - 45'	F5 / F6
46' - 60'	F7 / F8
60' -	F11 / F13





The **POLYFORM® G-fenders** are blow molded from marine-grade Vinyl material. Intended to be used for typically light-weight utility fenders - but still designed with re-enforcing ribs along the length of the fender body - to assure added strength

and abrasion resistance. These fenders are fitted with the full-size **POLYFORM**® V-10 all-plastic valve and securing valve screw. The **G-fenders** are suitable for smaller and medium size pleasure crafts. (Please refer to our Fender-Guide).





G -series		Ø	Ø	Ê
Art.No.	Length mm	Diameter mm	Eye diameter mm	Weight kg
G2	407	117	13	0,5
G3	515	145	16	0,8
G4	585	170	20	1,1
G5	705	215	22	1,5

Do not over-inflate! Maximum 0.15 - 0.20 bar of pressure at 20° Celsius. Allowance +/-5%.

Inflation valves The G-fenders are fitted with the V-10 valve. A combined screw and inflation tool is available.







Polyform G-fenders are suitable for pleasure crafts up to 30 ft.



The **POLYFORM® RFC-fenders** are heavy duty, ribbed fenders with center tube. They can be used horizontally or vertically for maximum protection.

Strong one piece construction moulded from tough, flexible Vinyl. Available in 2 sizes.

Designed with re-enforcing ribs along the

length of the fender body - to assure added strength and abrasion resistance. These fenders are fitted with the full-size **POLY-FORM**[®] V-10 all-plastic valve and securing valve screw.

The **RFC-fenders** are suitable for smaller and medium size pleasure crafts. (Please refer to our Fender-Guide).



Polyform V-10 valve Extra strong tube material Flexible body material Reinforcing ribs



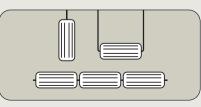
G -series		\bigotimes	\bigotimes	Ē
Art.No.	Length mm	Diameter mm	Tube diameter mm	Weight kg
RFC2	500	210	16	1,7
RFC3	660	250	16	2,7

Do not over-inflate! Maximum 0.15 - 0.20 bar of pressure at 20° Celsius. Allowance +/-5%.

Boat size	Recommended A fender
17 - 23'	RFC2
24' - 30'	RFC2 / RFC 3
31' - 45'	RFC 3







By use of a single fender line, one or several RFC fenders can be used both vertical and horizontal.



Multi-purpose Buoys



		\bigcirc	\oslash	\oslash	Ē
Art.No.	Buoyancy kg*	Length mm	Diameter mm	Tube diameter mm	Weight kg
CC2	29,0 / 17,5	430	385	48	2,6
CC3	55,0 / 33,0	500	450	48	3,9
CC4	100,0 / 60,0	590	540	48	5,3

*Gross Buoyancy / Recommended maximum Load. Do not over-inflate! Maximum 0.15 - 0.20 bar of pressure at 20° Celsius. Allowance +/-5%.



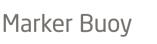
Commonly known as "Dhan-Buoys" or "High-Fliers". These buoys are fitted with a central, flexible tube for mounting of for example a pole. The **CC-series** Multi-purpose buoys are of seamless molded construction and are widely used for various marking applications.















Semi soft plastic, non-inflatable marker buoys.

Standard colors 🔘 🔴 🦲

**Gross Buoyancy / Recommended maximum Load. Allowance +/-5%.

CCE/CCD-series Inflatable Mooring Buoys

The **POLYFORM**® inflatable mooring buoys are offered with either a short mooring rod (CCE-type mooring buoy) or a long mooring rod (**CCD**-type mooring buoy). The mooring buoys are fully assembled by the factory and only need correct inflation before use. The rods include a swivel at the lower end and all parts are hot dipped galvanized.

Standard colors 🔾 🔴

12

11

0	0			
Art.No.	Rod diameter mm	L1 mm	L2 mm	Buoyancy kg*
CCE2	16	640	150	28.0 / 16.5
CCE3	19	740	150	53.0 / 31.5
CCE4	19	855	170	98.0 / 58.0
CCD2	16	1065	575	27.0 / 16.0
CCD3	19	1190	600	52.0 / 31.0
CCD4	19	1485	800	97.0 / 57.0

Inflation valves The CCE/CCD-series buoys are fitted with the V-10 valve.

IMPORTANT: Like all other inflatable buoys and fenders, these buoys are designed for surface use only, not for use under water. As these buoys are permanently exposed to the environment, maintaining correct inflation measurements are of highest importance for the quality and lifespan of the products.

**Total gross volume of buoys and Recommended Load for the buoy. Do not over-inflate! Maximum 0.15 - 0.20 bar of pressure at 20° Celsius. Allowance +/-5%.



Only the lower swivel (under water) shall be used for mooring. Do not expose the buoy to a load of more than 60% of its total buoyancy. All moorings shall be checked for wear and tear at least twice a year.









High-Liner

Welcotec

Polyform HL-series are specially designed and produced by use of Polyform's inhouse WelcotecTM molding technology ensuring controlled wall thickness, seamless true one-piece products and reliable product quality.



Colors	Ropehold	Body
Standard		$\bigcirc igodot$
On request	$\bigcirc ullet ullet$	

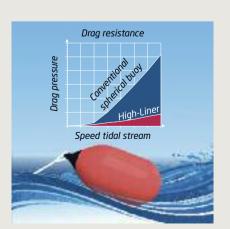
Custom colors available. Allowance +/-5%.

Cylindrical, 'bullet-shaped' **POLY-FORM**[®] HL-buoys are specially designed to reduce drag when used under conditions with strong currents. Under some conditions, the HL-buoys can considerably reduce the drag when compared to spherical buoys. The **HL-buoy** is also a popular fender, especially on boats with low freeboard. Designed with the original **POLYFORM**[®] blue-top ropehold, the **HL-buoys** are heavyduty buoys, used by commercial fishermen in inshore and offshore environments.

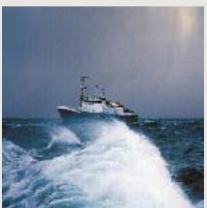
HL-series			\oslash	Ø	Å
Art.No.	Buoyancy kg*	Length mm	Diameter mm	Eye diameter mm	Weight kg
HL1	12,0 / 7,5	470	230	22	1,15
HL2	30,5 / 18,5	620	300	22	2,1
HL3	51,0 / 30,5	745	350	25	3,1
HL4	80,0 / 48,0	950	400	28	5,9

Inflation valves The G-fenders are fitted with the V-10 valve. A combined screw and inflation tool is available.

** Gross Buoyancy / Recommended maximum Load. Do not over-inflate! Maximum 0.15 - 0.20 bar of pressure at 20° Celsius.



Due to its special design the High-Liner buoys will "fly" on the waves.



It's in harsh waters like this the High-Liner buoys have their great advantage.



HL used as fender

Polyform Bacell[™] Foam Products

Polyform has a variety of products made partially or completely from different foam materials. The better known material is the Bacell[™], used for example in the Marina Fender Series, the BPB fishing floats and in many custom made products.

The 100% closed cell foam materials cannot puncture and will never absorb any water. It is highly shock absorbing, has excellent durability, and retains its shape even after high strain and extensive use. In addition it has high buoyancy and it is resistant to UV light and all weather conditions.



Polyform emphasis on continuous development and testing of EVA materials for new products and applications.



Bacell[™] is an in-house developed EVA material that is used in a wide variety of products.



Manufacturing of products in Bacell^m sets high standards for quality and tight tolerances for deviation.



Purse Seine Floats

The BPB BacelI™ Purse Seine Floats are

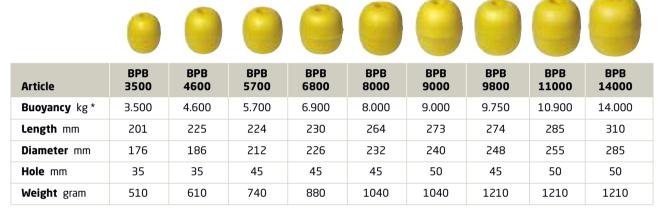
manufactured from ethylene vinyl acetate (EVA) to our in-house developed raw material recipe.

Advanced production technology guarantees floats of superior quality. The grommets are

a part of the products from stage one in the production cycle and thus form an integrated part of the finished products.

BACELL[™] floats are light in weight, have very high tensile strength and do not absorb any water. The outstanding elasticity of the

Bacell[®] material provides floats that have the highest resistance to shrinkage, permanent deformation and breakage.



* Gross buoyancy. Allowance +/- 5%



The Bacell[®] material provides floats that have the highest resistance to shrinkage, permanent deformation and breakage.



The Polyform BPB Purse Seine Floats have for decades been used in all the major fisheries throughout the world.

NF-series

FISHERY

Nordic Purse Seine Floats

The **Nordic Float Bacell**[™] Purse Seine Floats are manufactured from ethylene vinyl acetate (EVA) to their own in-house developed raw material receipt. Advanced production technology guarantees floats of superior quality. The grommets are a part of the products from stage one in the production cycle and thus form an integrated

part of the finished products.

The **NF** (Nordic Float) series of purse seine floats have superb quality features, optimized to meet the challenging northern pelagic fishery. The main features of the NF series are that the float will maintain its buoyancy over long time use in rough northern conditions and it will not crack. **Nordic Floats** have very high tensile strength and do not absorb any water. The outstanding elasticity of the BacellTM material provides floats that have the highest resistance to shrinkage, permanent deformation and breakage.

Article	NF7	NF10
Buoyancy kg*	8.200	11.200
Length mm	242	265
Diameter mm	235	260
Hole mm	32	32
Weight gram	1200	1600



* Gross buoyancy. Allowance +/- 5%

- Produced from high density, 100% closed cell Bacell™ material.

Central tube with reinforced grommets.

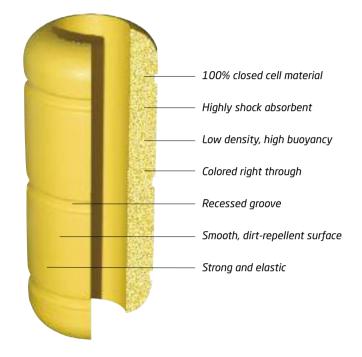
Body and grommet are integrated from stage one in the production cycle.



The NF7 and NF10 Nordic Floats are developed for use in harse nordic waters.

FlowSafe

Hose Flotation Device



FlowSafe hose flotation devices are used in various fields of marine activities, such as offshore oil- and gas industry and port facilities.

Transfer of fluid at sea is often associated with serious problems - especially in severe weather. During discharge, the hose sinks as it fills with water, slurry, or whatever is being pumped through the hose. Even slight movement of the vessel can cause the hose to come in contact with the propeller. The consequences arising from a broken hose can be extreme:

- Contamination due to spillage
- Destruction of the hose requiring repair or replacement at considerable cost that could have been avoided.
- Damage to the supply ship putting it out of operation. Both, the vessel and the crew may be exposed to danger.

With **FlowSafe** hose flotation device fitted around the transfer hose these problems

may to a large degree be avoided. The hose will float in plain sight, making discharging much simpler and safer.

FlowSafe protection

Star shaped inner surface on Type 3. Smooth inner surface on Type 4. Type 5 and Type 5L.

During discharge the hose is exposed to wear and tear. Mount **FlowSafe** around the hose at the points that receive the greatest wear. This provides effective protection to the hose, thereby adding to its service life and reducing overall cost.

FlowSafe acknowledgement The Norwegian Maritime Administration states (in part): "The maritime administration recommends that such flotation devices be employed on discharge hose to ensure that they float on the surface, and subsequently reduce the risk that the discharge hose is drawn up into the propeller causing loss of maneuverability."





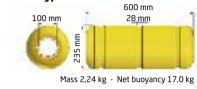
FlowSafe produced from environmentally friendly Bacell™ material

FlowSafe hose flotation devices are manufactured from **BACELL**[™] - an ethylene vinyl acetate (EVA) material made according to our in-house developed raw material recipe. BACELL[™] is a highly shock absorbent, strong and elastic material with 100% watertight cells. Relative to its strength, BACELL[™] has very low density, resulting in high buoyancy. To the highest possible degree, the outstanding elasticity of the **BACELL**[™] material prevents FlowSafe from shrinking, deforming or breaking.



FlowSafe Type 4

120 mm



600 mm

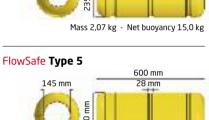
28 mm





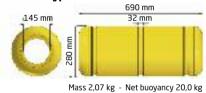
FlowSafe flotation devices are formed like a wrapping that can be opened along a lengthwise split. This makes FlowSafe easy to mount around the hose.

FlowSafe can be held in place by adequate fastening devices, such as metal or plastic strips which fit into the grooves around the outer perimeter of the flotation device. Being recessed inside the grooves, the securing strips are largely protected from being damaged.



Mass 2,07 kg - Net buoyancy 15,0 kg

FlowSafe Type 5L



Туре	Length inches	0.D. inches	I.D. inches	Groove inches	Mass pounds	Buoyancy pounds
3	23.62	9.25	3.94	1.10	4.93	37.5
4	23.62	9.25	4.72	1.10	4.56	33.0
5	23.62	9,45	5.70	1.10	4.56	33.0
5L	27.16	11.02	5.70	1.26	4.56	44.1

0.D. = Overall Diameter I.D. = Inner Diameter Allowance +/-5%.







FlowSafe is suitable for use offshore as well as in ports, on canals, lakes and rivers.



The **Polyform MF-series** are the ultimate fenders for maximum protection of boats in marinas and floating docks. The fenders can be mounted in any position to most materials. There are no need for air filling or maintenance.

The **MF-series** are made from **BACELL**® - a foam material that has been used in the professional market for over 20 years. **BACELL**® is a 100% closed cellfoam that cannot puncture and thus will not soak any water. Will not deteriorate in the sun, and will not stain your boat.



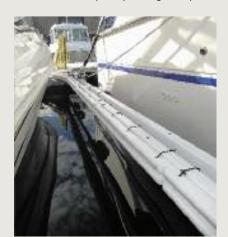
The **MF44** and **MF60** can be cut, curved, twisted, formed and shaped without loosing it's unique qualities.



The MF-series are delivered plasticwrapped or in sales displays with fittings and mounting instructions enclosed.

> The MF fenders are produced in a foam material that will not puncture or absorb water. They can be sawn, screwed and drilled into. They can easily be mounted in most places fendering are required.

OLYFORM



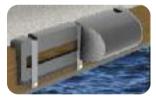


The MF44 Marina Fender is our smallest dock fender list for boat protection. It's easily attached to most docks by use of mounting brackets (included) and 4 appropriate screws. Can be formed to cover corners and bends. Will not deteriorate in the sun, will not mark your boat.

MF60 Marina Fender is the ideal protection - mounts easily to most docks by use of mounting brackets (included) and 4 appropriate screws. Can be formed to cover corners and bends. Will not deteriorate in the sun, will not mark your boat.

The MBF150 Marina Bumper is the most heavy-duty type of Marina Fender, designed for maximum protection of the bow/stern when mooring and during boarding. Delivered with mounting brackets.

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Art.No.	Length mm	Height mm	Depth	Standard colors
MF44	940	85	44	$\bigcirc ullet$
MF60	1000	140	60	$\bigcirc igodot$
MBF150	650	200	130	



MBF150 Marina Bumper comes with a reinforced mounting bracket system.



MF44 and MF60 may be mounted in numerous ways.



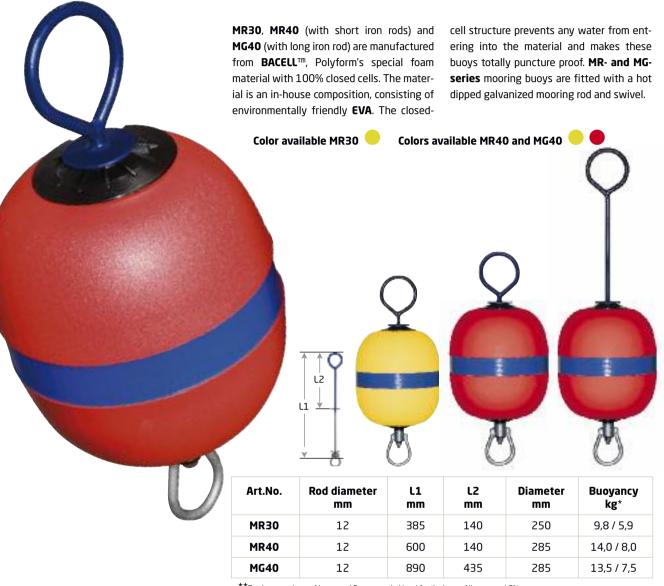
MF44 mounted to a outrigger by use of plastic strips.



MFB150 mounted using the enclosed brackets.

MR/MG-series

Non-inflatable Mooring Buoys



**Total gross volume of buoys and Recommended Load for the buoy. Allowance +/-5%.



Only the lower swivel (under water) shall be used for mooring. Do not expose the buoy to a load of more than 60% of its total buoyancy. All moorings shall be checked for wear and tear at least twice a year.





Non-inflatable Hard-Shell PE Products

The Polyform hard-shell products are rotationally molded buoys, pontoon floats and custom made products produced from PE (Polyethylene). These are mainly buoys for mooring – but included is also a significant range of different other products like different size and design pontoon floats, tanks, containers and customer tailored products.

Buoys for mooring are usually filled with polystyrene foam (EPS) and may also be offered filled with polyurethane foam (PUR). For further info see page 40.



Most hard shell PE products come with EPS foam filling, but can alternatively be supplied with different qualities of polyurethane (PUR) foam. Some products are intended to be used without foam, but can be supplied with various foam qualities on request.



Expansion of the EPS foam is done by using heat, and requires experienced operators.



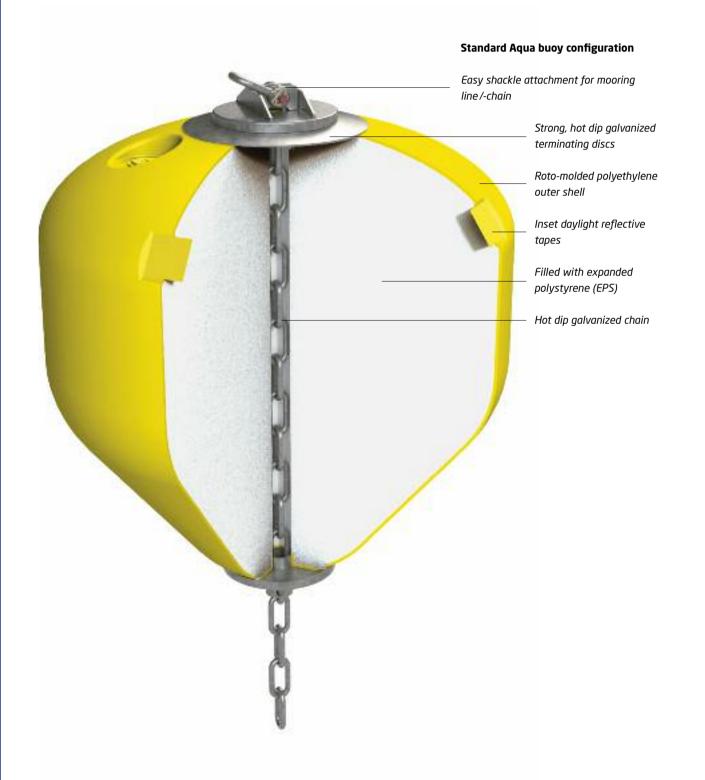
Mooring- spring- and light buoys are available with various fittings in galvanized steel. In addition, we make fittings to customer specifications.

Aqua-series Eishery WORK BOAT

Mooring and Spring Buoys

The Aqua series buoys are rotomolded from polyethylene (PE) with an extra heavy wallthickness of 8mm and filled with polystyrene foam (EPS), or polyurethane foam (PUR) depending on the application. The hot dip galvanized steel armatures and chain varies from application to application depending if it is for aquaculture, offshore, surface, sub-surface or other installations.







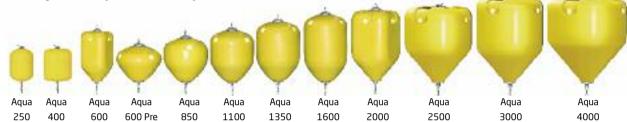
Aqua-series configured for fish farming/aquaculture

The Aqua-series buoys are made from a rotomolded PE outer shell and filled with polystyrene (EPS) foam, guaranteeing a compressive strength of 5 mH²O and a density of 25kg /m3.

The continuous high quality chain is terminated at either end of the buoy by use of terminating discs that are designed to prevent damage to the buoy. The chain is easily attached by shackle to the anchor line. All wear parts are standard components and can easily be replaced. Aqua-series buoys are designed for surface use and they are equipped with four yellow, daylight reflective tapes for better visibility. Armature and also a radar reflector can be supplied on demand and can also be mounted afterwards.



PRODUCT CERTIFICATE Complies with the requirements for strength and safety according to Marine fish farms NS 9415 (Norwegian Standard).



Туре	Volume in liter	Weight in kg	Net buoyancy kg	Length in cm	Diameter in cm	Light armature option
Aqua 250	260	32	228	113	65	no
Aqua 400	450	45	400	110	77x77	no
Aqua 600	620	55	560	165	77 x 77	no
Aqua 600 Pre	620	60	560	127	120	no
Aqua 850	873	73	800	143	120	yes
Aqua 1100	1130	95	1035	165	120	yes
Aqua 1350	1380	118	1262	188	120	yes
Aqua 1600	1640	130	1510	213	120	yes
Aqua 2000	2020	180	1900	228	117 x 117	yes
Aqua 2500	2550	210	2340	210	160	yes
Aqua 3000	3050	235	2815	235	160	yes
Aqua 4000	4075	285	3790	235	194	yes

Other sizes on request. Allowance +/-5%.



Aqua-series other configurations

The Aqua-series can easily be custom made, specially designed to meet the needs of the customer. They can be equipped with different steel armatures, different dimensions of continuous chain through the center, and different materials adapted to the use either on the surface or submerged to various depths. Polyform has an experienced research and development department and can in cooperation with the customer come up with the desired solutions.







APB-series



The APB-series represents a modular series of buoys, designed for surface or for sub-surface use, rotomolded from polyethylene (PE) and filled with polystyrene foam (EPS), polyurethane foam (PUR) or other materials depending on the application. The buoys are equipped with hot dip galvanized steel armatures, 4 fulllength hot dip galvanized steel bolts and continuous chain through the center. The steel armatures and chain vary from application to application depending on whether it is for aquaculture, offshore, surface, sub-surface or other installations.

Standard color

INSHORE & MARINA



The modular system allows for sections to be added / removed as needed.



APB-series configured for fish farming/aquaculture

The APB Aqua buoys are rotomolded from polyethylene (PE) and filled with polystyrene foam (EPS), designed for surface use and equipped with yellow, daylight reflective tapes on all 4 sides. In addition to the continuous chain through the center, the buoys are secured with 4 full-length hot dip galvanized steel bolts. The buoys are designed

to form a modular system and individual sections can therefore be added or, if necessary be removed from the assembly, to adapt to different buoyancy needs. The buoys **PRODUCT CERTIFICATE** include an integrated pipe as part of the top disc, allowing for light and different other of *Ns 9415* (Norwegian Standard). equipment easily to be mounted.



Complies with the requirements for strength



Туре	Weight in kg	Net buoyancy kg	Length in cm	Width in cm	Light armature option
Aqua 500 APB	85	495	72	117 x 117	yes
Aqua 1000 APB	145	1015	139	117 x 117	yes
Aqua 1500 APB	255	1500	109	180 x 180	yes
Aqua 2200 APB	280	2200	145	180 x 180	yes
Aqua 3000 APB	400	3000	194	180 x 180	yes
Aqua 4400 APB	590	4400	245	180 x 180	yes
Aqua 6600 APB	890	6400	335	180 x 180	yes
Aqua 8000 APB	1685	8215	529	180 x 180	yes
Aqua 10000 APB	1975	10325	529	180 x 180	yes

Other sizes on request. Allowance +/-5%.





APB Light-series configured for fish farming/aquaculture

The Aqua APB Light series is designed for use in sheltered waters.

The APB Light series is rotomolded from polyethylene (PE) and filled with polystyrene foam (EPS), designed for surface use and equipped with yellow daylight reflective tapes on all 4 sides. In addition to the continuous chain through the center, the buoys are secured with 4 full-length hot dip galvanized steelbolts. The buoys are designed to form a modular system and individual sections can therefore be added or, if necessary be removed from the assembly, to adapt to different buoyancy needs. Mounting bracket for marking lights, configured for fish farming/aquaculture, is integrated in the top disc of the buoys.



PRODUCT CERTIFICATE Complies with the requirements for strength and safety according to Marine fish farms NS 9415 (Norwegian Standard).







Aqua 4400 APB Light



Aqua 2200 APB Light

5666 711 5 61611

Aqua 6600 APB Light

Туре	Weight in kg	Net buoyancy kg	Length in cm	Width in cm	Light armature option
Aqua 2200 APB Light	240	2325	145	180 x 180	yes
Aqua 3000 APB Light	375	3110	194	180 x 180	yes
Aqua 4400 APB Light	510	4615	245	180 x 180	yes
Aqua 6600 APB Light	720	6815	335	180 x 180	yes

Allowance +/-5%.





APB-series other configurations

The APB buoys are produced with steel armatures for offshore applications, filled with polystyrene foam (EPS), polyurethane foam (PUR) or other materials depending on the application (see page 32). The buoys can easily be custom made, specially designed to meet the needs of the customer. They can be equipped with different steel armatures, different dimensions of continuous chain through the center, and different materials adapted to the use either on the surface or submerged to various depths. Polyform has an experienced research and development department and can in cooperation with the customer come up with the desired solutions.

APB modular system allows the construction of buoys in many varieties

MB-series



Mooring Buoys

The MB-series buoys are mainly used for mooring, marking of fishing gear and cables, pipelines, and different other surface installations. The MB-series buoys are rotomolded from polyethylene (PE) and filled with polystyrene foam (EPS), guaranteeing a compressive strength of 5 mH2O and a density of 25 kg /m3.

The buoys come complete with hot dip galvanized armature and swivel.



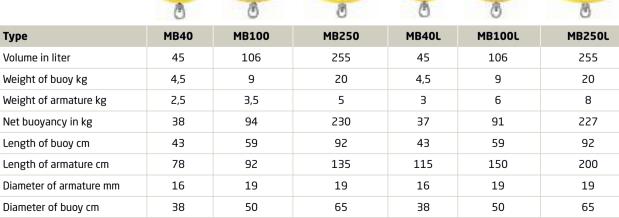


Only the lower swivel (under water) shall be used for mooring. Do not expose the buoy to a load of more than 60% of its total buoyancy. All moorings shall be checked for wear and tear at least twice a year.





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Allowance +/-5%.

LB-series



Light Buoys



Light-buoys

The LB-series light-buoys are used for marking of fishing equipment as well as fish farms, moorings, cables, pipelines and many different other surface or submerged installations. The LB-series buoys are rotomolded from polyethylene (PE) and filled with polystyrene foam (EPS). The buoys are made to accommodates the Jotron® MF1114 light-armature. In many cases the bracket can be adjusted to accommodate also different other standard models / types of lightarmatures. The buoys come complete with hot dip galvanized armature and swivel.

Туре	LB100	LB250
Volume in liter	105	250
Weight of buoy kg	10	25
Net buoyancy in kg*	92 / 82	225 / 215
Length of buoy cm	110	120
Length of light-armature cm	170	170
Diameter of mooring-armature mm	20	20
Diameter of buoy cm	50	65

*Exclusive of light armature / inclusive of Jotron MF1114 light-armature. Allowance +/-5%.

Standard color 🧲

Custom colors available.

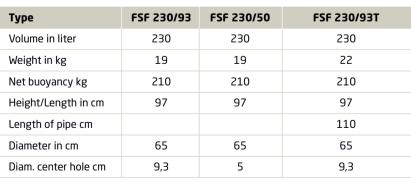
FSF-Series	AQUA CULTURE	INSHORE & MARINA
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Pontoon Floats



Cylindrical pontoon floats for various applications

The FSF-pontoon floats are constructed from an outer, 6mm strong roto-molded PE shell that is filled with polystyrene foam (EPS). As a standard, these pontoon floats come with a 93mm or 50mm center hole. Different other dimensions can be produced to order. For the standard product, the center hole is manufactured as a passage directly through the foam filling. As an alternative – if required and on demand – a plastic pipe can be welded in.



Allowance +/-5%.

Custom colors available.

SBH-buoys Mussel Farm Buoys





Buoys specially developed for mussel farming

The SBH buoys are specially developed and designed for mussel farming. This due to features like the ability to withstand tear and wear and, very importantly, featuring the highest breaking load for the ropehold. Environmentally correct GRAY colored, cylindrical in shape and with a sleek surface that makes these buoys also ideal for locations exposed to ice.

Standard color Custom colors available.

Туре	SBH120	SBH250
Volume in liter	120	250
Weight in kg	6	12
Net buoyancy kg	114	238
Height cm	90,5	118
Diameter cm	50	65
Eyelet in Ropehold cm	5	5
Breaking strength kg*	2500	3500

* Refers to short-time exposure to load. Allowance +/-5%.

LSB-buoys **Light Spring Buoys**





Light spring-buoys

The LSB-buoys are constructed from an outer, roto-molded PE shell that is filled with polystyrene foam (EPS). The LSBbuoys are designed for surface use.

Special measures have been taken to ensure the product's ability to withstand wear and tear and highest possible breaking load for the ropehold.



LSB120	LSB250
120	250
10	19,5
110	230
90,5	118
50	65
5	5
2500	3500
	120 10 110 90,5 50 5

* Refers to short-time exposure to load. Allowance +/-5%.

HDF-series Heavy Duty Fenders



Strong, durable air-filled fenders for commercial crafts. Produced in one piece with extra reinforced ropeholds. The HDF fenders are roto-molded from a strong, 8 mm thick semi-soft thermo-plastic mater

Standard color

Custom colors available.



Туре	HDF9	HDF10	HDF11	HDF12	HDF30
Volume in liter	140	210	265	400	1750
Weight in kg	11	18	20	30	85
Net buoyancy kg	129	192	245	370	1665
Height cm	120	160	145	185	235
Diameter in cm	50	50	65	65	117
Eyelet in ropehold cm	5	5	5	5	6
Reaction force in kN *	36	53	48	82	214

* At 60% deflection



High abrasion resistance and light weight. Resistant to seawater, cleaning agents, common solvents, mineral oil and UV-light.





Pontoon for floating marina systems

The pontoon floats are mainly produced with polystyrene as secondary buoyancy. In case of damage to the products the solution with polystyrene foam will maintain the buoyancy of the pontoon float until due service is done.

The pontoon floats are suitable both for marina producers and DIY (do it yourself). One of the advantages for the marina producers to use standard products is low development cost in the establishment phase. We can also offer custom molding of special designed pontoon floats for defined applications





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Volume in liter	80	200	420	1100
Weight in kg	10	18	30	50
Net buoyancy kg	70	182	390	1050
Height in cm	59	54	55	79
Length in cm	70	140	175	143
Width in cm	22	25	50	98

Allowance +/-5%.

Туре

Subsea Mooring and Buoyancy Systems

Due to the fact that Polyform[®] is one of the companies in Europe with the widest range of different in-house production processes in the business, we are proud to offer a variety of solutions for Subsea applications.

Our skilled engineers are dedicated to provide seamless buoyancy solutions. We possess a solid experience in the transforming of thermo-plastics, be it by rotational molding, extrusion, injection molding or a combination of the same.

The Polyform[®] hard shell polyethylene (PE) products are rotationally molded buoys, proven to be a highly durable material. Buoys for mooring are usually filled with polystyrene foam (EPS) or polyurethane foam (PUR), depending on project specification and depth.

The largest type of buoys Polyform[®] can offer are made by assembling modular, hard shell "building blocks" – held together by use of hot dip galvanized armatures and top- and bottom plates. These large buoys are being designed and assembled individually, completely tailor made to each project.

Although consisting of the same core materials, we have a new design development in the Polyform Sub Flowsafe, a hose flotation device for subsea applications. With the hard-shell exterior and tailor-made details for standard bunker hoses and their drum diameter, the Polyform Sub Flowsafe both takes care of the fluid transfer and protects the hose efficiently.

In addition to this our entire range of inflatable products can be filled with PUR foam and has an excellent durability. Each product can be adapted to its specific purpose, enabling Polyform[®] to offer a wide range of solutions consisting of well-proven technologies. For more detailed information of our Buoyancy Systems, please contact us.

Polyform offers a solid experience in transforming of thermo-plastics, be it by roto molding, extrusion, injection molding or blow molding, or a combination of same.

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By combining our different production techniques with our in house knowledge of plastics materials, our skilled engineers and technicians are well prepared to be your partner in developing also products that in size and shape may deviate from the standard products shown in this catalogue.

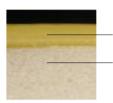


Sub Modular Buoyancy

The **POLYFORM® PE100** modular buoyancy is made from a rotomolded PE outer shell and filled with polyurethane (PUR) foam, with compressive strength for a variety of depth ratings.

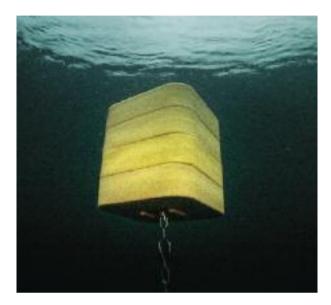
The continuous high quality chain is terminated at either end of the buoy by use of hot dip galvanized steel terminating discs that are designed to prevent damage to the buoy. The chain is easily attached by shackle to the anchor line. All wear parts are standard components and can easily be replaced.

These modular buoys are designed for submerged and surface use and they can be equipped with four yellow, daylight reflective tapes for better visibility.



Rotomolded high impact PE outer shell.

Polyurethane (PUR) foam, with compressive strength for a variety of depth ratings.



Standard color:



Max depth rating		SMB100 1 modules	SMB100 2 modules	SMB100 3 modules	SMB100 4 modules	SMB100 5 modules	SMB100 6 modules
epth	Dimensions (LxWxH)	77x77x24 cm	77x77x44 cm	77x77x64 cm	77x77x84 cm	77x77x104 cm	77x77x124 cm
ax de	Gross volume	110 L	220 L	330 L	440 L	550 L	660 L
×							
Max -10 m	Weight	18 Kg	33 Kg	48 Kg	68 Kg	78 Kg	93 Kg
Max -	Net buoyancy at depth rating	92 Kg	187 Kg	280 Kg	370 Kg	472 Kg	567 Kg
Max -30 m	Weight	24 Kg	46 Kg	66 Kg	88 Kg	108 Kg	130 Kg
Max	Net buoyancy at depth rating	87 Kg	175 Kg	265 Kg	350 Kg	442 Kg	530 Kg
Max -70 m	Weight	28 Kg	53 Kg	78 Kg	108 Kg	129 Kg	155 Kg
Max -	Net buoyancy at depth rating	82 Kg	165 Kg	250 Kg	330 Kg	421 Kg	505 Kg
Max -500 m	Weight	63 Kg	124 Kg	184 Kg	208 Kg	305 Kg	365 Kg
Max -!	Net buoyancy at depth rating	46 Kg	95 Kg	145 Kg	230 Kg	245 Kg	295 Kg

Sub FlowSafe-Series



Hose Floatation Device



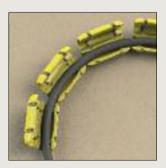
The POLYFORM® Sub FlowSafe is made from a rotomolded PE outer shell and filled with polyurethane (PUR) foam, guaranteeing a compressive strength of 500 mH20.

The Sub FlowSafe series are equipped with stainless steel hinge and clamp. All steel parts are placed within the outer diameter of the complete float.

A synthetic rubber gasket locks the Sub FlowSafe in position. Fitted onto a hose with a distance of 25mm, the internal profile of the Sub FlowSafe still allows winding the hose with clamps mounted to a drum with diameter of 1,8m.

Standard color:

Туре	Length	Diameter	Inner diameter	Weight (nominal)	Gross volume	Min. drum diameter	Max working depth	Buoyancy at -500m
Hose OD80	480 mm	200 mm	79-82 mm	5,5 Kg	9,13 L	1,8 m	-500 m	3,5 Kg
Hose OD95	480 mm	200 mm	93-96 mm	5,5 Kg	9,13 L	1,8 m	-500 m	3,5 Kg



The sub flowsafe is equipped with stainless steel hinge and clamp.



The Sub Flowsafe is made from a rotomolded PE outer shell and filled with polyurethane (PUR) foam, quaranteeing a compressive strength of 500 mH20

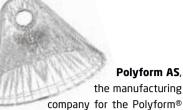


A synthetic rubber gasket locks the Sub flowsafe in position.



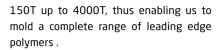
Fitted on to a hose with a distance of 25mm, the internal profile of the Sub Flowsafe still allows winding the hose with clamps mounted to a drum with a diameter of 1,8m

Development and Customization From idea-phase to finished products



products, is a highly competent roto-molder, experienced in molding hard- as well as soft thermo-plastics. An extensive assortment of different shape and size products have been part of the production range for now close to 60 years.

In addition, Polyform has one of the most comprehensive injection-molding manufacturing facilities in Norway. Our modern, closed loop-control machines range from



Our total manufacturing capabilities also include blow-molding, extrusion, expansion and forming products from different types of foam materials, ultrasonic welding and even decoration, in addition to roto-molding and injection molding.

Our skilled engineers and technicians through their specialized knowledge and expertise - can assist you in the research and development phase of your project. We can produce construction drawings, 3-D drawings, mold design - and we can assist with the construction and machining of production molds/tools.

Combining our different production techniques and adding specialized techniques, such as structural foam and gas assisted molding technologies may give you, our customer, the edge you need to be the leader in your market place.

From idea-phase to finished products: Try us!



Years of experience in selecting the right raw materials for each particular product has provided us with vital knowledge.

Foam Filling

The majority of our hard-shell products are filled with a foam-material, either an expanded-polystyrene (EPS) or a polyurethane (PUR) type of foam.

Most of our products – hard-shell products as well as soft plastic buoys and fenders can be filled with foam, if desired and for special applications.

Whereas many of the hard-shell products can be supplied with a filling of either EPS or PU foam, the soft plastic products (= inflatable types) can be filled with PU



foam only. This will be a rigid/hard type of PUR foam, NOT a soft type.

As a general rule, a product filled with EPS foam is intended for use on the surface only. The EPS foam is not intended for sub-surface use and will not stand up to the compression force when submerged. The PU foam we offer can be formulated and supplied in a variety of different densities, suitable for surface use and can also be specially designed for submerged use.



Foam-filling will add to the weight of the product, resulting in a loss of buoyancy equal to the weight of the foam injected into the product. The higher density of the foam - the higher the weight.

It is of the highest importance to clearly define the conditions and use the foamfilled products are intended to be used in – only then can we determine the correct type and density of foam to be used for that particular product and its intended application.

Foam density will determine the product's features. From lightweight EPS for surface use, to high density PUR qualities for subsea use. We have the knowhow!

Customized products

Based on existing products, we can make customized installations.



Custom-molded products

In addition to standard products Polyform AS can offer a wide range of customized products and custom molding of special products. Skilled engineers and technicians - through their specialized knowledge and expertise - can assist in the research and development phase on projects. Polyform AS can produce construction drawings, 3-D drawings, mold design - and assist with the construction and machining of production molds/tools.



Polyform Values

POLYFORM - a relationship you will value

You can trust us

We strive to meet your needs to your satisfaction. All parts of our company deliver as promised.

Our dedicated staff holds a high level of competence

Our highly qualified staff and management, with extensive experience, are here for you.

We focus on quality and innovation

High standards, a solution driven approach and customer based innovation ensures high quality products. This is the key to long term relations with our customers and suppliers.

Together, we create tomorrow's opportunities

Exploiting our common knowledge and expertise makes this possible.

We are here to stay!

We have grown sustainable for 60 years. We will continue to build and sustain long term value for our stakeholders.



Polyform[®] is situated in the north-western part of Norway, in an area known for having one of the world's most innovative environments within the maritime industry. Polyform[®] products are distributed to all parts of the globe.



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