

END USER MATRIX v1		Marine Shipping		Pleasure Craft (Consumer)		Off-shore Oil & Gas		Marine Renewable Energy		Marine Renewable Energy		Aquaculture	
		Hapag-Lloyd		Various		Bluewater		Bluewater		Minesto		Val	
		Minimum/Must have	Desirable/Nice to have	Minimum/Must have	Desirable/Nice to have	Minimum/Must have	Desirable/Nice to have	Minimum/Must have	Desirable/Nice to have	Minimum/Must have	Desirable/Nice to have	Minimum/Must have	Desirable/Nice to have
Application	Applied to	Main Hull, Rudder	Propeller blades, Niche areas	Main Hull, Rudder	Propeller blade, Running gear	FPSO hull, Platform legs, Buoys	Niche areas, Mooring lines	Body, Blades	Mooring lines, Buoys	Body, Tether	+ Base	Flexible Nets	Wire Nets, Mooring Lines, Buoys
	Substrate Material	Steel	N/A	Wood, Glass reinforced plastic	Carbon Fibre, Aluminium, Concrete	Steel	Polypropylene. Polyethylene, Polyurethane	Steel + GRP	Nylon, Polyethylene	Carbon Fibre	+ Aluminium, Polyurethane, Concrete	Nylon	Nylon, polyethylene
	Preparation	Grit blasted (full/spot)	Degreaser only	Mechanical abrade	Hand abrade, None	Grit blasted (full/spot)	None for pre-fabricated parts	Grit blast or hand tooling	None	Hand tooling	None	Water or solvent wash	None
	Technique	Airless spray	Brush, Roller	Brush, Roller	Aerosol, Air assisted spray	Airless spray	Brush, Roller	Airless spray	Untented, On site	Airless spray	Untented, On site	Dip coat (2,000L - 10,000L tank)	-
	Conditions	5 - 25C	-10 - 35C	5 - 25C	0 - 35C	5 - 25C	-10 - 35C	5 - 25C	0 - 35C	5 - 25C	0 - 35C	5 - 25C	0 - 35C
	Thickness, Appearance, etc.	200 um dry film	High gloss, Smooth	High aesthetics	High gloss, Smooth	-	His visibility for certain areas	Bright, < 1mm	Yellow	Bright, < 1mm	Yellow	No change to mesh size	-
	Dry time, Flood time, etc.	12 Hours	6 Hours	12 Hours	6 Hours	12 Hours	6 Hours	12 Hours	6 Hours	12 Hours	6 Hours	12 Hours	6 Hours
	Health and Safety considerations	Suitable for professional application	None	Suitable for consumer application	None	Suitable for professional application	None	Suitable for professional application	None	Suitable for professional application	none	Suitable for professional application	None
Performance	Biofouling target species	Shell, Weed	+ Biofilm (slime)	Shell, Weed, Soft	+ Biofilm (slime)	Shell, Heavy Soft	+ Weed & Biofilm (slime)	Shell & Biofilm (slime)	+ Oysters	Shell, Weed, Soft	+ Biofilm (slime)	Mussels, Hydroids, Seasquirts, Algae	-
	Fouling release target	<20 knots	<10 knots	< 8 knots	< 4 knots	Easy clean, Cleanable by tool	Easy clean, Cleanable by hand	< 10 knots	< 5 knots	< 10 knots	< 5 knots	150-200 Bar hose	Low pressure hose
	Fouling deterrence target	21 days	90 days	28 days	180 days	Less important than easy clean	-	Less important than easy clean	-	Less important than easy clean	-	Equal to current	1.5 years
	In-service environment	Deep sea	Coastal, River	Coastal, River, Freshwater Lakes	Canals, Inland waterways	Seawater	-	Seawater	Seawater, Brackish, River, Fresh	Seawater	Brackish	Sea	Fresh, Brackish, Salt
	In-service monitoring	Dive inspection, Engine efficiency	-	Visual inspection of hull	Speed and manoeuvrability	Routine dive inspection, Load cells	-	Visual inspection of body	Efficiency of turbine	Device efficiency	ROV inspection	Visual inspection of net, Fish health	-
Features	Abrasion	As existing FR	As existing BAF or ACP (Anchor, Chain, Fender)	As existing FR	As existing BAF or ACP (Fender, Hoist straps)	As existing FR	As existing BAF or ACP (Ropes, Chains, Tugs)	As existing FR	As existing BAF ACP (Sand, Grit, Debris)	As existing FR	As existing BAF ACP (Sand, Grit, Debris)	Resistance to haulage	Resistance to chewing by fish
	Adhesion	To dedicated tie coat	To ACP or prepared steel	To dedicated tie coat	To ACP or prepared substrate	To dedicated tie coat	To ACP, prepared steel or plastic	To dedicated tie coat	To ACP, prepared steel or plastic	To dedicated tie coat	To ACP, prepared steel or plastic	To dedicated tie coat	Direct to net
	Corrosion	> 15 years	> 25 years	> 10 years	> 20 years	Harsh salt C5M	> 25 years	> 15 years	> 25 years	> 15 years	> 25 years	-	-

	Exposure	Sea water, Fresh water, UV	Oil, Diesel	Sea water, Fresh water, UV	Oil, Diesel, Detergent	Sea water, Fresh water, UV	Oil, Diesel	Sea water, Fresh water, UV	Oil, Diesel	Sea water, Fresh water, UV	Oil, Diesel	Sea water, Fresh water, UV	Oil, Diesel
	Temperature resistance	0C - 30C	<0C	0C - 35C	-	0C - 30C	Arctic exploration	0C - 30C	-	0C - 30C	-	0C - 30C	-
	Flexibility	No cracking on immersion or temp cycling	-	No cracking on immersion or temp cycling	-	No cracking on immersion or temp cycling	Mooring lines capable of being coiled	No cracking on immersion or temp cycling	Coiled mooring lines, Blade flexing	No cracking on immersion or temp cycling	Tether flexing , Body/Wing flexing	No change to net flexibility	-
	Legislative	IMO compliant	Solvent emissions directive	As existing	Superior environmental footprint	As existing	Superior environmental footprint	As existing	Superior environmental footprint	As existing	Superior environmental footprint	As existing	Biocide free
Usage	Performance Lifetime	4 - 5 years	7 - 10 years	1.5 years	4 - 5 years	25 years	25 + years	5 years	10 - 15 years	5 years	20 years	1.5 Years	3 - 4.5 Years
	In-service maintenance/repair	Dive and clean	-	waterline via long brush	-	Dive and clean	Underwater repair	Dive and clean	Underwater repair	Dive and clean	Underwater repair	Dive and clean	Underwater repair
	Out-of-service maintenance/repair	Dry dock: Spot blast and full scheme	Dry dock: Finish touch up	Lift & Dock: Clean and localised repair	Lift & Dock: Clean only	Dry dock: Spot blast and full scheme	Dry dock: Finish touch up	Lift & Dock: Clean and localised repair	Lift & Dock: Clean only	Lift & Dock: Clean and localised repair	Lift & Dock: Clean only	Lift & Haul: Clean and replace	Lift & Haul: Clean only
	Removal	Grit blast	Hyrdoblast	Abrasive blast	-	As part of decommissioning	-	Grit blast	Hyrdoblast	Grit blast	Hyrdoblast	Rotary cleaner, Solvent bath	-
	Recoating	Overcoated by suitable sealer/tie coat	High pressure freshwater wash and degrease	Overcoated by suitable sealer/tie coat	High pressure freshwater wash and degrease	Overcoated by suitable sealer/tie coat	High pressure freshwater wash and degrease	Overcoated by suitable sealer/tie coat	High pressure freshwater wash and degrease	Overcoated by suitable sealer/tie coat	High pressure freshwater wash and degrease	High pressure freshwater wash and degrease	High pressure freshwater wash
	Notes					Inspection and cleaning paid by leasee		Blades not body are key		Tether not usually fouled			

FR = Fouling Release, BAF = Biocidal Antifouling, ACP = Anticorrosive Primer