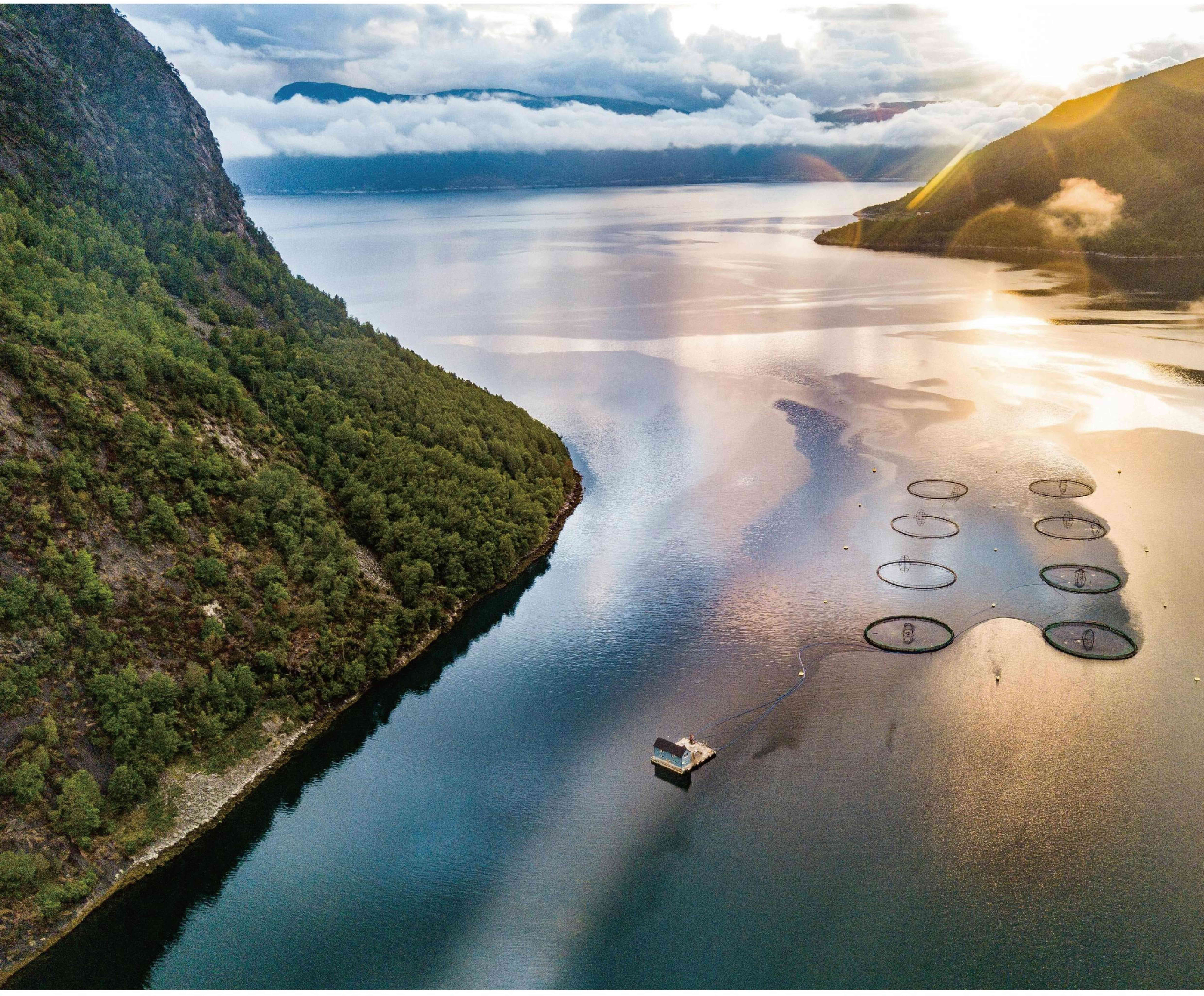
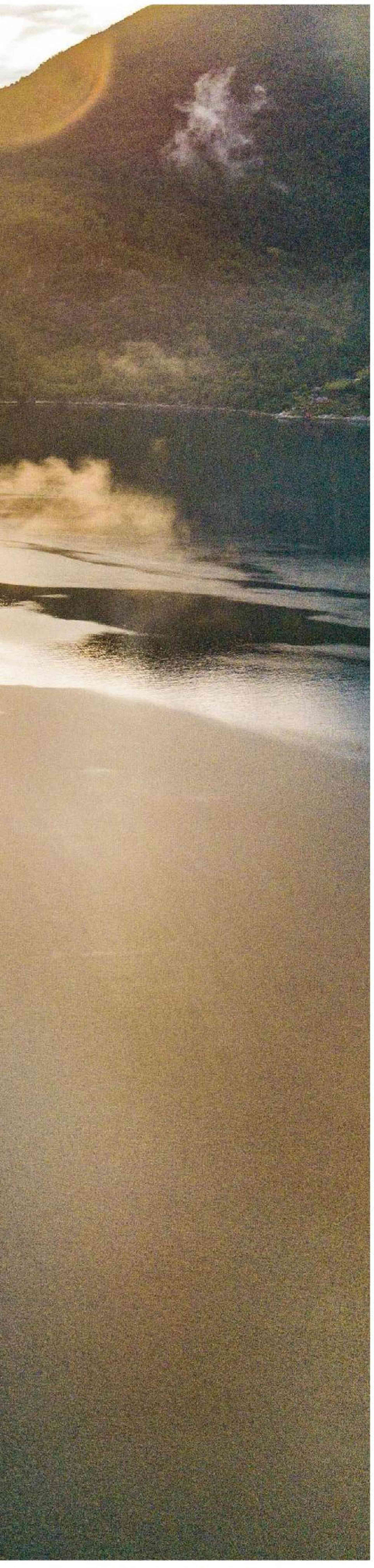
SMEOCEAN

AQUACULTURE
FISHERY

Committed to Mooring Safety



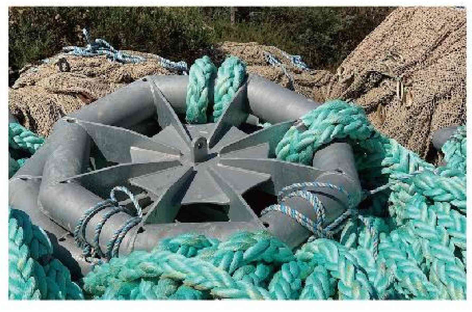


AQUACULTURE

01. MOORING PLATE/MOORING RING
02. FIBER ROPE
03. MASTER LINKS AND RINGS
04. MOORING CHAIN
    - ANCHOR CHAIN
    - LONG LINK CHAIN
05. THIMBLE
07. ANCHOR
08. MOORING SHACKLE
09. T BOLT & ROCK PIN

MOORING PLATE

Mooring Connection Plates are manufactured using an Alloy Grade material and followed by a full “Heat Treatment” process.
Alternatively, SME can offer Mooring Connection Plates to cope with extreme ocean conditions manufactured with an “HDG” Surface or “ZINGA” offering an environmental friendly cathodic protection.
The manufacturing process is in accordance with NS 9415:2009 (Marine Fish Farms)
SME are also able to offer a bespoke design service based on your individual requirements or customers’ drawings.

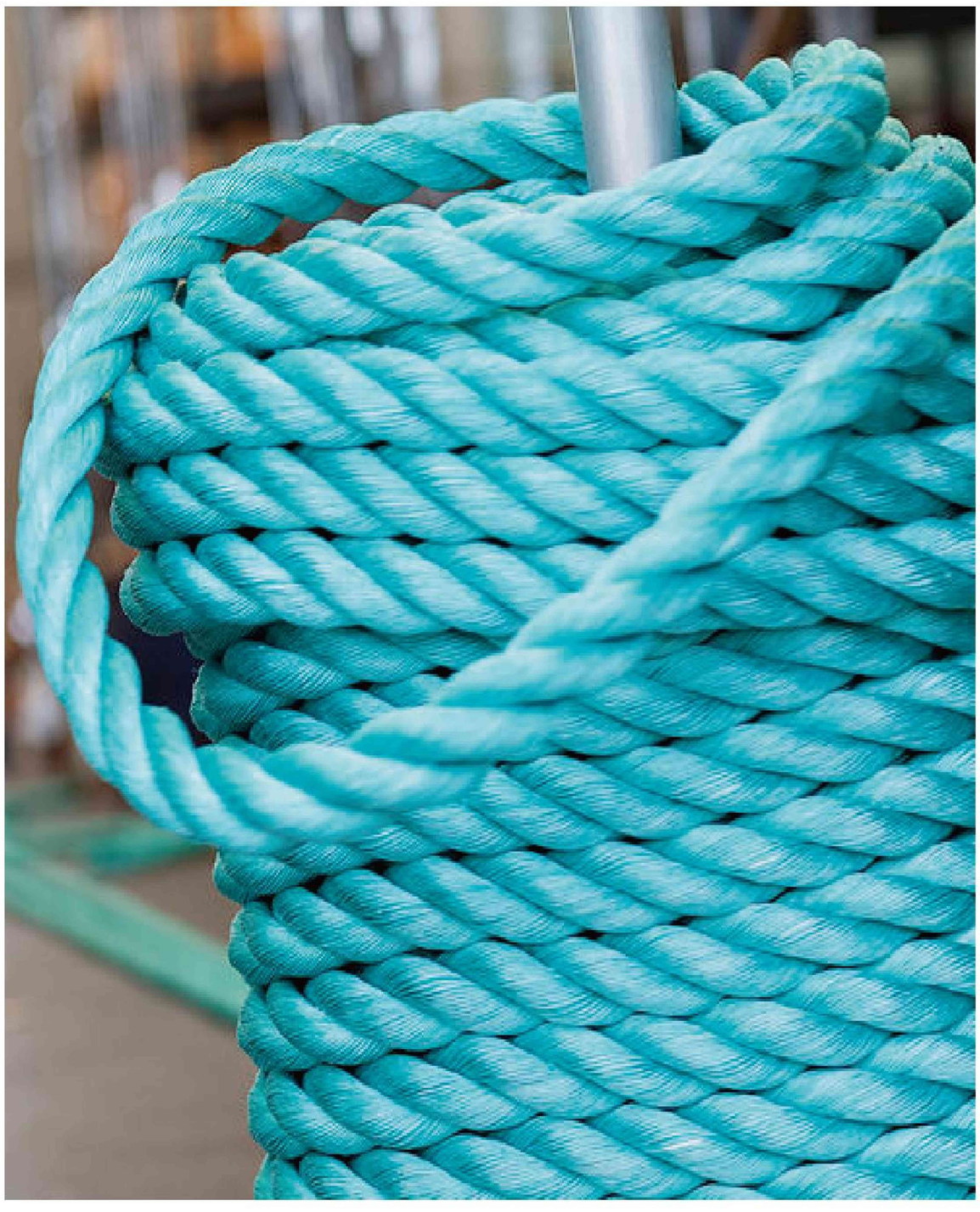


MOORING PLATE			
Type	MBL	Thickness mm	Weight kg
12-holes	60T	26	60
16-holes	90T	40	125
16-holes	150	70	230

FIBER ROPE

Ropes from SME are selected from qualified manufacturers that have delivered to Marine and Aquaculture industry for many years. Ropes made of combination use of high quality polyolefin fibre provide good wear resistance, UV performance as well as good hand splicing efficiency.

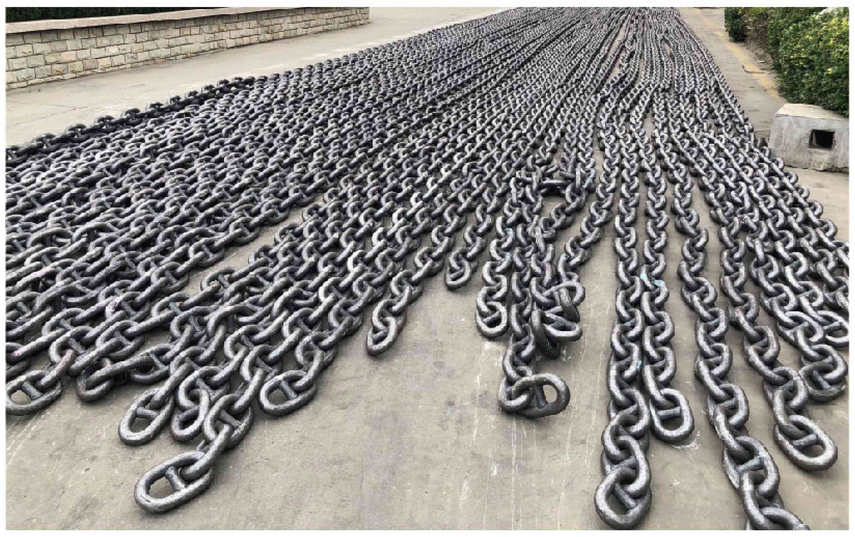
- 3 Strands & 8 Braided Mooring Rope available.
- Diameter 32mm to 96mm



MASTER LINKS AND RINGS

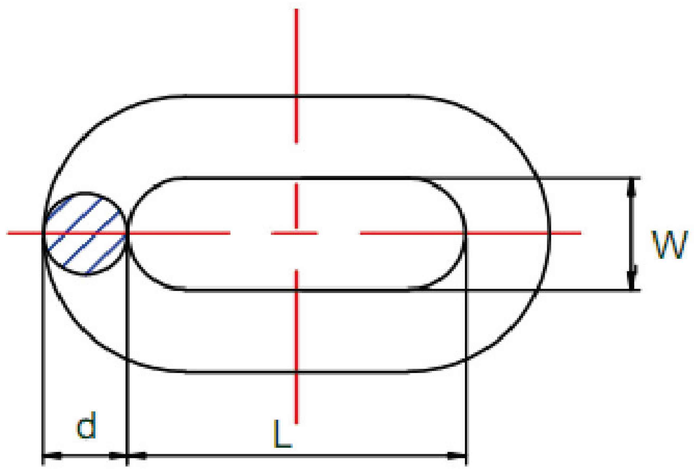
Made of High Alloy Steel with quenched and tempered.
Each master link has been Proof Tested and random Breaking Test and NDT also carried on site.
Surface: HDG or Powder Coating.

Dia	WLL	Weight	Inside L	Insdie W
7/8”--22mm	8	1.63	180	100
1”--25mm	11.50	2.13	180	100
1-1/8”--28mm	12.50	3.81	270	140
1-1/4”--32mm	16.00	5.05	270	140
1-3/8”--36mm	21.20	6.83	285	155
1-1/2”--40mm	25	8.9	300	160



ANCHOR CHAIN

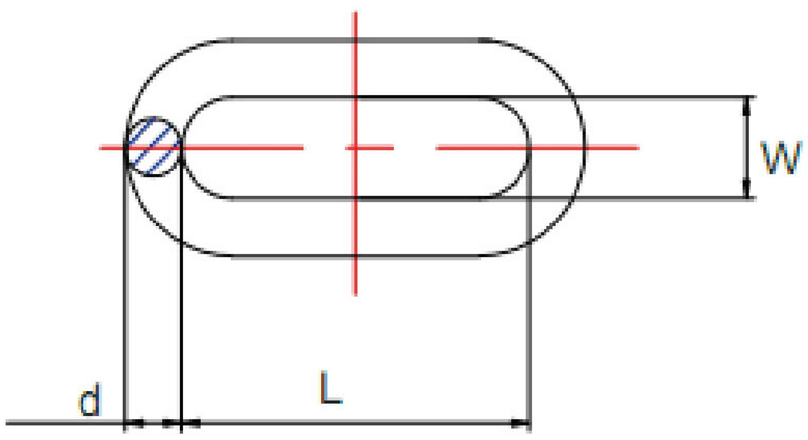
Anchor chain is an important composition of Aquaculture Mooring System, which is required to be with good quality. As a Professional Chain Provider, SME are able to offer mooring chain up to 122mm in Grade 2 and Grade 3. Our 17 years manufacture experience together with ISO9001 system make sure all chain links proof loaded and therefore support the cage system to tolerate winds and weather at the most extreme.
Classification society certificate from DNV.GL, BV, NK, KR & CCS is available upon requested.



Diameter	Dimensions			MBL
mm	d	L	W	KN
30	30	120	45	467.5
32	32	128	48	531.2
36	36	144	54	672.3
38	38	152	57	748.7
40	40	160	60	829.1
48	48	192	72	1195.6

HDG Long Link chain

HDG Long Link Chain are delivered in both painted Grade 80 and HDG finish Grade 60. With safety in mind SME carefully manufacture and test every single link. Each order supplied by SME is completely traceable and well documented.
The manufacturing process is in accordance with NS 9415:2009 (Marine Fish Farms).

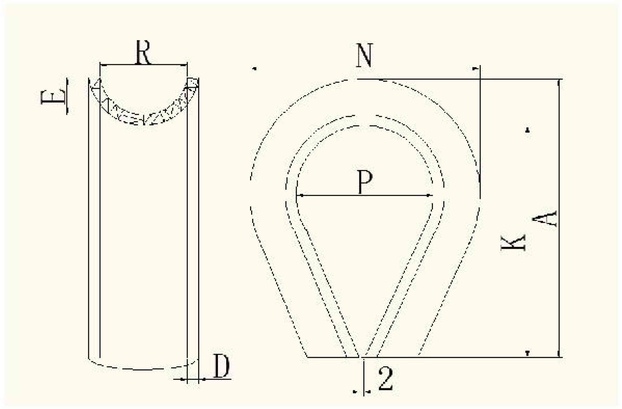


Diameter	Dimensions			MBL
mm	d	L	W	KN
13mm	13	80	26	155
16mm	16	100	26	235
19mm	19	100	28	333
22mm	22	120	37	447

THIMBLE

K3

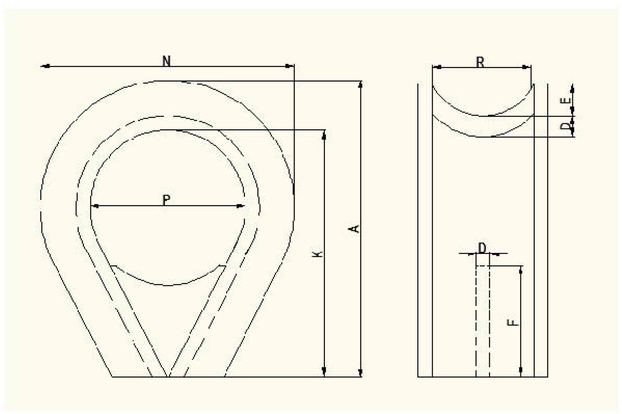
THIMBLE



SPEC	A	N	P	K	D	E	R	kg
5″	127	110	65	95	5	20	40	0.78
6″	152	120	75	115	6	34	48	1.3
7″	178	140	85	140	6	28	56	1.8
8″	203	160	105	1260	8	32	64	3.2
9″	229	180	110	175	10	36	72	5
10″	254	200	120	190	10	40	80	6.1
11″	279	220	145	210			88	8
12″	305	245	150	230			102	10
14″	356	300	170	290			115	16
16″	406	320	185	310			130	20
18″	457	350	205	340			150	30
20″	508	380	235	370			170	56

K3B

THIMBLE



SPEC	A	N	P	K	D	E	R	F
6″	152	120	75	115	7	24	48	40
7″	178	140	85	140	7	28	56	55
8″	203	160	105	160	8	32	64	55
9″	229	180	110	175	10	36	72	65
10″	254	200	120	190	10	40	80	70
11″	279	220	145	210	12	45	88	65
12″	305	245	150	230	14	51	102	80
14″	356	300	170	290	14	58	115	120

4 SQUARE THIMBLE

THIMBLE

TUBE

THIMBLE

	MAX	TOTAL	REEL	INNER	MATERIAL	PACK
	ROPE DIA	LENGTH	HEIGTH	WIDTH	THICKNESS	KG/PIECE
G255	40 MM	11 1/2"=298	55 MM	85 MM	7 MM	5,95
G260	44 MM	12"=308	60 MM	86 MM	7 MM	6,85
G265	48 MM	12 1/2"=312	65 MM	88 MM	7 MM	7,20
G270	56 MM	13"=332	70 MM	90 MM	7 MM	7,60
G275	64 MM	13 1/2"=342	75 MM	94 MM	7 MM	8,30
G285	72 MM	17 1/2"=450	88 MM	130 MM	10 MM	20,11
G295	80 MM	19 1/2"=500	94 MM	150 MM	10 MM	24,85
G2105	92 MM	21 1/2"=550	107 MM	190 MM	10 MM	30,43
G2110	96 MM	24"=600	112 MM	200 MM	14 MM	50,4
G2120	104 MM	26"=650	120 MM	220 MM	16 MM	68,8
G2140	115 MM	30"=750	140 MM	240 MM	20 MM	110

ANCHOR

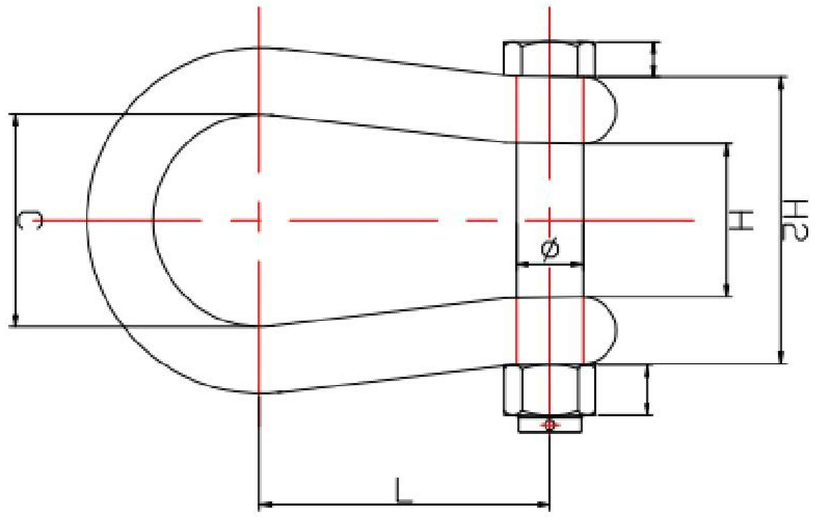
Anchors of various design can be manufactured. SME are able to offer a custom design service based on your individual requirements or customers' drawings.
Our following procedure enable a high performance anchor:
Customer Demand
Our Design
Small Scaled Tested
Tuning and Large Scaled Test

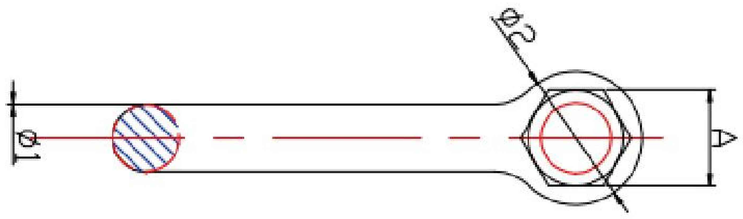
Including

- Plough Anchor/ Sand Anchor
- Dual Shank Anchor
- ADA Anchor
- Others to inquiry

MOORING SHACKLE

Our Mooring Shackles are manufactured from alloy grade steel. Each individual mooring shackle from SME has been produced by following ISO9001 Quality Control System. With our years know- how on forging, heat treatment and hot dip galvanized, it is ensured the shackle avoid any Hydrogen Embrittle-ment and offer a long fatigue life of safe performance.
The manufacturing process is in accordance with EN13889, NS 9415:2009 (Marine Fish Farms) and NYTEK.





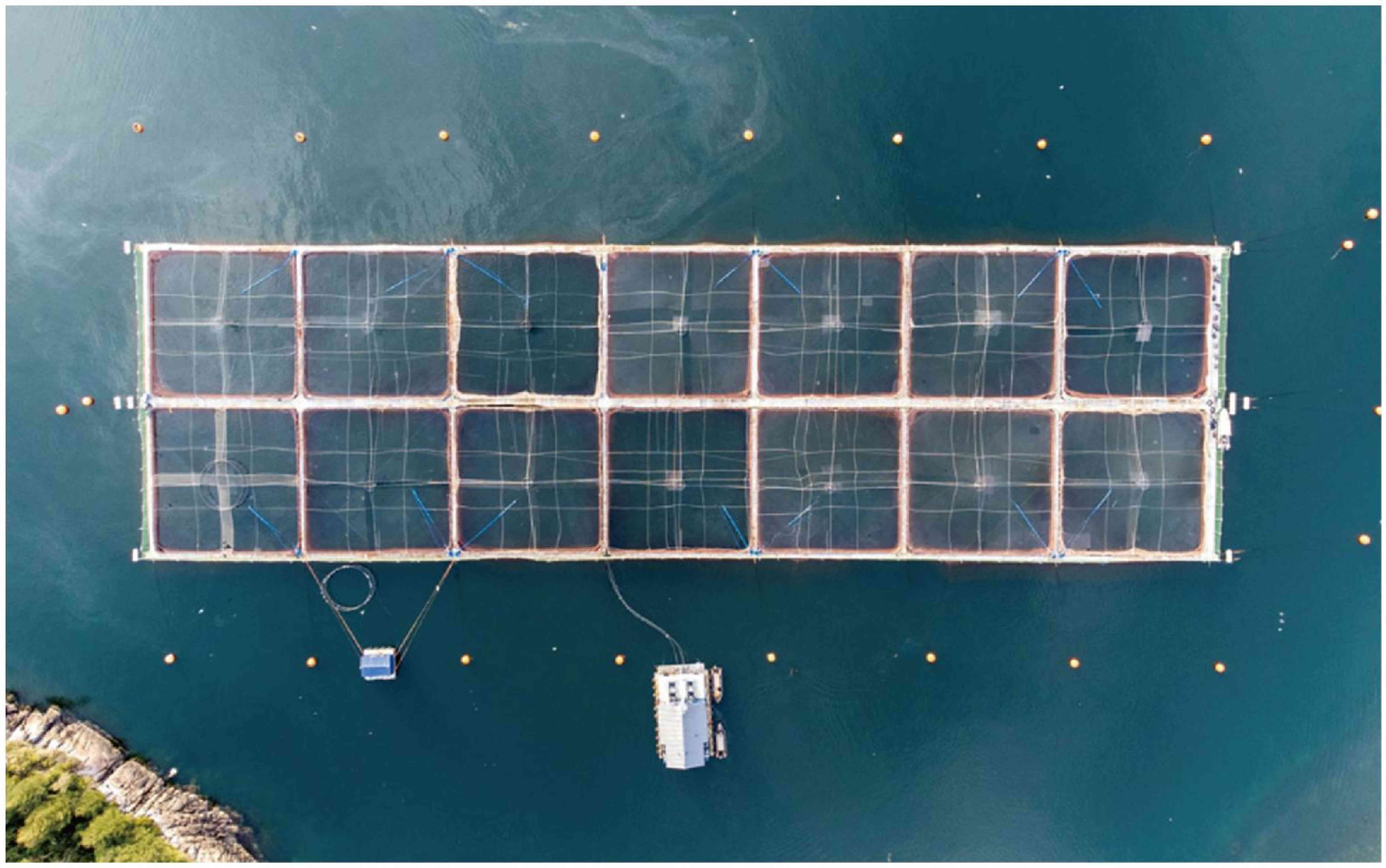
Product name	BL	A	C	L	H	H2	Ø	Ø1	Ø2	M
Mooring Shackle 40T	40T	36	68	104	52	96	25	22	50	22
Mooring Shackle 60T	60T	40	89	122	64	120	28	28	65	28
Mooring Shackle 90T	90T	49	107	145	82	146	32	32	72	32
Mooring Shackle 150T	150T	74	152	192	126	226	50	50	105	50

T BOLT ROCK PIN

Material: Alloy Steel with Quenched and Tempered
Finish: Hot Dip Galv.

T Type ROCK PIN		
SIZE φ	Length mm	MBL
32mm	400	40T
35mm	400	50T
38mm	500	60T
45mm	600	80T
50mm	700	100

EYE ROCK PIN		
SIZE φ	Length mm	MBL
32mm	400	40T
38mm	500	60T
45mm	600	80T



FISHERY ACCESSORY

11. FISHING TRAPS

12. FISHING CHAIN

13. ACCESSORY

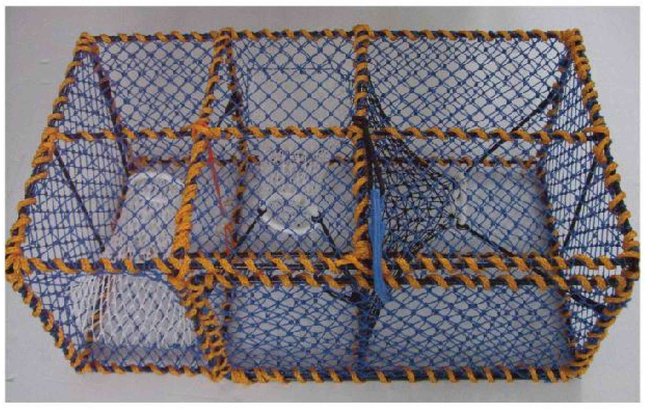
15. R&D

16. BUSINESS SCOPE

FISHING TRAPS

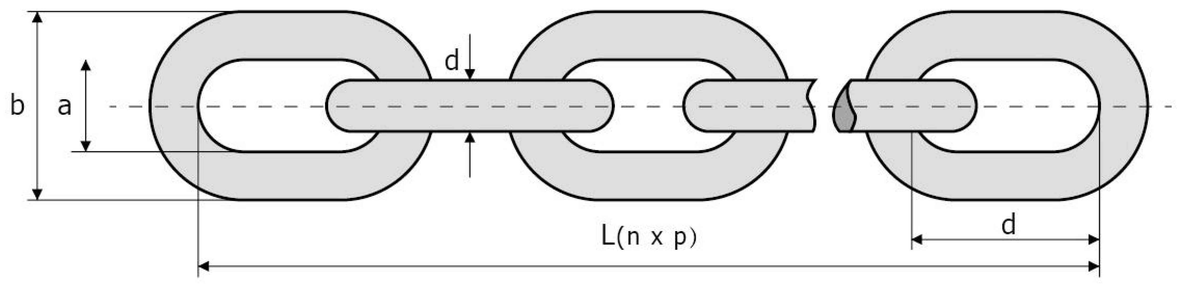
Our 30 years of experience in hand crafted lobster pot and other traps make sure the customer always receive the best goods in term of cost and quality. OEM and Bespoke design are offered to individual requirement.

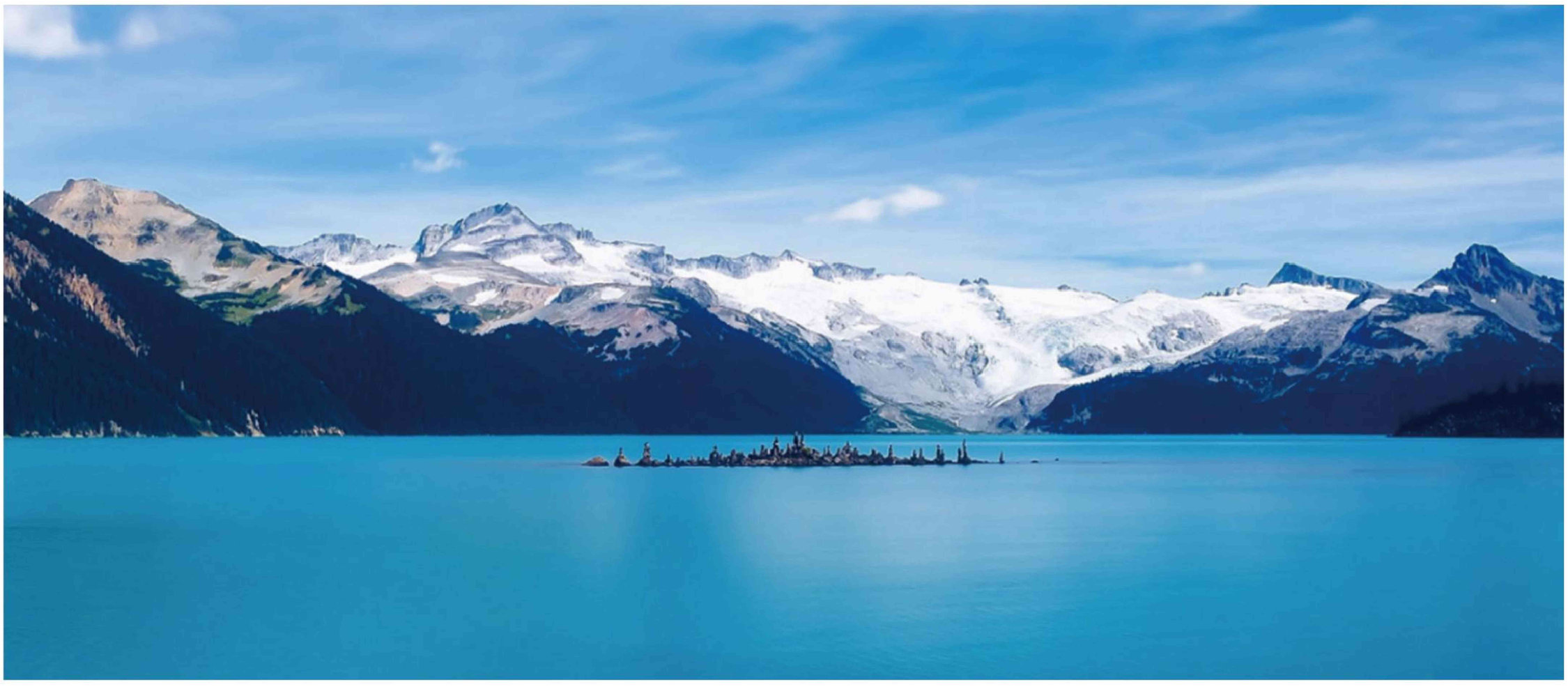
- Lobster Pot
- Snow Crab Pot
- King Crab Pot
- Prawn/Crayfish Creel



FISHING CHAIN

- Material: Alloy Steel
- Surface: Painting, Hot Dip Galv, Powder Coated
- Grade 60, 70 and 80
- Marking: SME Traceable System and Customer Demand
- Size: 8-28mm, Short Link Chain, Mid Link Chain and Long Link Chain
- Contact our sales for more technical information.





ACCESSORY

SME offers hardware to fishing and aquaculture industry. The products are both manufactured by our own group factories and selected leading manufacturers.

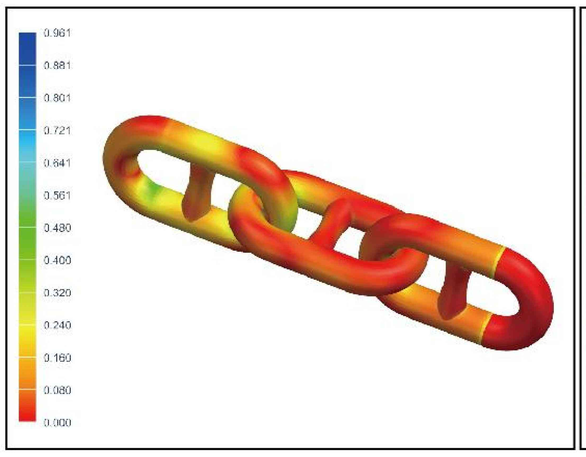
Quality Control
Our chemical and physical lab enable all products be tested to an international standard. The test facilities including 3 in-house test benches up to 1200 tons capacity and a serious of chemical spectrum equipment. The tested products are accompanied by certificates and are fully traceable.

ACCESSORY

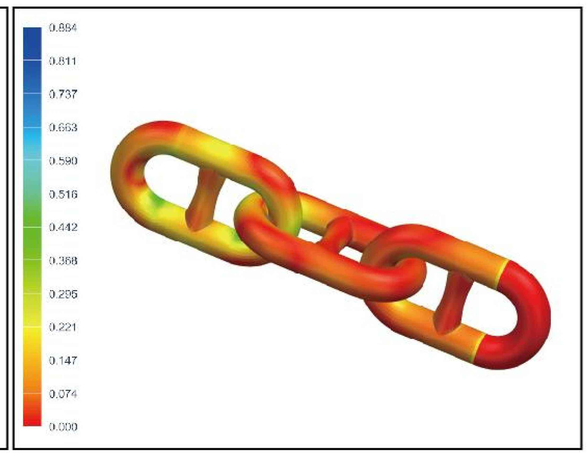
R&D

We manufacture products integrated with idea and innovation that finally benefit to our customers. Our In-House Engineer team has years of experience in material metallography, dynamic mechanical analysis etc. We are open ears to your thoughts and likely to provide custom design to individual requirements.

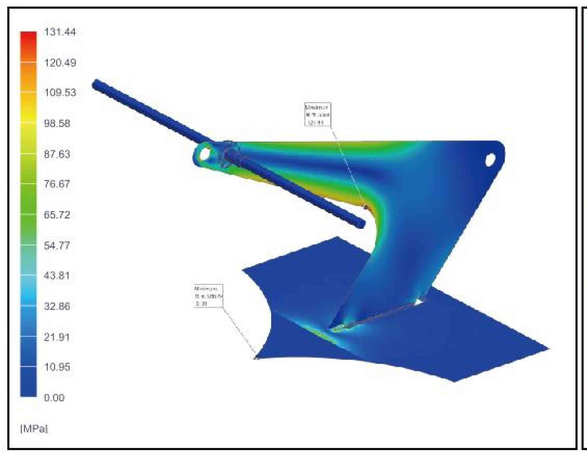
FATIGUE FAILURE INDEX(87MM STUD LINK CHAIN GRRADE 2)



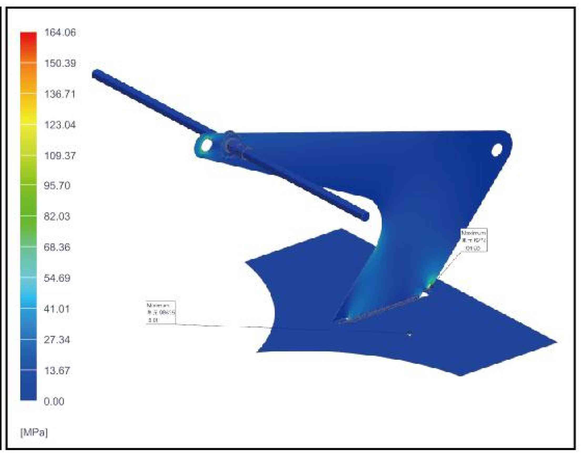
FATIGUE FAILURE INDEX C3 (87MM STUD LINK CHAIN GRADE 3)



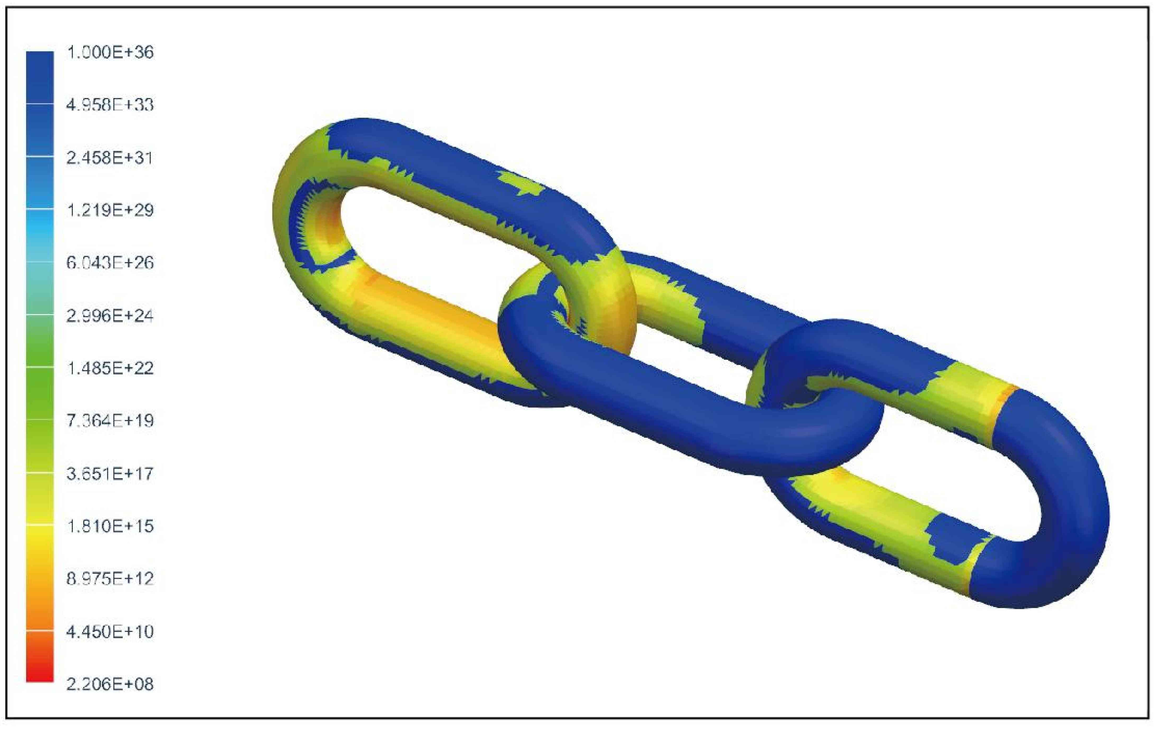
STRESS OVERVIEW IN LOAD CASE C2



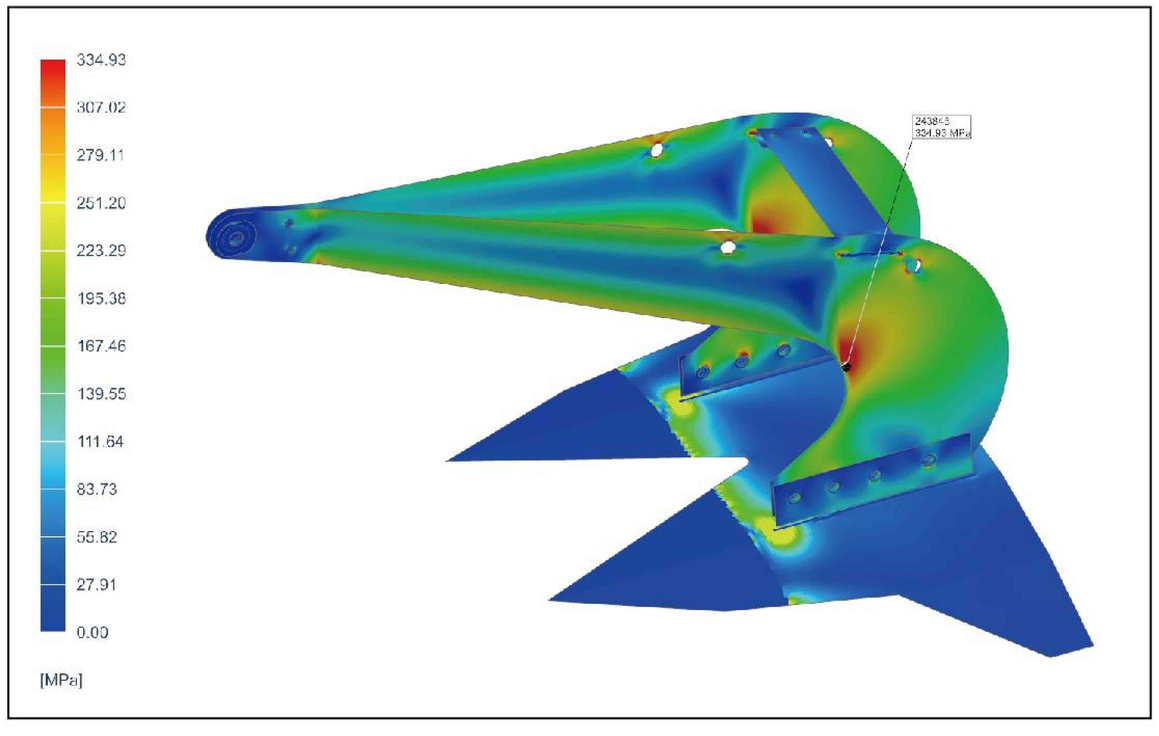
STRESS OVERVIEW IN LOAD CASE C3.1



FATIGUE LIFE C4 (87MM STUDLESS CHAIN GRADE 3)



STRESS OVERVIEW IN LOAD CASE C2



BUSINESS SCOPE

SMEOCEAN

www.smeocean.com

Sinostar Marine Equipment Co., Ltd.
Add: No.8B Hong Kong Middle Road, Qingdao, China
Email: sme@smeocean.com
T: +86 532 66888282 M: +86 18562520522