



CHING FA

FISHING IMPLEMENTS FACTORY CO., LTD.



PELAGIC FISHERY

- AMERICAN TUNA PURSE SEINE NETS
- MONOFILAMENT LONGLINE
- SAURY NET



SEA FARM

- FLOATING CAGE
- FLEXIBLE CAGE
- SET NET



AGRICULTURE

- AGRICULTURE NET
- ANTI - BIRD NET
- FLOWER NET



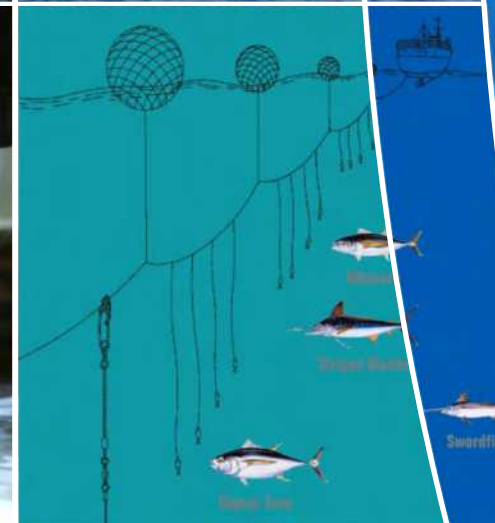
SPORTS AND SAFETY

- GOLF NET
- SAFETY NET
- CAMOUFLAGE NET



NET DESIGN AND ASSEMBLY

- CAST NET
- GILL NET
- TRAMMEL NET



慶發漁具工廠股份有限公司
CHING FA FISHING IMPLEMENTS FACTORY CO., LTD.



MAIN OFFICE / FACTORY:
NO.1-2, SHING NUNG ROAD, TUNGKANG,
PINGTUNG, TAIWAN



TEL:(886)-8-8331100-9 FAX:(886)-8-8327022 • 8322690
E-MAIL:export@chingfa.com.tw

<http://www.chingfa.com.tw>

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rely on, and cooperate with forever.



COMPANY PROFILE

公司簡介

- 1948** The startup stage. The first factory was set up by Chen's brothers in a modest fishing town, called Tungkang area, lying to the south of Taiwan. They started the production of cotton thread/yarn only for the domestic market under the brand name - Rose.
- 1961** We established a new factory on Chen Hai Road to meet the increasing demand.
- 1967** The factory adopted a modern organization structure, purchased new machines and produced nylon twines. Net weaving machines were also brought in from Japan to produce nylon fishing nets.
- 1969** Collaboration with a famous net weaving factory from Japan further improved technical skills and product quality. The finished products were exported all over the world including Japan, North America, Central and South America, Europe, Africa and Australia and etc.
- 1970** Due to our outstanding export performance, the Ministry of Economic Affairs frequently awarded us with trophies. Another new factory on Shing Nung Road was also set up to capture the international markets.
- 1994** Invested USD 20 million in Vietnam to establish Ching Fa Co., Ltd. (Vietnam), where it encompassed a space of 75,000 square meters.
- 1995** Started setting up the Vietnam factories and brought back 40 Vietnamese to Taiwan as trainees. Hired computer personnel and procured computer equipment to set up computer networks.
- 1996** Completed the Vietnam factories and started exporting from there.
- 1997** Reinvested the latest webbing machines, CAD type, from TOYO KOYO, Japan.
- 2002** We were certified with ISO 9001 - 2000.
Increased land space in vietnam by 25,000 square meters, along with a project of expanding the factory being under way. Meanwhile, total amount of investment was increased up to 24 million US dollar.
- 2003** Completion of expanding the factory in Vietnam, with production of Raschel knotless nets being added.
- 2004** Ching Fa merged Chin Sheng in January in Taiwan, with Ching Fa being the existing company. After the merger, totally registered capital was turned into 7.43 million US dollar.
In August, its totally registered capital was increased up to 8.18 million US dollar shortly after a reserved profit 0.75 million US dollar was added.
- 2005** The project of scrap-and-buy on machines and equipments was moving forward in Vietnam.
- 2006** The factory in Vietnam was honorably certified with ISO 9001-2000.
- 2007** The factory in Taiwan was renewed with an increase of cash 0.72 million US dollar, making its totally registered capital up to 8.90 million US dollar.
- 2011** Reinvested the latest Raschel knotless webbing machines and extruder machines in Vietnam to increase its productivity.
- 2012** Reinvested the latest twisting machines in Vietnam.
- 2015** Reinvested the latest webbing machines in Taiwan (GTA type, made by AMITA in Japan); registered capital in Taiwan is increased to 13.5 million US dollar; factory in Vietnam will finish the project of increasing webbing machines and other facilities; the project of expanding factory in Taiwan is under way now.

Endless upgrading the technology as well as rationalizing the work is our management philosophy. So, we are not proud at all, though our quality products have been getting popular domestically and globally; though we remain the biggest manufacturer of gears not only in Taiwan but Vietnam.

Indeed, we do not think we are successful unless all of our customers worldwide are fully satisfied with our quality, price, delivery and after-service.

To reach more perfect quality products, we continue exerting strict quality control, research, innovation and continuously update the testing equipments to justify our quality products. That is why we have gained positive response from our customers worldwide.

Thus, we are quite confident on the future; we also continue making progress, hoping that someday in the future we can realize the dream: Ching Fa is a kingdom of fishing gears.



Ching Fa-Taiwan



Ching Fa-Vietnam

- 1948 年：**陳氏兄弟在南台灣東港鎮新生二路的慶進二廠白手起家開始生產玫瑰牌棉紗並銷售全台各地。
- 1961 年：**遷移到東港鎮鎮海路(慶發廠)總廠擴大生產。
- 1967 年：**改組為公司組織，並添購各式機器設備生產尼龍漁線，及從日本引進新式編網機生產尼龍漁網。
- 1969 年：**與日本著名織網廠技術合作，藉以進一步提升技術水準及產品品質，由於信譽卓越，產品外銷至世界各國，包括日本、北美洲、中南美洲、歐洲、非洲、澳洲等地。
- 1970 年：**年年外銷實績屢獲我國經濟部頒獎表揚。
因為業務不斷成長，原慶發廠總廠外，又增建東港鎮興農路慶進廠來分別負責製造美式大型圍網及無結網，相互配合開發市場。
- 1994 年：**該年1月由董事會通過赴越投資美金二千萬元，設立慶發越南廠。
該年7月由越南政府核准投資執照，設立工廠於越南同奈省仁澤縣綏夏工業區，面積 75,000 平方公尺。
- 1995 年：**慶發越南廠正式動土興建廠房，並甄選越籍儲備幹部共四十名赴台訓練，延聘電腦人員並採購各式電腦設備進行網路系統化作業。
- 1996 年：**慶發越南廠完成第一批貨品外銷裝櫃作業。
- 1997 年：**再次引進日本最新型編網機CAD型號。
- 2002 年：**慶發台灣廠取得榮譽認證 ISO 9001-2000；越南廠投資金額增加為美金二千四百萬元，土地面積增加 25,000 平方公尺。
- 2003 年：**越南擴廠完成，增加生產無結網。
- 2004 年：**一月台灣慶發公司併購慶進公司成為存續公司，並將資本額增加為美金743萬元；同年八月，再盈餘轉增資美金75萬元，使公司登記資本額達到美金818萬元。
- 2005 年：**慶發越南廠進行機器設備汰舊換新計劃。
- 2006 年：**慶發越南廠取得榮譽認證 ISO 9001- 2000。
- 2007 年：**慶發台灣廠現金增資美金72萬元，登記資本額提高為美金890萬元。
- 2011 年：**越南廠完成擴增無結編織機台與抽絲機台計畫，提高總產能。
- 2012 年：**越南廠完成擴增編織線生產機台計畫。
- 2015 年：**台灣廠完成擴增日本GTA型編網機計畫；資本額提高為美金1350萬元；越南廠完成擴增編網機台計畫；台灣廠目前正在擴建中。

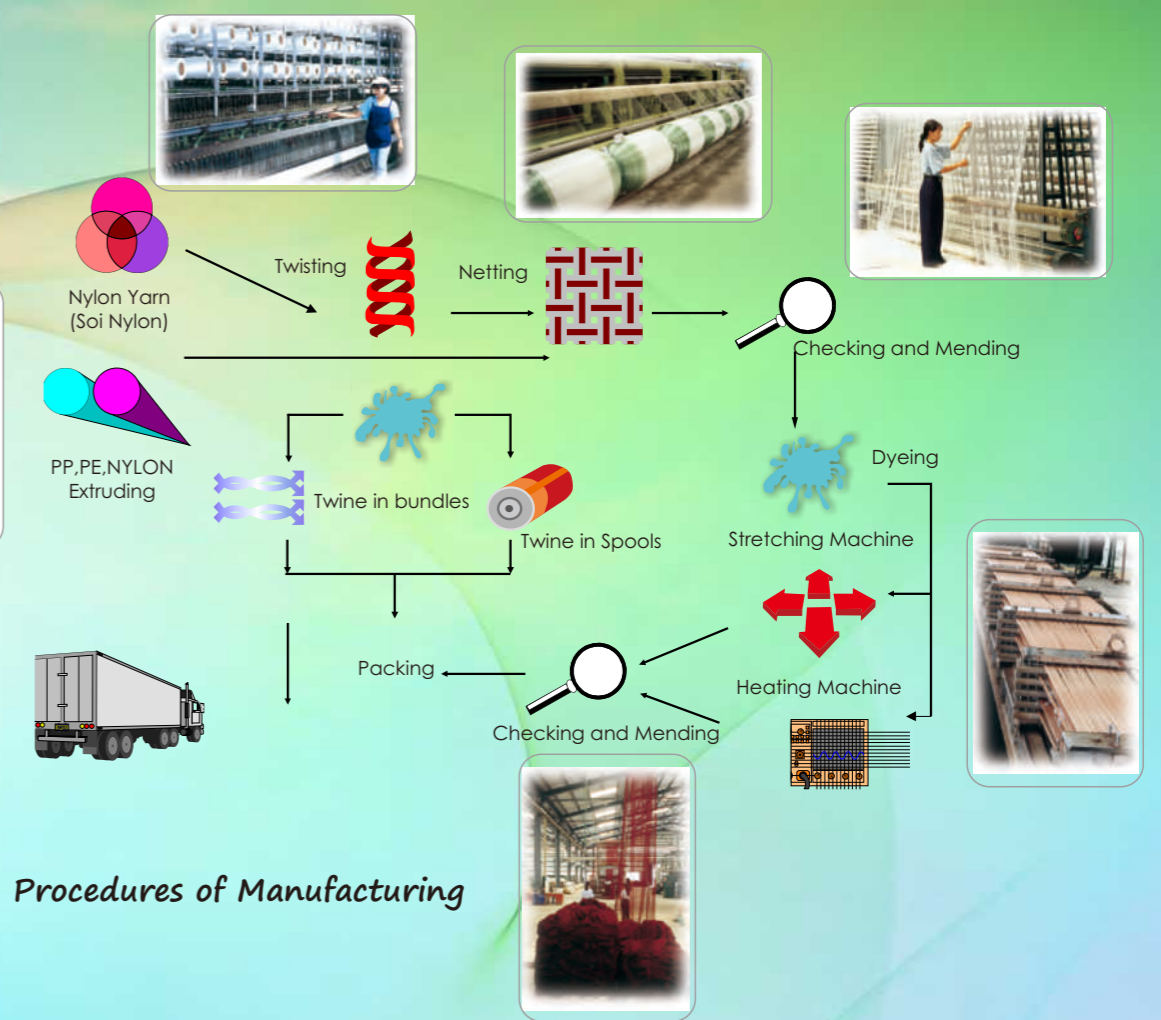
永無止盡的追求技術提昇，及工作合理化是公司一貫秉持的經營理念，雖然我們在台灣甚至世界漁網製造業界上，已頗負盛名，但我們絲毫不以為傲，因為只有我們的客戶都對我們的產品極為滿意時，那才是我們成功的所在及追求的目標。為了追求更完美的品質，嚴格的品質管制，並不斷的引進各式最先進科技的測試設備及研究開發各種新產品，是我們從不放鬆的工作，而這也使得我們多年以來，不僅產品暢銷東南亞各國，更在歐美各地擁有極佳的銷售網路及良好的信譽。另外在國內，各類新的網具需求亦不

斷的在增加當中，如沿海漁場的定置網、箱網、三腳虎網等等。對於未來，我們充滿信心，也嚴格的督促自己要不斷的進步，期待在世界網具界中，建立起一個永不搖墜的製網王國，帶給所有的使用者更多、更實用、更高品質的網具。





Procedures of Manufacturing



MANAGEMENT BELIEF:



Customer's Satisfaction

We produce up-to-date fishing gears for the fishery and fish-farming industries. Our production is based on flexibility and is tailor-made to satisfy customers.

Environment And Responsibilities

Environment protection, sustainable fishing, and security considerations are at the heart of CF. We integrate these concepts into every aspect of our innovation, planning, purchasing, manufacturing, marketing and after-service.



Quality Products and Technologies

High quality products and latest technologies are our insist and guarantee. Our experienced and qualified staff are always at your service.



AMERICAN TUNA PURSE SEINE NETS 美式大圍網

PELAGIC FISHERY



HiTech [®] BRAIDED NYLON TWINE			
USA	FRANCE	SPAIN	METERS
TWINE	DES	DE	KG
NOS.	TRESSES	HILOS	
NO.24/27	T560		546
NO.30	T440	8842	448
NO.36	T370	8842/1/2	355
NO.42	T270	4840/3	271
NO.48	T250	4840/3-1/4	239
NO.54	T240	4840/3-1/2	216
NO.60	T180	4840/4	197
NO.72	T4	4840/4-1/4	168
NO.84	T4-1/2	4840/4-1/2	145
NO.96	T5	4840/5	112
NO.120	T5-1/2	4840/5-1/2	97
NO.132	T6	4840/5-1/4	72
NO.168	T6-1/2	4840/6	66
NO.210	T7	4840/7	49
NO.300	T8	4840/8	35
NO.350	T9	4840/9	24
NO.400	T10	4840/14	16

NETS

CF tuna nets are made according to the most strict quality standard. So they provide durable strength, abrasion resistance, uniform mesh size, secure knots, non-fade black color, and a smooth fibre surface.

產品 Product	美式大圍網 American Tuna Purse Seine Net
編織方式 Making	尼龍鱗魚骨網 Nylon Braided knotted Net
組合方式 Combination	按客戶指定設計方式組合 Made to Client's Net Design
常用規格 Common Size	NO.36~NO.168 x 3-1/2"~10"
產品特性 Specialty	<p>慶發公司所製造的美式大型圍網全部採用特殊尼龍材質 (hi-tech 7 尼龍黑絲 210D/7F) 所編織生產，具有更高的耐磨性與耐候性，是一般普通尼龍材質210D/24F或高強度尼龍輪胎絲210D/35F所無法相比。</p> <p>慶發公司長期專注於材質優異、穩定，和組網技術的提升，並持續改善各項組網細節，完成客戶所交付的訂單，提供客戶迅速滿意的服務。</p> <p>Ching Fa's tuna nets are made by a special hi-tech 7 nylon yarn. Ching Fa's hi-tech 7 tuna nets provide faster sinking speed, better abrasion resistance, uniform and flexible mesh size, non-fade black color, and smooth fibre surface. So, Ching Fa's hi-tech 7 tuna nets will have a longer life-span, and will relatively bring your operating costs down remarkably. During the past decades Ching Fa has modernized its factory, improved its net know-how and built up a highly experienced team. We are much confident to assemble the best tuna purse seine nets for all of our customers worldwide.</p>



CHAINS

CF uses high quality steel, especially formulated and heat-treated for tuna fishing. Every heat treat lot, approximately 3,000 lbs., is sampled and destructively tested for material strength and link elongation - assuring compliance to design criteria. All tuna chain is then proof tested 100% every link.

CF tuna chain is then continuously hot-dip galvanized to provide the strong protective coating you have come to expect, which has over 30% more zinc per unit volume than mechanical coating.

Trade	Weight / Per 100 FT. Lbs	Inside Dimesions		Ft. steel/ Box	Weight/ Box Lbs
		Length Inches	Width Inches		
7/16" (11mm)	218	1.37	0.75	2x900FT	3924
1/2" (13mm)	255	1.72	0.75	2x825FT	4208
9/16" (14mm)	301	1.7	0.85	2x700FT	4214
5/8" (16mm)	385	1.93	0.865	2x550FT	4235
3/4" (19mm)	527	2.52	1.07	2x400FT	4216

ROPES

CF ropes are made tough enough to withstand the rigorous fishing in oceans. Choose our top quality nylon or other synthetic ropes for fishing.

ITEMS	SPECIFICAIONS
NYLON BRAID ROPE	16/24 ply, 200 meters / coil
POLYESTER BRAID ROPE	16/24 ply, 200 meters / coil
NYLON DOUBLE BRAID ROPE	16/24 ply, 200 meters / coil
NYLON CROSS ROPE	8-strand, 200 meters / coil
NYLON PLAITED ROPE	12-strand, 200 meters / coil
NYLON TWIST ROPE	3-strand, 200 meters / coil
POLYPROPYLENE TWIST ROPE	3-strand, 200 meters / coil

EVA FLOATS

MODEL	DIAMETER mm	LENGTH mm	HOLE DIAMETER mm	BUOYANCY grams
SHE-50	204	225	40	5000
SHE-70	220	250	42	7000
SHE-85	248	270	48	8500
SHE-100	260	285	50	10000



ADVANTAGES

ADVANTAGES OF CHING FA'S HI-TECH 7 TUNA NETS

1. More solid or round is its diameter of each filament:

Traditionally, each filament of 210d/24F was made little flat and thin. However, Ching Fa's hi-tech 7 - 210d/7F - is made little round and thick. So, braided twine made of hi-tech 7 is characterized with more solid and round in its diameter. It goes without saying that each mesh size of tuna net made of hi-tech 7 braided twine will be more uniform in due course.

2. Resistance against abrasion is higher and stronger:

As each filament of Ching Fa's hi-tech 7 is made thicker and more round, the resistance against abrasion will relatively be stronger and higher, needless to say.

3. Sinking speed gets faster:

Compared with the traditional 210d/24F, as each braided twine of tuna net made of Ching Fa's hi-tech 7 is relatively made more round, the sinking speed will relatively get faster, too, when tuna net is shot into the sea. Therefore, the possibility of catching tuna is also relatively higher.

4. Mesh size gets more uniform but still remains flexible:

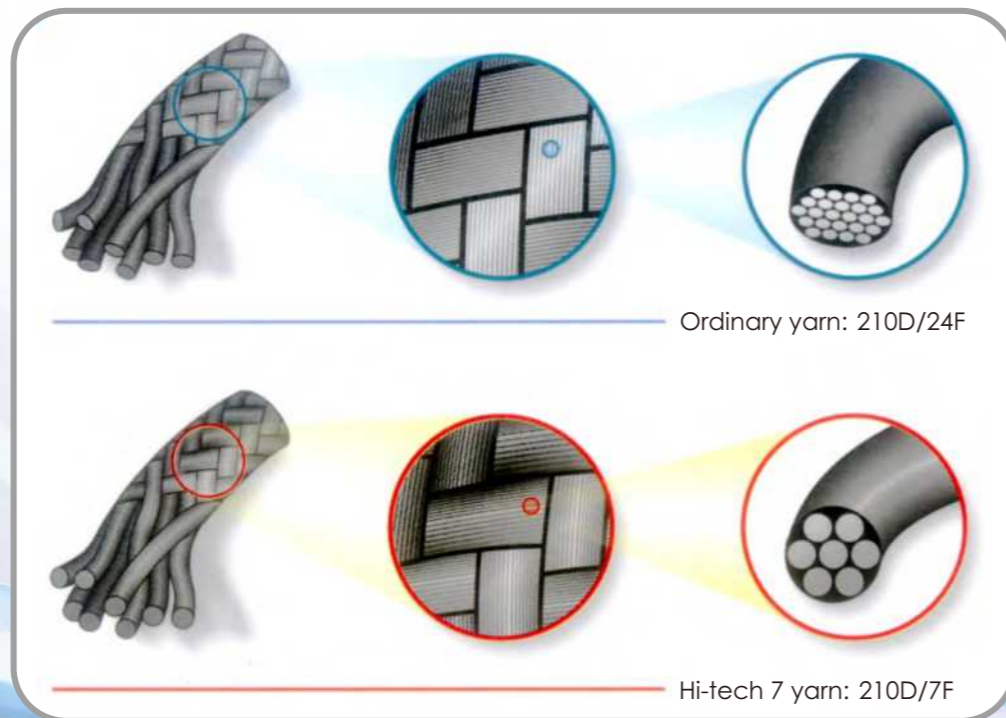
As Ching Fa's hi-tech 7 tuna net is made stiffer than that of the traditional one, its mesh size is characterized with more uniform while its flexibility remains the same as usual. As a result, tuna net will not easily get entangled when it is shot or hauled.

5. Black color of tuna net is non-fade permanently:

As each filament of Ching Fa's hi-tech 7 is dope-dyed into black color instead of dyeing, the tuna net is permanently guaranteed not to fade away.

6. Tuna net lasts longer in its life:

As Ching Fa's hi-tech 7 tuna net is obviously characterized with better resistance against abrasion and gets faster in its sinking speed, the net will relatively last longer in its life than it was made of traditional filament. Therefore, the operating cost of fishing will definitely be lower as a whole.

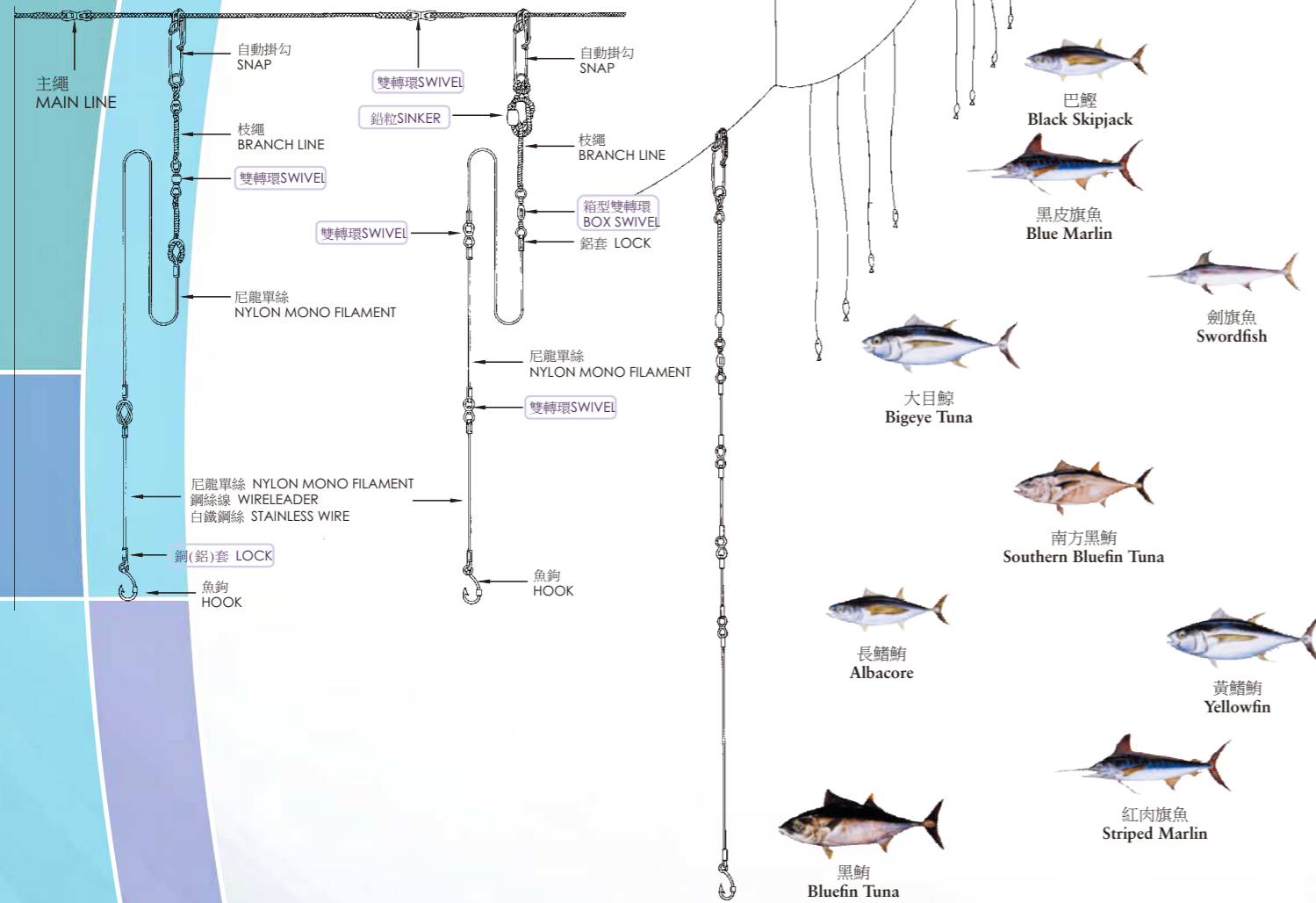




MONOFILAMENT LONGLINE 延繩釣

PELAGIC FISHERY

延繩釣



Nylon Mono Fishing Line

In commercial fisheries there will always be a tendency to increase the number of hooks and to fish as far as possible. This has been done with handlines in the form of so-called "vertical long line"

Longlining, as its name implies, involves the use of a 'long line' with a series of baited hooks spread along the ocean floor. After evolution from manual operating initially, this system has now become mechanized to use automatic baiting, shooting and hauling machines.

These improvements have made longlining an increasingly popular form of fishing, due to its higher catch rate. Fishermen are able to harvest more fish and in many other ways can compete with other forms of fishing. In particular, they can be more selective – landing higher quality of fish in one hand while consuming less fuel on the other.



NYLON BRAIDED MAIN LINE

規格 Specification	參考拉力(kg) Breaking Strength	公斤米數 Length m/kg	線徑(mm) Twine Size	米/束 Package m/coil
#50/1*8	520	95	4.8mm	700 m/coil
#60/1*8	620	80	5.1mm	600 m/coil
#40/2*6	620	80	5.1mm	900 m/coil
#40/1*12	620	82.6	5.0mm	900 m/coil

規格 Specification	線徑(mm) Twine Size	米/束 Package m/coil	直線拉力(kg) Breaking Strength
#400	3.30	Wooden reel	486
#500	3.69	Wooden reel	585
#600	4.04	Wooden reel	621



NYLON MONO BRANCH LINE

規格 Specification	線徑(mm) Twine Size	米/束 Package m/coil	直線拉力(kg) Breaking Strength
70	1.38mm	1000	107
80	1.47mm	1000	115
90	1.56mm	1000	130
100	1.65mm	1000	144
110	1.73mm	1000	154
120	1.81mm	1000	167
130	1.88mm	1000	182
140	1.95mm	1000	189
150	2.02mm	1000	203
160	2.09mm	1000	216
180	2.21mm	1000	235
190	2.27mm	1000	248
200	2.34mm	1000	261
220	2.45mm	1000	288
230	2.50mm	500	300
250	2.61mm	500	326
260	2.65mm	500	339
280	2.76mm	500	353
300	2.86mm	500	378
330	3.00mm	500	416
350	3.09mm	500	441
400	3.30mm	500	486
450	3.50mm	500	527
500	3.69mm	500	585
400	3.30mm	Wooden reel	486
500	3.69mm	Wooden reel	585



產品 Product	鮪釣線繩 Nylon Monofilament Longline
生產方式 Production	專業尼龍單螺桿壓出機 Single or Twin Extruder
常用規格 Common Size	#70 ~ #500; #40/1*12; #40/2*6; #50/1*8; #60/1*8
產品特性 Speciality	慶發採用100%日本進口尼龍原料生產，對品質嚴格把關，並持續精進改善，提供客戶高品質高拉力物性的產品。 Ching Fa uses 100% Japanese nylon chip to produce the monofilament longline and strictly controls on the quality. Ching Fa supplies the strong and high tension monofilament longline to the customers.



SAURY NET

秋刀魚棒受網

PELAGIC FISHERY

發展概況 Brief evolution

秋刀魚棒受網係屬火誘網漁業之一，本省開始於1977年，由2艘拖網船改裝而成的棒受網船赴西北太平洋作業，當初由於作業技術不熟稔以及無法掌握漁場，僅漁獲 100 公噸而已，經過業界不斷的努力與改進，而逐漸確立該漁業的基礎，參與作業的漁船亦隨之增加。經多年來演變，秋刀魚船於2014年高達 105艘左右，捕撈魚獲量2013年達到18萬公噸，2014年更破歷史記錄達到23萬公噸。

Saury fishery is one of the light-lure fisheries in Taiwan, starting from the year 1977, when the saury boat was renovated from 2 trawlers, with fishing ground in northwest pacific ocean. Due to unskilled fishing operation and not enough knowledge about fishing ground, the harvest quantity was about 100 metric tons only. After making efforts and improvements, the saury fishery had gradually gained an impetus, and more boats participated in the fishing activity.

After years of evolution, the number of saury boat in Taiwan reached about 105 in the year 2014, when its total harvest quantity of saury fish reached a historical peak - 230K metric tons. In the year 2013 its harvest quantity was 180K metric tons.

漁獲用途 Harvested purpose

秋刀魚棒受網，其漁獲物概為秋刀魚，主要做為鮪延繩釣的餌料，少部分做為人類食用。

Saury fish captured by saury net is mainly used as bait for longliners, whereas a small portion of saury fish is taken for human consumption.



學名：Cololabi saira (Brevoort)

中名：秋刀魚俗稱山瑪魚

利用：煎食、火烤、鮪延繩釣餌

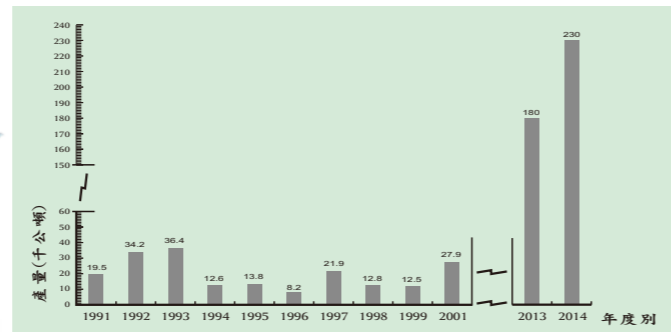


圖 A1

產品 Product	秋刀魚棒受網 Saury net
生產方式 Production	無結網 Raschel knotless net
常用規格 Common Size	210/24x16F、210/30x16F
組合方式 Combination	按客戶指定設計方式組合 Made to Client's Net Design
產品特性 Speciality	<ol style="list-style-type: none"> 1. 吸魚區網片有加粗，使得網具漁獲量滿載時，其承受力量足夠，不會導致破網。 2. 鉛腳網片其網孔為3寸，不會導致魚在網內亂跳而插入網孔，可保持魚身的完整。 <ol style="list-style-type: none"> 1. Nettings at the fish pump area are made by thicker twines. So, the net can be more durable without the risks of being broken, especially while the net is in full capacity of fish. 2. Mesh sizes at the lead rope are made in 3" so fish inside the net will not be gutted, and fish can also maintain a good shape.

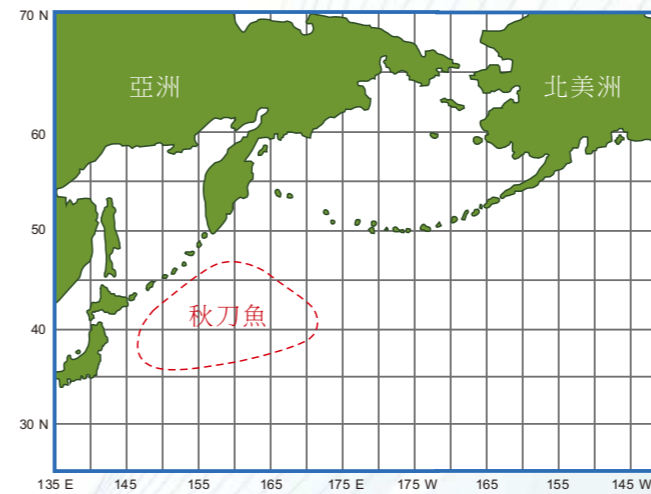


秋刀魚棒受網作業模式(左舷作業) Model of Saury net's operating (left side)

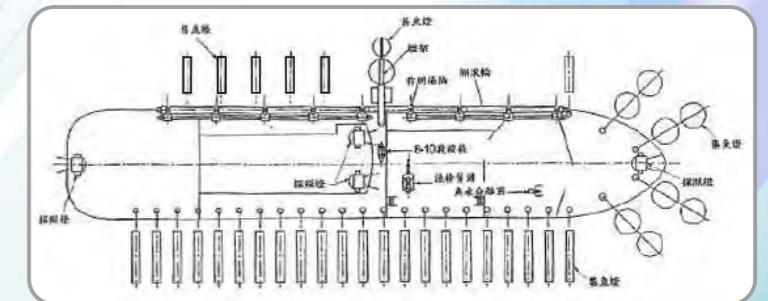
漁場與漁期 Fishing ground & Fishing season

本省秋刀魚漁船，主要以西北太平洋為作業漁場，因秋刀魚的適水溫為15~18°C 尤其在寒暖流所形成的潮境處成為良好漁場，漁期為7~11月間。

Normally saury boats in Taiwan are fishing in northwest pacific ocean where saury fish are used to temperature 15°C ~ 18°C; especially the best area is at where the cold and warm currents interset. Fishing season is during July~November.

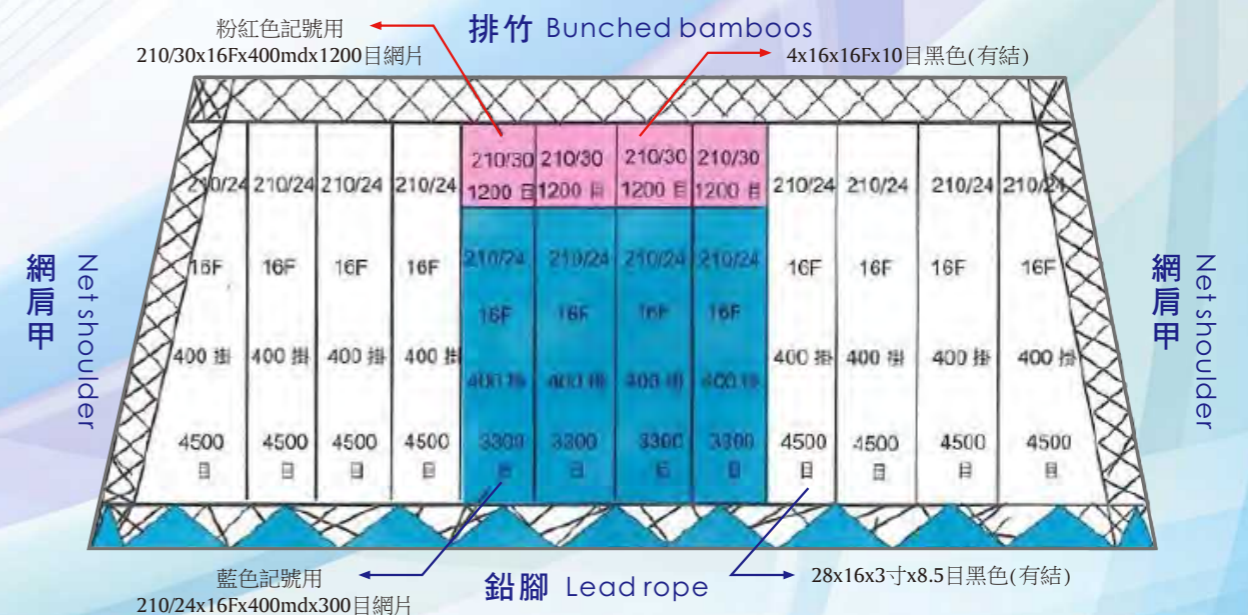


秋刀魚棒受網漁場 Saury fish ground



秋刀魚棒受網主要漁撈機械的配置(左舷)情形
Layout of major facilities aboard the saury boat(left side)

秋刀魚棒受網展開圖 Net plan of saury fish



DANISH PURSEINE NET

扒網(三腳虎網)

COASTAL FISHERY

發展概況 Brief evolution

由於焚寄網係兩艘式的作業模式，需要較多的作業人數(約需20餘人)，在漁村勞力匱乏下，遂發展以單艘船作業的扒網(因作業地區不同其俗稱亦異，澎湖稱扒網、林園稱三腳虎)，該漁具由兩袖一囊組成，網的形狀類似地曳網，亦屬火誘網的一種，也由於其構造簡單，作業效率甚高，節省人力，操作敏捷，適合漁捕表中層的魚類，目前於林園、澎湖及蘇澳，成為重要的沿海漁業之一，其亦使用集魚燈作業。

Due to the costly fishing with two boats that require at least 20 crew aboard, plus the shortage of labor force in fishing community, the Danish purseine nets called with different nicknames in different areas were gradually created for fishing that requires one boat only.

This type of fishing gear consists of two wings and one fish-bag, whose shape is a bit like trawl. Thanks to its simple structure, high efficiency, economical and easier operating, it has been turning into a very important fishing method along the coasts of Taiwan, as well as inshore islands.

其包括網船及舢舨一艘(作為燈船，丁香扒網使用四艘燈船)，其主要漁撈機械為捲筒式揚網機，如圖(A)所示。

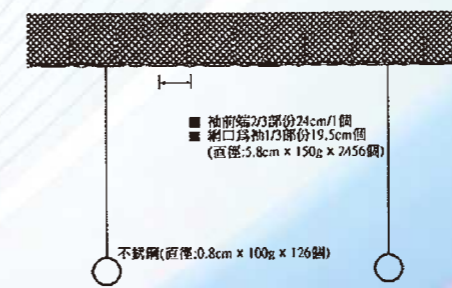
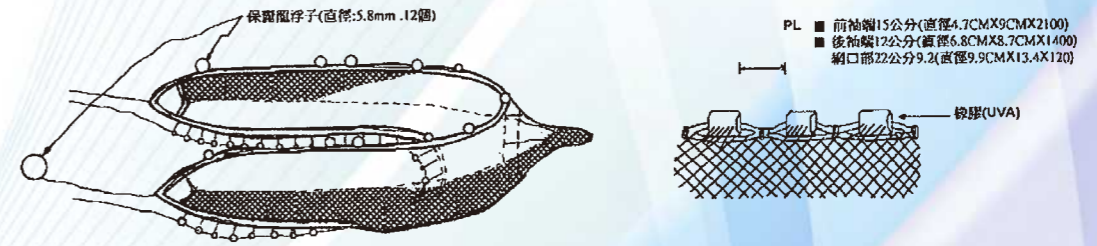
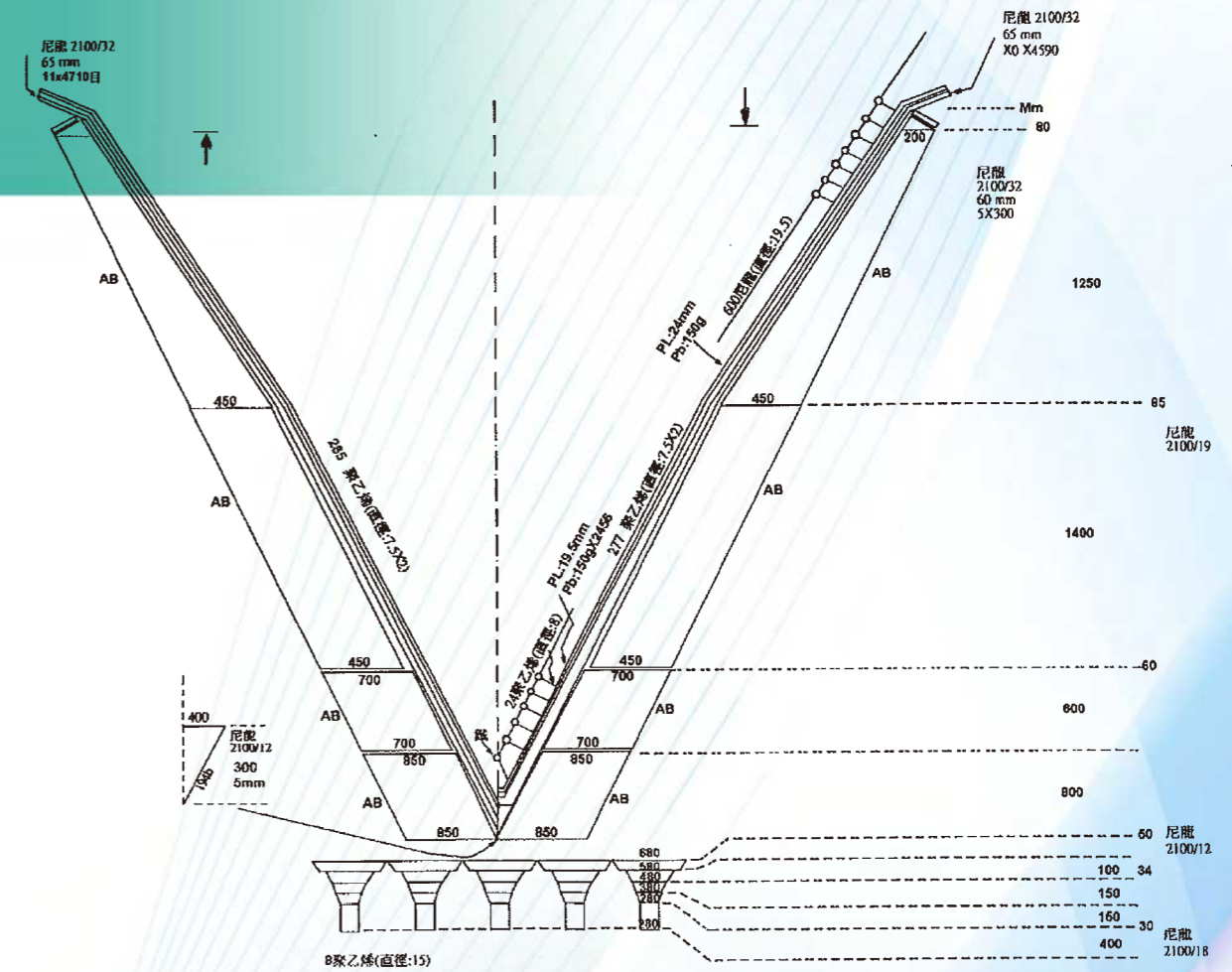
This type of fishing includes a major boat plus a small work boat, and the principal equipment aboard is the net roller as shown in photo (A).



圖(A)



圖(A)



一般扒網漁具構成圖
Compositions of Danish Purseine Net





FLOATING CAGE

浮框式箱網

CF develops and markets engineered products, primarily for use in the aquaculture industry, using its patented submersible technology. The submersible sea cage, specifically tailored and designed, will be characterized with more fish harvest on the one hand while it will also prolong the life of the cage on the other.

Taiwan is surrounded by sea, so sea cage has been getting popular and become the mainstream. CF consulting plus innovated technologies also works with other companies relevant to the ocean. Because of over 60 years of experience in fishing net industry along with the past 25 years in aquaculture industry, we are able to share our knowledge, know-how with others who are also pursuing business opportunities in the ocean.

慶發公司開發技術性的海上箱網，具有沈降至水面下，減少颱風來臨時的損失，以及提高魚貨量的特性。台灣四面環海，浮框式箱網從開始發展到現在，已有幾十年歷史，期間經由無數次的改良，尤其，採本公司研發的特殊尼龍材質 Supe 20 製作的箱網，在操作上更為安全、耐用、省時、方便，使得浮框式箱網已成為箱網的主流。



產品 Product	箱網 Cage Nets
編織方式 Making	以SUPER20特殊尼龍單絲編織無結網 SUPER20 Netting ; Mono-filament knotless netting – Raschel type
組合方式 Combination	按客戶指定設計方式組合 Made to Client's Net Design
常用規格 Common Size	按客戶指定規格組合 Made to Client's Net Design
產品特性 Speciality	慶發公司所製造的箱網是採用100% Super 20特殊尼龍材質所編織成的無結網。此種材質具有優異的平滑表面，不吸水，較穩定的網目尺寸，較佳的水流流動，容易清洗等特性。 慶發公司長期專注於材質優異、穩定，和組網技術的提升，並持續改善各項組網細節，完成客人所交付的訂單，提供迅速滿意的服務。 Cage net assembled by Ching Fa with Raschel knotless nettings uses a special Super 20 nylon monofilament yarn, which is superior to the conventional multifilament yarn; which is characterized by remarkable advantages such as: smooth surface on netting, water resistant, stable mesh size, better water flow, easier cleaning, and etc., etc.

CAGE NET for MARINE AQUACULTURE

Security



Toughness



Reliability



Advantages of Super 20 Mono Knotless Netting as a material for fish farming cage

1. Super 20 has developed to offer a physical performance of netting in sea water, which has a higher rigidity factor, extension and yield in the netting is much reduced vis-a-vis conventional nylon multifilament netting. This allows the achievement of improved design factors used in specifying and assembling fish farm nets to provide predator resistance of seals, sharks & etc., reducing the loss of stock by reduction of 30% plus mortality rate per annum to less than 1%, according to the progressive graphs seen at Tassal Group Pty. Ltd., who is so far the biggest salmon producer in Tasmania, Australia.
2. To make up nets from conventional netting to perform acceptably with high tension designs, the entire net must be scraped in less than the total working life of the net (at about 40% of life, dependent on local sea water conditions) or remade to recomply the net. This introduces the problem of having nettings of different age/stability characteristics within the net, which is less acceptable in today's highly competitive fish farming industry. However, it now becomes an avoidable cost by using Super 20 type netting.
3. Two dimensional stability of netting when assembled using developed joining technique (Saw Tooth Joinings) allows net designers to accept netting constant in warp and weft orientation. Super 20 gives high efficiency in use of materials in high tension areas of nets.
4. Running out of sea water from netting when lifted from sea is more rapid giving safer handling of the fouled used net, and more rapid air drying of the netting if that is cleaning technique, or if washing technique, then more rigid nature of netting but with adequate overall flexibility gives less washing time to clean net status, and less wear being produced on the netting with faster washing machine cycles.
5. Smoother surface on webbing of netting has less damage to fish stock than conventional nylon knotless netting.
6. Smoother surface of each monofilament element of the netting construction gives improved more water flow (less tidal resistance) than previous netting materials used.
7. Smoother surface of each monofilament element of the netting decreases the



- characterized by: **NS 9415 Noomas Certification**
- ✘ Smoother surface
 - ✘ More water flow
 - ✘ Easy cleaning
 - ✘ Slow seaweed growth
 - ✘ Massive saving within net change
 - ✘ Excellent abrasion resistance

Our farm nets have a proven track record for use in rough weather condition.



FLEXIBLE CAGE

軟式箱網

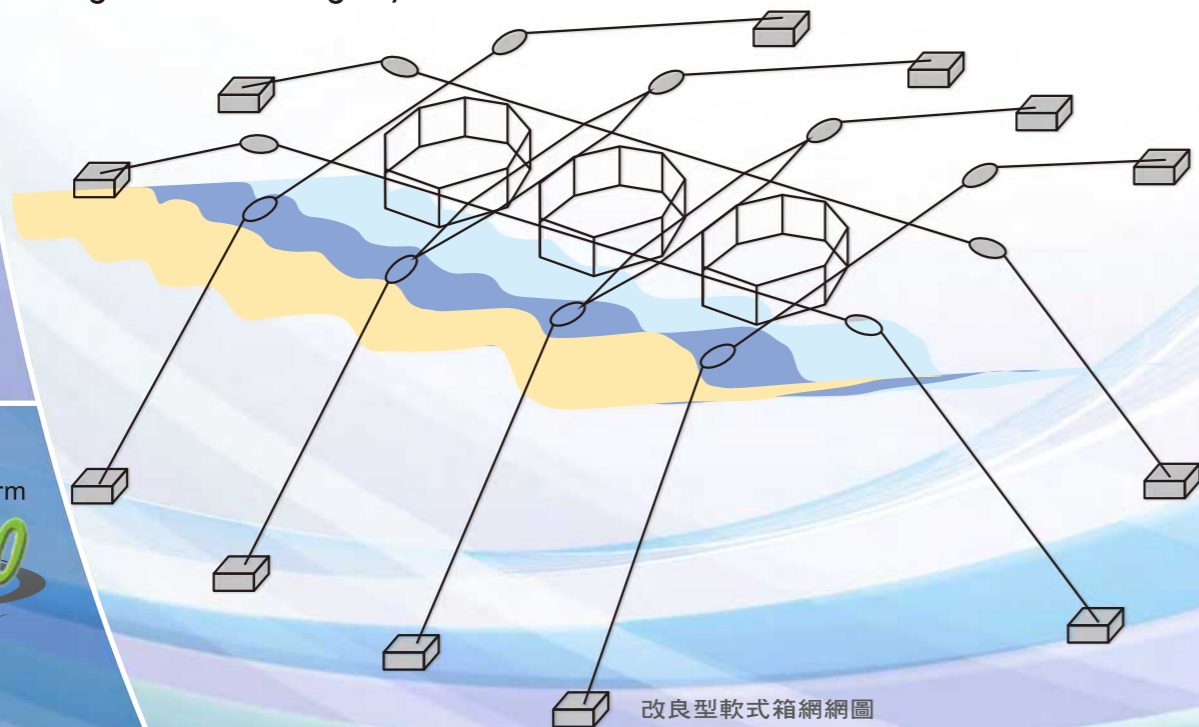
Traditionally, flexible cage is mainly composed of floats and mooring ropes to fix the cage, which was developed through the theory used on set net. After years of experiments and tests, our flexible cage can suit to the special coasts surrounding Taiwan. As there is rough typhoon in summer time and strong northeastern wind in winter time, it will sometimes bring a big damage to the cage. Our innovated flexible cage is primarily based on the traditional one, while it is characterized with the advantages of resisting against the wind and wave, which our patented submersible cage owns.

With special type of new material and its character of decrease in volume, our flexible cage has turned into light-oriented on its weight to better withstand cage deformation brought by wind and wave. We think redesigning the relevant facilities or equipments surrounding the cage, plus complying with mechanical equipments aboard the work boat and decreasing the labor force to upgrade the work efficiency should be a new trend for sea cage in Taiwan in the future.



MOORING

The construction of the Ching-Fa flexible cage system



改良型軟式箱網網圖



傳統上，軟式箱網僅以浮子及繩索構成箱網形式，是依據定置網的原理發展而來，經過幾年的測試後，已證實能適應台灣多變的海域情況。但因發展的時間太短，成熟度不夠，導致操作上不方便。台灣夏天有颱風冬天有東北季風，對於箱網有極大的損害率。本公司改良式的箱網是以傳統軟式的箱網為基礎，擷取下沉式箱網抗風浪的特性，加上大型性化，及改變箱網的材質。依據新型材料特性所製成的箱網，使整體的配備輕量化，新材質的體積小，不易受風浪的影響產生變形。重新設計相網週邊設備，配合工作船上的各項機械化設備，從放養、計數、餵魚、收穫、換網...等等，減少人力的支出，提昇工作效率，是未來台灣海域箱網的新方向。



箱網型式 Style	改良型軟式箱網 FLEXIBLE CAGE			
	四角 Square		八角 Octagon	
箱網型狀 Shape				
每組箱網浮框數 cage / system	12		3	
直徑 Diameter (m)	8	10	20	
網深 Depth (m)	5	8	8	10
容積 Volume (m ³)	320	800	2650	3320
最大養殖量 Max Products	6.4	16	52	66
養殖魚種 Culture species	紅魷 (Greater Yellow Tail)、海鱺 (Cobia)、石斑 (Grouper)、笛鯛 (Red Striped Snapper)、嘉臘 (Red Sea Bream)、紅鼓 (Red Drum)、華臘鯪 (Permit Fish)			
養殖密度 Fish Density	15 ~ 20 kg / m ³			
PS. Special specifications made to order.				

OUR SERVICE 其他服務

本公司承包事項從漁場調查到箱網的設計、製作以及現場施工等系列服務。並可應客戶要求各種類型，大型或特殊形狀箱網，還可提供各式零組件，浮子、纜繩、網片等漁業用品。

SITE PROSPECTING、NETS SUPPLY、REPAIR、DESIGN、WORK、CONSTRUCTION、INSTALLATION、CONSULTANCY.

SET NET

定置網

SET NET

The set net consists of a wing net which cuts off the course of the fish and leads them into the pocket net that collects the fish.



定置網是一種陷阱類漁具，設在沿岸水域，當魚類洄游經過時，將其誘入網中而捕獲之。舊式的定置網非常簡單僅在淺灘設施，但逐漸的改進，新型的定置網可依不同的需求而更改設計。

ADVANTAGES OF "CF" SET NET

定置網的優點

- 1.簡易錨錠系統容易施工。
- 2.抗風浪之特性。
- 3.錨錠系統安全性高。
- 4.可依業者之需求而設計。
- 5.維修，收成，操作容易。

- 1.The simple mooring system makes deployment easy.
- 2.It is very resistant to wind and waves.
- 3.The mooring system is very secure.
- 4.Very sturdy structures can be designed.
- 5.Catching and repairing tasks are easy.



產品 Product	定置網 Set Nets
編織方式 Making	有結網，無結網，日式貫穿網 Knotted netting, Rachel knotless netting, Twisted knotless netting
組合方式 Combination	按客戶指定設計方式組合 Made to Client's Net Design
常用規格 Common Size	按客戶指定規格組合 Made to Client's Net Design
產品特性 Speciality	<p>慶發所製造的定置網，按照客戶原樣編織製造並組合成型或提供客戶替補網片自行替換，方便客戶自行作業加工防藻藥劑，容易清洗等特性，慶發長期專注於材質優異與組網技術優異的指標完成客戶所交付的訂單，並持續改善精進各項細節，為客戶快速地提供高品質網片製造與組裝、整修服務。</p> <p>The set net, Ching Fa manufactured, is built up according to customers' design, or Ching Fa supplies nettings for customers to change and/or to repair the set net by themselves. The set net features: facilitate the customers to deal with the anti-fouling agent and it's easy to clean the set net.</p> <p>Ching Fa provides high quality products, assembly know-how and after-service to comply with customers' demands.</p>



THE SET NET MAINLY CONSISTS OF:

定置網的構造

- 1.stopper net (fish wall) 垣網
- 2.play ground cage 運動場網
- 3.ladder net 登網
- 4.first cage 首箱網
- 5.harvest cage 收成箱網



特多龍無結
PES Knotless



PE無結
PE Knotless



尼龍無結
PA Knotless

OUR SERVICE 其他服務

本公司承包事項從漁場調查到定置網的設計、製作以及現場施工等系列服務。除各種定置網之外，還可提供各式零組件，浮子、纜繩、網片等漁業用品。

SITE PROSPECTING、NETS SUPPLY、REPAIR、DESIGN、WORK、CONSTRUCTION、INSTALLATION、CONSULTANCY.

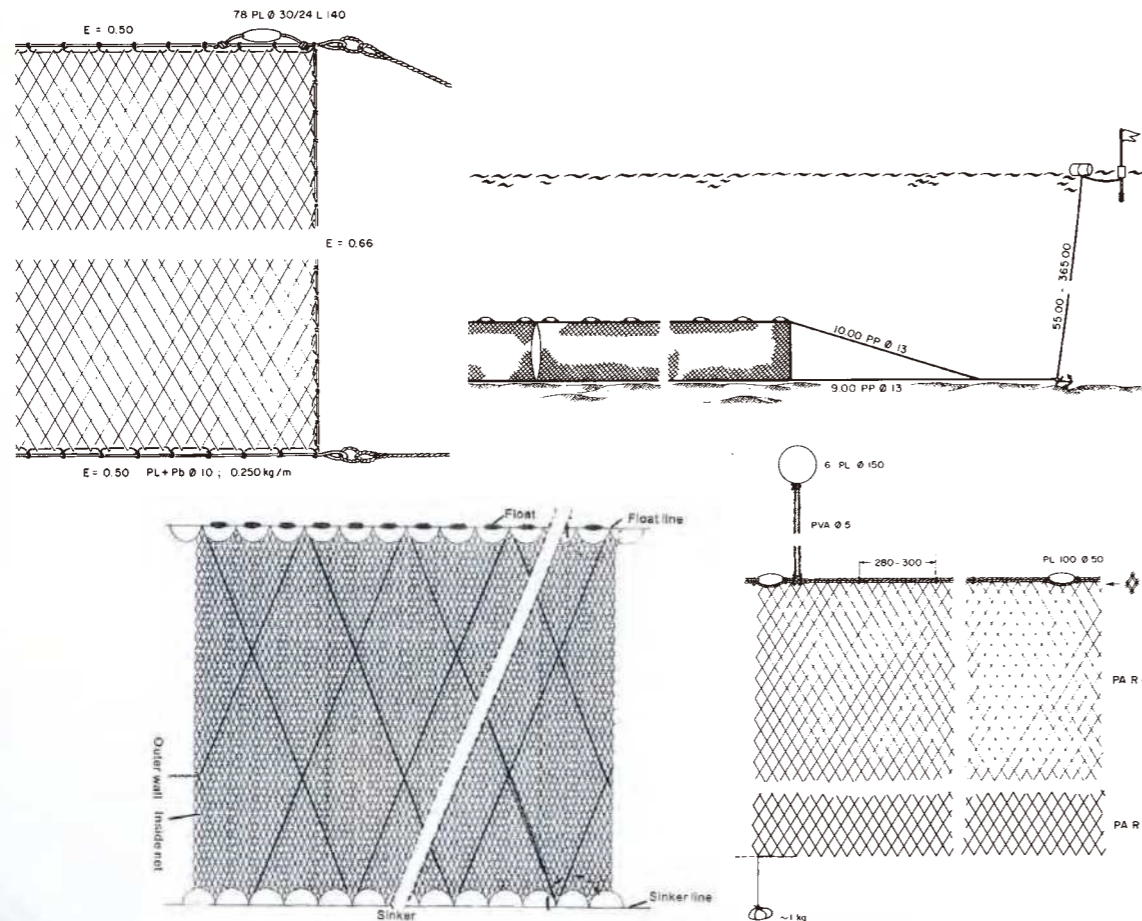


GILL / TRAMMEL / CAST NET

流刺網 / 三層網 / 手拋網

GILL NET / TRAMMEL NET

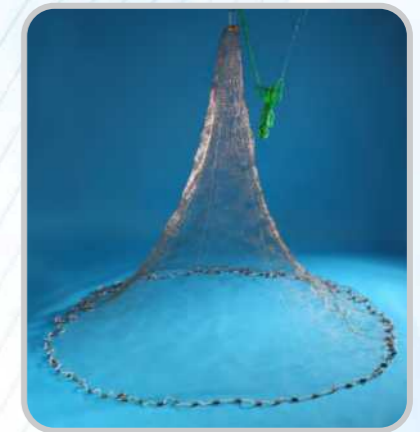
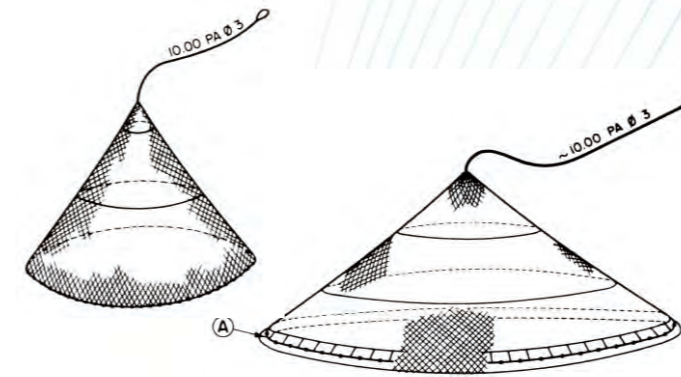
Gill net/trammel net is a kind of vertical net (usually made of nylon or monofilament) designed to catch targeted fish. Due to its special mesh sizes and layers, some targeted fish cannot go through the net completely and get stuck with head on the mesh. Gill net/Trammel net can be made either floating or sinking type and can be fishing stationarily or by drifting.



產品 Product	流刺網 / 三層網 Gill Net / Trammel Net
常用規格 Common Size	按市場規格或客戶指定規格編織生產 According to the customers' spcification
產品特性 Speciality	慶發所製造的流刺網、三層網，按照客戶原樣編織製造或依市場使用規格生產。慶發長期專注於材質優異、穩定，和組網技術的提升，並持續改善各項組網細節，完成客人所交付的訂單，提供迅速滿意的服務。 Ching Fa manufacturers various gill net and trammel net in accordance with the customer's sample or market specification. With our long-term focus on the raw material's quality, stability and the upgrade of assembly skill in detail continuingly, we can finish customer's orders punctually and provide customers with satisfactory service.

CAST NET

Cast nets are cast and hauled by hands. Normally it is regarded as a sport fishing. When the net is cast properly, it will open up in the air like a skirt and will land on the surface of water evenly. As there are weights around the edge of the net, the cast net will sink quickly, surrounding and trapping fish inside the net when the net is hauled.



U.S.A Style



Fuji Style [pocket style]

手拋網 CAST NET: U.S.A Style		
Multifilament nylon	210d/6 210d/4	ply
Monofilament nylon	0.30mm 0.32mm	dia
Mesh size	3/8" 1/2"	sq
Radius size		3.0', 3.5' . . . etc.
<ol style="list-style-type: none"> 1. Polish brass ring and swivel 2. Braided hand line and braided lead line 3. Plastic separator for brail line, easily operated 4. Keep brail from twisting or tangling with minor effort 5. The net is expertly designed to fully open with ease, but sink fast 6. Open right full size 		

手拋網 CAST NET: Fuji Style (pocket style)		
Multifilament nylon	210d/6 210d/4 210d/3	ply
Monofilament nylon	0.30mm 0.32mm	dia
Mesh size	1/4" 3/8" 1/2"	sq
Radius size		4', 5' . . . etc.
<ol style="list-style-type: none"> 1. With skirt pocket 2. Lead spaced to provide fast sinkage and maximum efficiency 3. Complete with leads and hand rope 4. Expertly hand crafted from the best materials these nets will give long, trouble free services 5. Open right full size 		

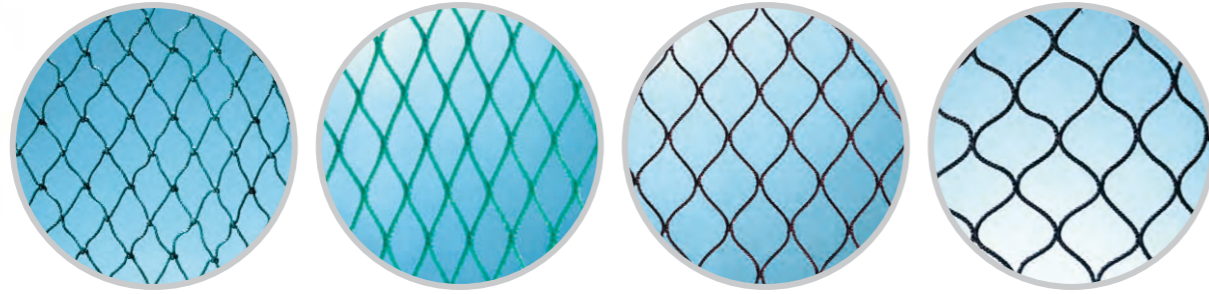


SPORT/SAFETY/CAMOUFLAGE NETS

運動網 / 安全網 / 偽裝網

GOLF NETS 高爾夫球網

The Golf Net is delivered completely assembled and ready to hang to a frame. Strong knotless nylon · PE top and sides are bound to a durable heavy-duty backdrop and lets the ball drop gently to the ground . It is designed to be installed outdoors.



GOLF NETS 高爾夫球網

項目 ITEMS	MODEL 1	MODEL 2	MODEL 3
材質 MATERIAL	PE / NYLON	PE / NYLON	NYLON MONO
網地種類 NET KINDS	無結網 RASCHEL KNOTLESS NETS	單結網 SINGLE-KNOT NETS	雙結網 DOUBLE-KNOT NETS
網目 MESH	Hexagon六角 50mm × 50mm	Square四角 50mm × 50mm	Square四角 50mm × 50mm
	Square四角 50mm × 50mm		
	360D/210D	360D / 210D	Diameter : 0.85mm
顏色 COLOR	綠色 GREEN	綠色 GREEN	綠色 GREEN
特點 FEATURES			
抗UV	Resistance to UV light		
高拉力	High strength		
重量輕	Low weight		



SAFETY NETS 安全用網

各項重大工程建設的進行中，基於人員安全及規定，特殊安全網的配置是絕對的需要，避免意外事件發生。本公司開發各式安全網，適用於各種工作環境，具有簡單配置及高安全性的優點。

When engineering and construction are under way, due to security concern and regulations, it is absolutely required for the contractors to install specifically-tailored safety nets to refrain from the accidents. We develop a variety of safety nets-with advantages of easy fit-in and high security-to comply with customer's needs.

SAFETY NET 安全網

項目 ITEM	規格 SPECIFICATION
材質 MATERIAL	尼龍 NYLON，塑膠 PE，特多龍 PES
網片種類 NET TYPE	TWISTED & KNOTTED NET，BRAIDED & KNOTTED NET，RASCHEL KNOTLESS NET 各式有結無結網
網目 MESH SIZE	任何尺寸 ANY SIZE
顏色 COLOR	任何顏色 ANY COLOR
拉力 BREAKING STRAIN	高強度 HIGH TENACITY



CAMOUFLAGE NETS 偽裝網

Camouflage net is primarily made for military use. Meanwhile, it also can be applicable to other purposes. Design, material as well as specification is subject to customer's requirements.



產品 Product	高爾夫球網 Golf Nets / 安全網 Safety Net / 偽裝網 Camouflage Nets
生產方式 Production	有結網 Knotted Net 無結網 Raschel Knotless Net
常用規格 Common Size	按特殊用途或客戶指定規格編織生產 According to the customers' specification
產品特性 Speciality	<p>慶發所製造的各種特殊用網，按照客戶原樣編織製造或符合特殊使用尺寸生產，提供高品質耐用性網片，慶發長期專注於材質優異與編網技術優異的指標完成客戶所交付的訂單，並持續改善精進各項細節，為客戶快速地提供高品質網片製造、承包設計與現場施工服務。</p> <p>Ching Fa manufactures all kinds of special nets, according to the customer design or special specification. Ching Fa provides the high-quality, durable netting and long-term focus on superior materials and excellent Know-how to complete and fast deliver the customer orders. Ching Fa also supplies the design and site construction services.</p>



AGRICULTURE NET

農業用網

AGRICULTURE/FLOWER NETS

農業網/花網

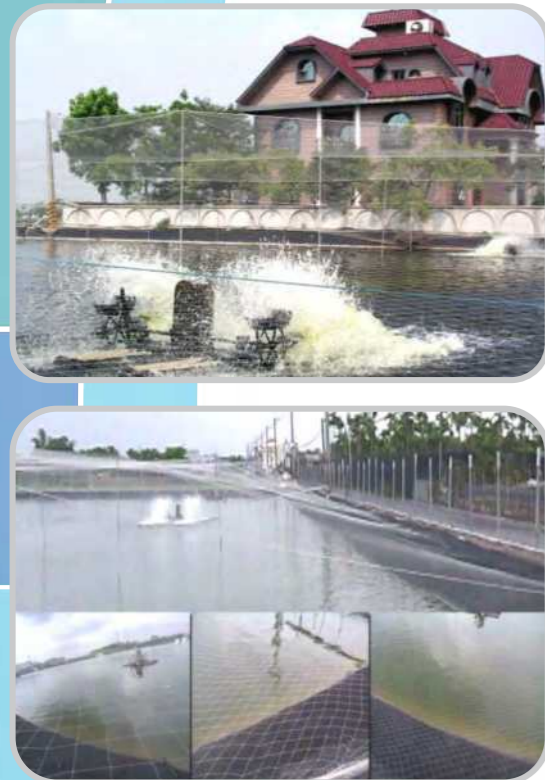
CF's agriculture/flower nets are well constructed to support the vegetables with steady growth and increasing its harvest.



ANTI-BIRD NET

防鳥網

CF's anti-bird net can be applicable to not only agriculture but fish farming on land or sea.



產品 Product	農業網 Agriculture Nets / 花網 Flower Nets / 防鳥網 Anti-Bird Nets
生產方式 Production	有結網 Knotted Net 無結網 Raschel Knotless Net
常用規格 Common Size	按適用作物或客戶指定規格編織生產 According to the customers' specification or crops
產品特性 Speciality	慶發所製造的各農業用網，按照客戶原樣編織製造或符合作物使用尺寸生產，提供高品質耐用性網片，慶發長期專注於材質優異與編網技術優異的指標完成客戶所交付的訂單，並持續改善精進各項細節，為客戶快速地提供高品質網片製造與服務。 Ching Fa manufactures various agricultural nets in accordance with the customer's specification. Ching Fa provides high quality agricultural nets and has long-term focus on superior material and know-how to comply with customer's demands.

適用作物 Application	產品規格(網張開實際尺寸) Specifications			備註 Remarks
	寬度 Width	網孔 Mesh	長度 Length	
小黃瓜 瓠瓜 絲瓜 苦瓜 四季豆 菜豆 豌豆 蕃茄 Chinese Cucumber Cucumber Bean Pea, Spong Gourd Balsam Pear Tomato	5尺、6尺、8尺、10尺、12尺、21尺、24尺 1.5、1.8、2.4、3.6、6.3、7.2 Meters	6寸 18cm	100 Meters	菱形網目 Diamond Mesh PE
	5尺、6尺、10尺、12尺、16尺、21尺、24尺 1.5、1.8、3、3.6、4.8、6.3、7.2 Meters	8寸 24cm		
四季豆 菜豆 苦瓜 絲瓜 蕃茄 Bean Balsam Pear Spong Gourd	4尺、5尺、6尺、10尺、12尺、20尺、24尺 1.2、1.5、1.8、3、3.6、4.8、6、7.2 Meters	1尺	120 Meters	四方格網目 Square Mesh PE
		30cm		
甜椒 茄子 辣椒 Sweet Pepper Eggplant Hot Pepper	1.8尺、2.4尺、3尺、3.6尺、4.2尺、4.8尺、5.4尺 0.55、0.73、0.91、1.09、1.27、1.46、1.64 Meters	6寸	50 Meters	四方格網目 Square Mesh Braided Twine
		18cm		
菊花 康乃馨 百合花 滿天星...等切花類 Chrysanthemum Dahlia Lily Carnation Stock Gypsophila Cut Flower	2.1尺~3.2尺 0.63~0.97 Meters	3.5寸4寸 ~ 1尺	120 Meters	四方格網目 Square Mesh Braided Twine
		10.5 ~ 30cm		
防鳥網 草莓 葡萄 蓮霧 棗子 Bird Net Strawberry Net	10公尺	1.2寸~1.8寸	100 Meters	菱形網目 Diamond Mesh Nylon Mono
	120 Meters	3.6~5.4cm		

其它規格可事先聯絡，歡迎訂購 Please advise in advance if any other specifications required

產品特點:

- 針對各種作物栽植間距，可發展成多元化：菱形網目可發展成隧道形/平面形直列式等形狀，並可依作物來選擇網的高度。四方格網目網邊線徑粗，可增加強度及耐用程度，並可依作物來選擇網的高度。
- 農作物成長後密度平均，通風良好可降低蟲害發生，減少田間作業負擔。
- 架設網片方便簡單，栽植農作物整齊美觀，防風雨，採收方便，省時又省工，耐候性佳，具耐酸性，抗紫外線，適用於任何農作物。

FEATURES

- * Be light, easy and strength-saving with multiple applications as designed for.
- * Be a shape of diamond mesh, culvert, pyramids and parallel with the height of net to choice depending on agriculture products.
- * Be a shape of square mesh with each colorful selvages given more duration and reinforcement with the Width of net to be choice depending on agriculture products.
- * Be widely deployed making products grown faster with quantity stabilized and quality promoted in less Laboring in field and more efficiency of management obtained.

FEATURES

- * Modern equipment with excellent techniques and reliable quality.
- * Full specifications meet customer's inquiry.
- * Pure raw material excellent weather proof and strict control in process of construction of nets suitable to any agriculture products.