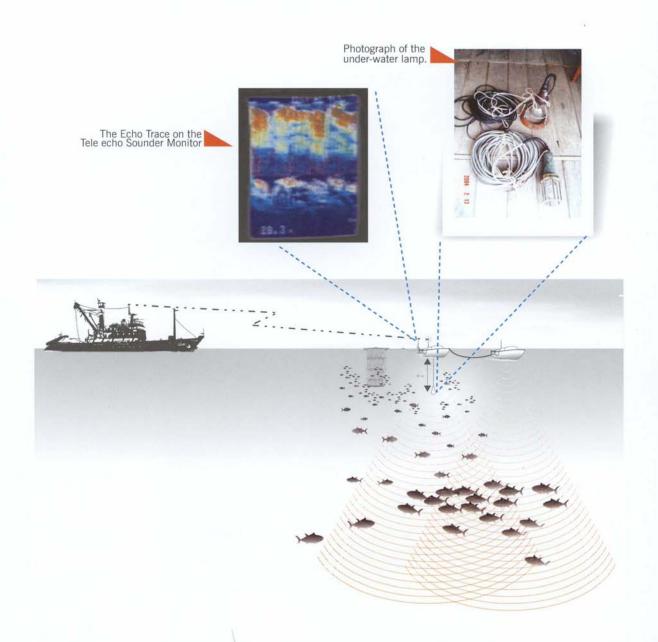


## 2. Luring light and schooling confirmation by working boat.

After fish school conformation, 2 working boats are launched and sailed to Payao. One of the working boats is fixed at Payao with a 2000 watt underwater lamp. The other is tight and handled the light boat. Purse seiner can observe fish school below the payao by echo trace, transmitted by both of working boats. One of working boat will survey around that drifting object, if fish school does not stay below the drifting object. Period for luring light is 20-30 minutes.







The Operation of a Light boat.







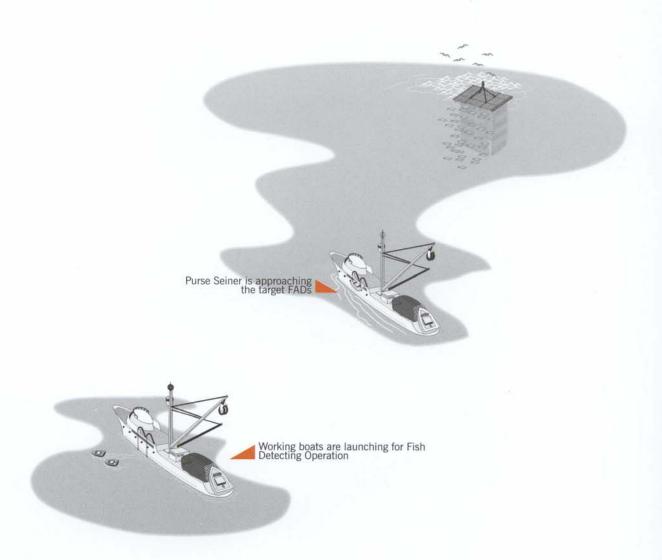
## 3. Shooting operation.

Before start shooting operation, master fisherman gather all information of the current, weather and fish school. The important parameters of purse seine operation are as followed;

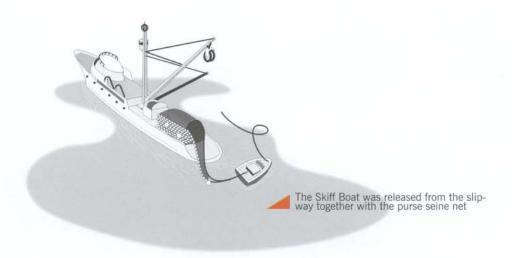
- 1. Fish school is large enough for fishing.
- 2. The current between upper layer and lower layer, Upper and mid layer, should be less than 1.0 knots.
- 3. The individual current layer should be lower than 1.0 knots.
- 4. The wind speed is less than 15 m/s.
- 5. Payao drifting speed should be less than 1.5 knot.
- 6. The weather condition should be clear after start shooting for few hours of operation.

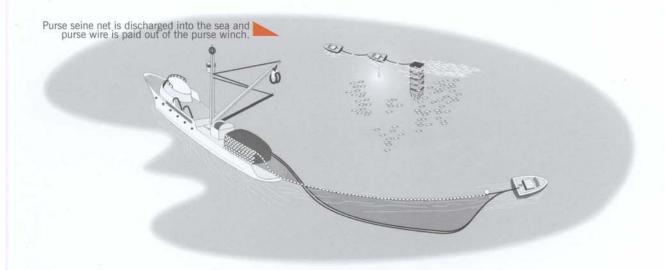


If the fishing parameters are suitable and safety for conduct the operation, the ship is approached to the target. At distance about 1500 m., two radars are transmitted to check reference range of two working boat positions. Low frequency sonar, 28 kHz, should detect the fish school at range 1000-1200 m. The other is medium frequency, 94 kHz, should detect the fish school at range 500-600 m. The ship was accelerated up to 7-9 knots. The suitable distance between ship and target was 200-250 m. Master fisherman ordered to discharge skiff boat from the slip way when purse seiner is at suitable shooting direction.



After releasing the skiff boat was slipped from the slip-way with the purse seine net then skiff boat hard turned to starboard side. Purse seine net is discharged into the sea and purse wire is paid out of the purse winch. Whole purse seine net always discharges from net space of purse seiner before complete net circle  $100-200\,\mathrm{m}$ .

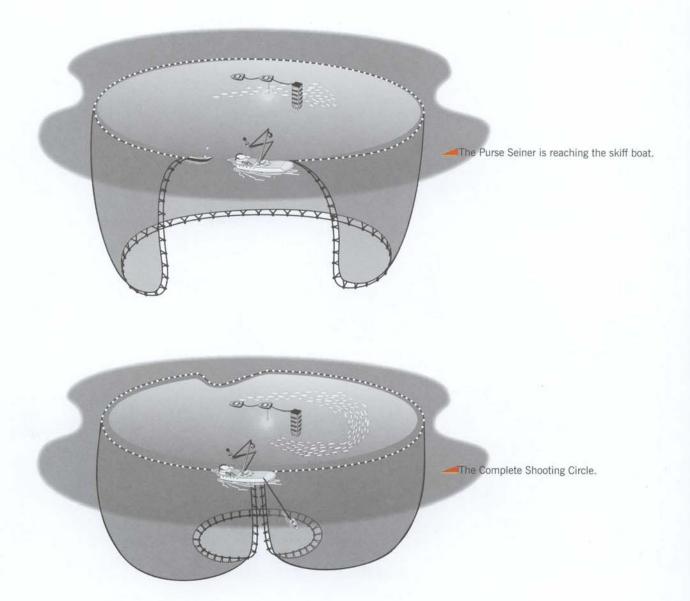






# 4. Pursing of purse line and towing warp

When the shooting circle is complete and purse seiner reaches skiff boat, the skiff boat sends a guidance line which connects to the purse line and bunt end rope to the crew at the purse winch. Both ends of purse line are hauled into the drums, forward and middle drum of purse winch. Purse line hauling is carefully adjusted length by purse winch control console so that all purse rings are located at the center piece of purse line. The purse line hauling spends the time 25-30 minutes and finishes when all rings are hung at the purse davit block. Towing line is hauled by rear drum of purse winch till reaches the roller at the bulwark near net space. Bunt end rope is hauled by brailing winch and secure at the base of purse davit.



#### 5. Ring transfer

After all rings are hung at the purse davit, crews attach 2 cramps at each end of purse winch. Double winch with hook controlled by main control console heaves all rings up and transfers them to hang at ring stripper.







#### 6. Net hauling

Net hauling is start after all purse rings is hung at the ring striper and payao is removed aways from the net circle. Purse seine net is hauled by power block with grip into the net space. To adjust net hauling performance and location of purse seiner, skiff boat will tow the purse seiner by using skiff towing line. Angle of towing line is adjusted by skiff adjusting winch. During net hauling, direction of stern deck was against the wind when crews haul the net. Two working boats adjust the circle of net and tow the float line to the stern deck of purse seiner, to reduce the load of power block during hauling operation. Net hauling is conducted until reach the bunt net.







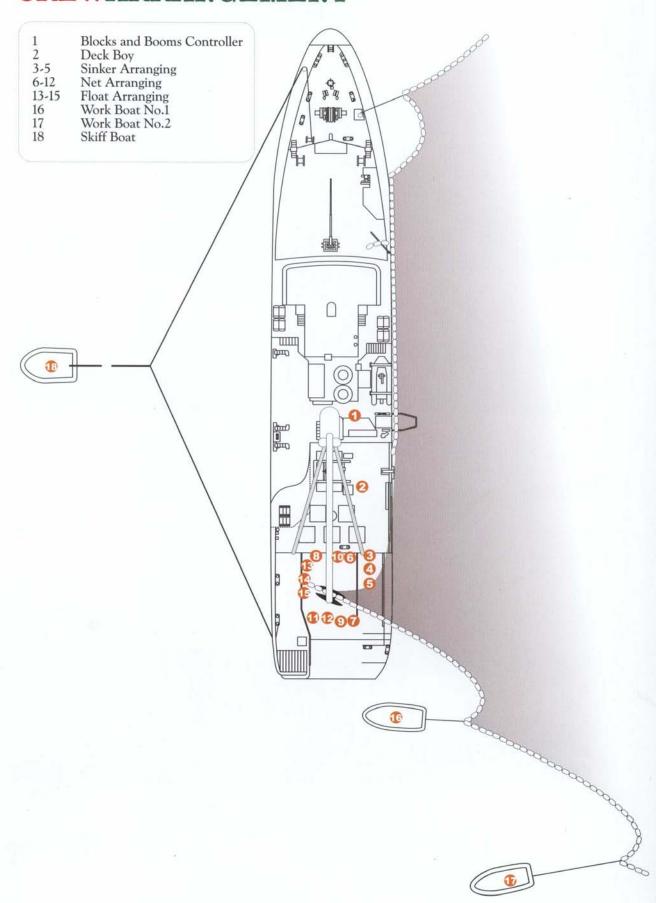








# **CREWARRANGEMENT**



#### 7. Bunt hauling

After finish net hauling, skiff boat comes to hold the float and pull away from the starboard side, to make bunt hauling is convenient. Bunt part is hauled up on the working deck by using cargo winches at the auxiliary booms and choke winch. Bunt net is hauled up until the fish school emerges to use giant scoop. A working boat pulls and adjusts the distance between skiff boat and purse siener, the other working boat adjusts the location of purse seiner.



## 8. Fish brailing

Bunt hauling is finished, when bunt net is hauled up until the fish can be brailed by a giant scoop. A giant scoop is controlled by cargo winch and Brailing winch. Fishes are scooped and dropped into the funnel at the center of working deck. The funnel is fixed with tray direct to the fish hold.

