

Specification for Compact Lifeboat CLR-C 8.5

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Specification no.: **5177SPC0**

for Boat type: **CLR-C 8.5**

Customer: **Cosco (Nantong) Shipyard Co., Ltd.**

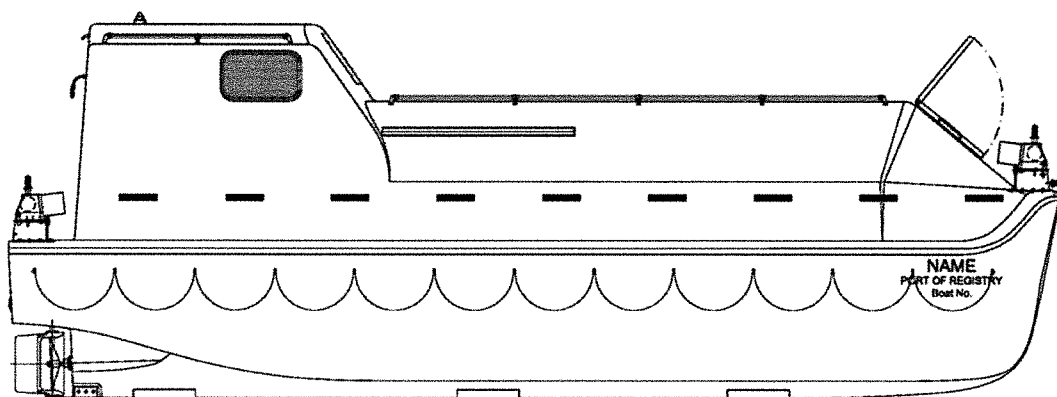
Project / Hull no.: **Nb. 370**

Fassmer Order / Project no.: **2210946**

Date: **04.04.2011**

Modification: **0**

Prepared by: **A. Hellwege**



Main Particulars

Length:	8.50 m
Breadth of hull:	2.89 m
Max. height:	3.22 m
Capacity:	60 persons
Weight fully equipped, unmanned:	3700 kg
Weight incl. 60 persons:	9100 kg
Boat speed incl. 60 persons:	min. 6 kts
Hook distance:	8135 mm
Engine manufacturer:	Nanni, France
Engine type:	4.38 with 27.6 kW / 37.5 bhp at 3000 rpm

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	<u>Options and special execution:</u>	<u>Standard boat weight:</u>	<u>3700 kg</u>
<input checked="" type="checkbox"/>	<p><u>027 Certification</u></p> <p>Each boat to be delivered with Certificate of Conformity with EC-Directive 96/98/EC as amended by Directive 98/85/EC as Lifeboat according SOLAS LSA-Code together with EC-Type Examination Certificate, issued by See-Berufsgenossenschaft (EC-Notified Body no. 0736) and with certification for hoisting wires.</p> <p>This certification is mandatory for ALL vessels with flag of EC-Member states, Norway, Iceland, Bermuda, Cayman Islands, Gibraltar and Isle of Man and further accepted by several other administrations.</p>		0 kg
<input checked="" type="checkbox"/>	<p><u>057 On-Board-Testing:</u></p> <p>Not included – to be ordered separately</p>		0 kg
<input checked="" type="checkbox"/>	<p><u>407 Lettering</u></p> <p>Language of instructions for using boat, engine and release device: English</p>		0 kg
<input checked="" type="checkbox"/>	<p><u>501 Engine</u></p> <p>Water-cooled boat diesel engine with reverse and reduction gear.</p> <p>Maker: Nanni, France. Type: 4.38.</p> <p>Output 27.6 kW / 37.5 bhp sufficient for a guaranteed minimum speed of 6 knots.</p>		0 kg
<input checked="" type="checkbox"/>	<p><u>732 Battery charging</u></p> <p>A battery charger is installed in the lifeboat. An AC current of 42V has to be led to the charging plug of the boat.</p>		0 kg
<input checked="" type="checkbox"/>	<p><u>914 Loose Equipment</u></p> <p>Following parts with expiry date are not part of Fassmer supply because expiry date might have been reached at commissioning of ship:</p> <ul style="list-style-type: none"> 1 set emergency signals: <ul style="list-style-type: none"> 4 rocket parachute flares 6 hand flares 2 buoyant smoke signals 1 food ration per person 3 ltr. of water per person in water tank 		0 kg
	<u>Total contract boat weight:</u>		= 3700 kg

010 Construction

The boat is constructed in round framed design with transom stern.

It is provided with sufficient free board, especially in the fore-ship area. Together with the fair lines of the hull this provides good behaviour in heavy sea.

At the aft ship a platform is situated which enables persons to enter the boat from the water serving also for salvage by helicopter. Gunwale and a small fore-ship platform to be provided with anti-slip surface for walking around the canopy.

040 Tests

All necessary tests as hoisting hook test, overload test, trial trip and function tests to be executed at Fassmer yard.

131 Hull

To be built with isophthalic gelcoat outside, followed by alternating glass mats and rowings in orthophthalic fire retardant polyester resin, coloured as listed in "401 Colours".

Hull to be strengthened with laminated longitudinal girders.

All laminates in high quality hand-lay-up-method without use of sandwich materials.

135 Hull inner liner

A smooth gelcoat surface for easy maintenance towards the inside. Laminate with glass mats and rowings in orthophthalic polyester resin, coloured as listed in "401 Colours".

All fitting areas are reinforced by corrosion-resistant backplates.

Hull and inner liner are glued and screwed flange-like together in the gunwale area.

136 Hull air cases

Air cases formed by hull and inner liner to be filled with CFC-free polyurethane foam providing good stability under all circumstances, good insulation and safety against sinking of the boat when having been damaged.

151 Canopy

To be built in single skin construction w/o sandwich materials with integrated stiffeners where necessary. Outside isophthalic gelcoat, coloured as listed in "401 Colours".

154 Connection of hull and canopy

Flange-like glued together and additionally screwed.

166 Drain plug

One automatic drain plug with stopper is provided at the deepest point of the hull.

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211 Door

One large hinged door made of GRP with window and integrated air duct for air supply from outside provided on aft bulkhead on opposite side of ship. Air inlet with water trap arranged to guarantee permanent ventilation even in capsized position.

Clear opening of the door 610 x 1260mm, also sufficient for stretcher. Door can be secured in open position for ventilation when afloat.

215 Windows

Two large front and two side windows provided at steering stand made of impact and UV-resistant polycarbonate.

One window placed in aft door.

216 Hatch

One translucent forward hatch of 620 x 620mm clear opening provided in the foreship as emergency escape and for access to hoisting hook, painter fitting and sea anchor. Hatch can also be opened from outside. Securing for open position.

221 Ladders and steps

A removable rope ladder can be fitted at transom to enter the boat from the water.

236 Lashing and towing bollards

Two pin bolts for use as clamp for life raft towing, mooring and boat towing integrated in fore and aft hoisting hook.

For lashing the lifeboat to the Davit horizontal lashing bollards are provided at the stern and at the transom. Additional lashing fittings are not necessary.

315 Flooring

Areas destined for walking in- and outside made of GRP with antislip surface. No wooden flooring to reduce maintenance.

342 Insulation

Exhaust line insulated with rockwool covered with glass cloth, all asbestos free.

353 Seats

Seats mainly integrated into inner liner for easy maintenance. Each seat position marked.

355 Seats and seat belts

One 4-point seat belt provided for each seat. Endless belt with stainless steel quick lock/quick release fitting. Only one integrated adjusting device for quick operation.

Every seat provided with a head rest.

356 Inventory and water stowage

An inventory case fitted in the centre line of the boat. Access through large top hatch.

Sufficient storage capacity for 3l water for each person provided in aluminium inventory case.

358 Battery case

Battery case integrated in inner liner with watertight bottom and sides.

Cover provided. Battery secured against capsizing. Draining provided to prevent submerging of battery connections. Ventilation for battery case provided.

361 Hoisting hooks

Boat to be equipped with 10t draft NADIRO DROP-IN-BALL hooks made of special brass.

A central release unit is fitted at the helmsman position.

Hooks can only be released when the boat is waterborne by means of an electric water pressure sensor.

Hoisting hooks have additional eyes for transportation of the boat or for use of hanging-off pendant.

Outlet for davit brake wire provided near helmsman position.

362 Hoisting hook connections

Hoisting hook anchors inside made of seawater resistant aluminium and screwed to hull and hoisting hook with well accessible stainless steel bolts.

367 Painter fitting

Stainless steel painter fitting at fore-ship to release painter from inside.

371 Engine case

Engine case made of self extinguishing GRP. It can be opened quickly for access to the engine.

401 Colours

- Hull outside: orange RAL 2004
- Canopy outside: orange RAL 2004
- Hull inside: light grey RAL 7035
- Canopy inside and canopy air cases: white RAL 9010

407 Lettering

Ship's name, home port and boat number to be marked on the canopy on both sides.

Boat numbers if not requested otherwise: SB-boat no. "1"; PS-boat no. "2" etc.

If requested by administration call sign of ship is marked on top of the canopy to be seen from above.

Operating instructions for boat, engine and release device are fitted inside the boat. All important items are provided with pictograms easily to be understood and additional English description.

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408 Retroreflective material

To be fitted on canopy to be seen from top and from the sides.

501 Engine

Engine type as listed under "Options and special execution".

Starting: Two independent batteries for electric start only.

Engine flexible mounted to reduce noise level and vibrations.

511 Shaft plant

Stainless steel shafting with grease lubrication and bronze bearings. Shaft plant can run dry 5 minutes when boat is hanging in the Davits.

516 Propeller

Three blade brass propeller in a special execution to run in rudder nozzle.

521 Fuel tank

Made of aluminium and screwed to hull inner liner. Filling connection and inspection cover on top of tank. Fuel valve and water separation possibility provided.

Fuel tank capacity abt. 240 lt., sufficient for more than 24 working hours at 6 knots.

546 Cooling system

One closed cooling circuit going through keel-pipes. Cooling system filled with anti-freezer. Thus, when freezing no draining at engine plant is requested.

550 Exhaust System

Dry exhaust pipe c/w silencer and waterlock provided behind engine to reduce noise level. Exhaust piping insulated, outlet with goose neck to the boats transom, made of steel.

571 Rudder

Rudder nozzle with blade and stainless steel shaft. Bearings: two pieces in rudder trunk and one below the nozzle. Nozzle to protect propeller against damages. Rudder and propeller protected by solid rudder shoe. Rudder shaft is water-lubricated.

576 Steering

Bowden wire steering with cable connected to brass tiller on the rudder shaft. An emergency tiller can be easily put into the tiller fitting. Bowden wire can easily be disconnected in case of failure.

640 Bailing

Manual bailing pump installed. Capacity abt. 60 l/min.

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712 Electric switch board

Installed at helmsman position with 4 fuses (single wire system), 3 switches and 1 plug for searchlight.

713 Battery charging connection

One self-disconnecting charging plug installed at the aft bulkhead in centreline near to aft davit, completely delivered with counter part.

721 Position indicating light

One waterproof light on top of canopy, light intensity 4.3 cd.

722 Inside lights

Three water sheltered inside lamps to be operated by helmsman.

725 Search light

One watertight search light provided (loose equipment). Holder and 12 V socket for search light installed.

731 Batteries

Two capsuled maintenance-free gel-type batteries provided. Capacity 65 Ah at 12V.

802 Compass

Approved compass installed at helmsman position provided with lightning.

803 Radar reflector

Radar reflector (part of loose inventory) can be mounted into aft railing stanchion.

811 Radio station

Fixed installed VHF radio "Standard Horizon GX1100E" and SAR-T "Simrad SA 50" with standard scope of supply provided.

830 Engine control

Provided with single lever control from the helmsman position.

837 Engine instruments

Engine switch board provided at helmsman position including starter, stopping device and instrumentation according to engine maker's standard.

905 Deck equipment

- One hand operated screen wiper.
- Lifelines at the boat's sides and at transom.
- 1 rowlock for sculling at transom.

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914 Loose equipment

Standard equipment delivered with the boat. Alterations are possible, depending on authority.

Pos	Pc	Description
1	2	boat hook
2	1	set of manuals: 1 boat manual 1 engine manual 1 engine spare part list 1 survival manual
3	1	container with: 1 fishing-tackle 1 signal whistle 1 signal mirror 1 waterproof electric torch with 2 spare bulbs and batteries 1 jack-knife 3 tin openers
4	1	case for motor spare parts: 1 oil filter 1 fuel filter 1 V-belt 1 tool set 1 oil drain pump for engine

Pos	Pc	Description
5	2	painters ø22mm, 15m long
6	1	bailer
7	2	hatchet with bag
8	1	radar reflector
9	1	sea anchor with rope
10	2	cup with line
11	2	hauling line, each 30m floatable with rescue quoits
12	2	bucket with line
13	1	searchlight
14	6	thermal protective aid
15	60	6 anti seasickness pills
16	60	seasickness bag
17	1	first aid kit
18	1	fire extinguisher
19	1	boat oar
20	1	rope ladder
21	1	dipper

Note: pyrotechnics, rations and water as listed in chapter "Options and special execution" on page 2 of this specification.

