RIB-X Explorer XP510 specification

XP510

A perfect balance between physical dimensions, ride comfort and ease of use for the whole family. The XP 510 has been refined over many years and has been dubbed "one of the best all rounders available in it's class" by many boating reviews.

The success of the XP510 lies within the inverted chine hull design which makes this craft very forgiving, no matter which manoeuvres are presented

It is perfectly at home on inland and coastal waters, offering a dry and comfortable ride

Integral nose anchor locker - Bow seat - Modern lightweight construction - Non-slip moulded deck - Double jockey seat - S/S rear seat with back rest - S/S 'A' frame/ski bar - S/S tow eye's - No feedback steering - Sports steering wheel - Grab handles - Under deck cable ducting - Full length recessed channel - Engine well/battery compartment - Optional under deck fuel tank

OVERALL LENGTH 5100mm

OVERALL BEAM 2150mm

INSIDE LENGTH 4000mm

INSIDE WIDTH 1200mm

HULL DEADRISE 11,5°

AIR COMPARTMENTS 6

HULL WEIGHT 220kg

MAXIMUM LOAD 1080kg

MAXIMUM PERSONS 79

MAXIMUM POWER 130hp

PONTOON DIAMETER 490mm

PONTOON FABRIC

1100 dtex

Annex B

RIB-X commissioning guide

Rib-X Commissioning Guide

Introduction

Commissioning/Rigging

All vessels must be rigged by either Rib-X or an installation engineer approved by Rib-X.
As a Rib-X Dealer or Approved Rib-X Agent you are only permitted to rig or commission any boat supplied to you once you or your engineer has satisfactorily completed the 2 day rigging course held at our factory in Leicestershire.
These courses approve an individual and not the company in its entirety.
This procedure is to ensure uniformed quality of rigging on all boats both supplied by yourselves and direct from the factory. Failure to abide by these guidelines could invalidate the vessels warrantee.
All warrantee work must be pre-authorised by Rib-X and these works too can also only be carried out by an approved body or person.

All elements of the commissioning process can be done centrally through the Rib-X Leicestershire plant, and these installations will conform to the RCD guidelines issued by the BMF Technical Department and the RYA technical department.

Application

1) Fuel

Installation of fuel tanks and related ancillaries.
Fuel tanks can either be fitted on deck, under deck (where applicable), under console or within seating (ie jockey consoles), in every case the guidelines regarding installation are the same, they must be securely fastened down preventing both lateral and vertical movement when in position, with a minimum of 5mm ventilation underneath the tank, and if fitted into a confined area sufficient breathing and airflow must be provided to ensure adequate ventilation around the tank.
Removable tanks should be mounted on proper mounting brackets available from most quality chandlery firms.
Permanently fitted tanks should be fitted prior to console/seating being installed (see point 2), using adequate fittings to ensure no lateral or vertical movement, the fuel tank must be mounted in either the deck hatch below the console or in the console itself.
Alloy or stainless steel tanks must be earthed. Fuel pipe should be run under the deck floor (where applicable) port side to rear (transom) where a fuel / water separator should be fitted and mounted.

All fuel lines must be ISO 7840 approved, and to the right measurements. Following the above the appropriate sender unit and fuel breather pipe and filler to be attached. The latter two items should be fitted to the side of the console (usually port side).
All fuel lines must have a minimum of two appropriate fastenings (ie jubilee clips) on all pipe connections. Following the fuel tank installation the deck panels (where applicable) on or around the fuel tank should then be replaced using both adequate amounts of marine grade polyurethane adhesive and stainless steel screws (these amounts will vary dependent on panel size)

2) Consoles and seating

All consoles and seating modules when a boat is supplied to you as a bare boat only, will only be attached using only transit screws, these screws are for transit purposes only and not sufficient for full rigging use, they are provided in this way in order to allow you to easily remove the modules for rigging and installation.
When rigging the vessel these transit screws should be removed and the console and seating removed to allow easier installation of steering, electronics etc.
The console and seating modules must then be re-mounted using a continuous line of appropriate marine grade polyurethane adhesive (ie Pureflex) between the flange on the module and the deck, this is undertaken for both fixing and water sealing purposes. This must then be reinforced by using minimum of M6 stainless steel or larger self tapping screws or coach bolts and penny washers. Screws through these flanges must be at no more than 150mm intervals.

3) Electronics

Mount all electronic components using indivdual manufacturer / supplier guidelines and diagrams. Rib-X have access to templates for most electronics products if required.
Failure to not adhere to manufactures installation guidelines may invalidate your customers warrantee

The battery, battery box and isolator switch can be fitted after point 2, isolator switches should be mounted off of the floor, ideally by a minimum of two inches, and can be sited in either the console or helm/ jockey seat for easy access. All wiring for any electronic component must be ducted through the under floor ducting (where applicable) and supported at least every 300mm. These may include Bilge Pump, Navigation Lights and all other cabling. Do not put joints battery cables.
Contact Rib-X for any queries.

4) Steering

The steering system is dependent upon the specification of the boat and can be either cable type or hydraulic, we recommend that engines above 150hp should have hydraulic steering fitted.
Fitting of any steering system is usually easier once the console has been removed.
Whatever system you install the installation process must be in line with the manufacturers installation guidelines.
The engine and steering should then be PDI'd and checked before any water test.

Trailers

Where a dealer chooses to supply a trailer not provided by Rib-X, in order for our hull warrantee to be valid the trailer must first be approved by ourselves, (ie sufficient keel rollers etc) failure to do this could invalidate the vessels hull warrantee.

All Rib-X boats must adhere to the following process prior to hand over to the customer: -

Pre hand over

All vessels must have a full PDI on all equipment, the vessel must be clean and have undertaken a thorough water test prior to delivery/handover.

Hand over

Ensure completion of the owners handbook/ manual and registration page returned to us, all warrantee cards and guarantees supplied to the customer

Remember.... It's our job to build the best..!! and "Happy Boating"

Important note.....

Rib-X will not be held responsible for your failing to adhere to these guidelines, nor for installations, rigging or repairs carried out by unauthorised third parties.

Rib-X ltd

Signed for Rib-X.....

Signed Dealer.....

Annex C

RYA assessment report

“Partner 1”
Assessment against ISO 6185-3

Report by the RYA Technical Department – May 2008

1. Introduction

The RYA Technical Department was requested by the MAIB to inspect the rigid inflatable boat (RIB) **Partner 1**, a model XP 510 RIB marketed by RIB-X, against a number of the requirements of BS EN ISO 6185-3 and in particular requirements covering:-

- Console attachment & construction
- Residual buoyancy
- Compartmentation
- Maximum number of persons
- Maximum motor power
- Builders plate
- Craft identification number

The inspection took place at Cobbs Quay, Poole on the 29 April 2008.

2. Inspection and Results

2.1 Console attachment & construction

Along with requirements for overall craft construction, section 5.11 of ISO 6185-3 makes specific reference to the seating and seating attachment systems. This states: - *“There shall be no damage or malfunction to either the seating or to any related attachment systems when tested in accordance with section 7”.*

Section 7 and specifically section 7.3.2.2 requires the craft to undergo a series of *In-water performance tests* which involve a number of runs at maximum speed each culminating in turning the boat sharply to both port & starboard. The requirements of these tests are that *“All seating and attachment systems shall be clearly seen to have satisfied the requirements of 5.11”.*

2.2 Residual buoyancy

Residual buoyancy, section 6.8 of ISO 6185-3, is calculated using the requirements for Maximum load capacity (m) as specified in section 6.4. This is given by:

$m = (0.75 \times V \times 1000) - m_b$

where:

m_b is the maximum load capacity, in kilograms (total mass on board including persons, equipment, motor(s) and fuel);

V is the volume, in cubic metres, of the buoyancy of the boat

In the case of **Partner 1** - m_b, from the manufacturers information, is 220kg and V is the combined volume of the four tubes* at 1.838m^3.

* The buoyancy of a RIB, for ISO 6185-3 calculation purposes, may, in addition to the inflated buoyancy tubes, take into account the permanent inherent buoyancy of at least two compartments of permanent sealed buoyancy, fixed rigid to the hull, not exceeding 20% of the total buoyancy.

It was not possible to determine if the area under the floor could be considered as permanent sealed buoyancy, however the tubes of the boat provided sufficient buoyancy for the maximum load through the tubes to meet the requirements.

So, for **Partner 1,** the calculated Maximum load capacity is

m = (0.75 x 1.838 x 1000) – 220

m = 1158.5 kg

The maximum load for **Partner 1,** as given on the Builders Plate, is 1076 kg. This is below the calculated maximum requirement by the Standard.

Residual buoyancy is the subject of section 6.8 of ISO 6185-3 and requires that, after failure of the largest buoyancy chamber, the residual inflated buoyancy of the hull shall be at least 50% of the manufacturer's rated Maximum load capacity.

Failure of the largest **Partner 1** tube gives a remaining tube volume of 1.365 m^3. This is greater than 50% of the manufacturer's maximum load of 1076 kg.

2.3 Compartmentation

The dimensional factor *F*(d), in Table 2 of ISO 6185-3 gives the minimum number of required separate buoyancy compartments. With **Partner 1**

F(d) = l x b (l = Overall length, in metres, b = Overall beam, in metres) = 10.96

For an engine power greater than 45 kW and an *F*(d) greater than 8, ISO 6185-3 requires a minimum of 5 separate buoyancy compartments.

Partner 1 has only 4 separate buoyancy compartments.

In addition to the above requirement the volume of each separate buoyancy compartment, with internal partition bulkheads in the neutral position, shall be within ±20% of the mean compartment volume. **Partner 1** as inspected met this requirement.

2.4 Maximum number of persons

ISO 6185-3, in section 6.1, gives a formula for the Maximum permissible number of persons (n).

This is given by:

n = (Ai – *x*) / 0.3

where

Ai is the inboard area, in square metres;

x is the area, in square metres, of the inboard area which cannot be utilized for the accommodation of persons. (e.g. steering console, exposed fuel tank(s), etc)

From **Partner 1** measurement:

Ai = 2.75 x ((0.98 + 1.25)/2) = 3.07 m^2

x = 0.64 x 0.5 = 0.32m^2

With **Partner 1** n, the calculated Maximum permissible number of persons = 9.17

The Builder's plate gives 9 as the Maximum permissible number of persons.

2.3 Maximum motor power

Section 6.2 of ISO 6185-3:2001 sets a maximum recommended motor power; this maximum motor power rating may be increased for boats supplied with a remote steering system installed by the manufacturer as standard equipment, provided they conform to the manoeuvring test procedure specified in ISO 11592.

The maximum recommended motor power rating is given by:

P_{max} = 10 x F(d) – 33

where

P_{max} = maximum motor power rating, in kilowatts.

F(d) = l x b (l = Overall length, in metres, b = Overall beam, in metres)

With **Partner 1** P_{max} is:-

P_{max} = 10 x (5.1 x 2.15) – 33 = 76.7kW = 103 HP

The engine as fitted to **Partner 1** had a power rating less than the calculated Maximum recommended motor power.

2.4 Builder's plate

The Builder's plate affixed to **Partner 1** and as illustrated below gives the following information;

Maximum Engine Power – 76 kW
Maximum Number of Persons – 9
Maximum Weight of Persons, Engine & Carry On Load – 1076 kg
Design Category C – Maximum Pressure 0.25 bar
ISO Standard 6185, Part 3 / Cat C Applies
Manufacturer – FALCON
Country of Origin – SOUTH AFRICA
Serial No – ZA FAL 51062 B505
Model – 510 SH
Year of Manufacture – 2005
Total Hull Deadweight – 220kg

2.5 Craft identification number

No Craft identification number (CIN) was displayed although the Builder's plate did give some details related to a CIN.

3. Conclusions

Although it was not possible to undertake the tests on **Partner 1** for the structural requirements of ISO 6183-3, it is fair to assume from the damage sustained as detailed in the MCA Incident Report Form of the 20 April 2008, that **Partner 1** did not satisfy the requirements of ISO 6185-3 section 5.11 and section 7.3.2.2 in that *there was damage and malfunction to the seating and related attachment systems.*

The residual buoyancy of **Partner 1** meets the requirements of ISO 6185-3 based on the maximum load & unladen weight detailed on the Builder's plate, however the boat does not meet the buoyancy compartmentation requirements as she possesses only 4 separate buoyancy compartments when the calculated minimum is 5.

The maximum number of persons and maximum recommended engine power meet ISO 6185-3 requirements.

Partner 1 displays no CIN as required by the EU Recreational Craft Directive.

RYA Technical Department

References

BS EN ISO 6185-3:2001 Inflatable boats – Part 3: Boats with a maximum motor power rating of 15kW and greater.

Falcon 510 SR Bureau Veritas test report

BUREAU VERITAS

International Register for Classification of Ships - Established 1828 -
Registre International de Classification de Navires - Fondé en 1828 -

Marine Division
Division Marine

TEST REPORT

Issued within the scope of the Bureau Veritas Marine Division General Conditions
Délivrée dans le cadre des Conditions Générales de la Division Marine du Bureau Veritas

JOB NUMBER	:	LCPO/1999/J0013
BOAT MODEL.	:	FALCON 510SR
MANUFACTURER	:	HEYNEMAN YAMAHA 154 VOORTREKKER ST. SWELLENDAM 6740 SOUTH AFRICA
LOCATION OF TEST	:	BUFFELJAGSDAM SWELLENDAM SOUTH AFRICA
DATE OF SURVEY	:	21 APRIL 1999
SCOPE OF SURVEY	:	INSPECTION AND PRACTICAL TEST ON INFLATABLE HARD BOTTOMED BOAT

This is to certify that a surveyor to Bureau Veritas did attend the above said survey on 21 April '99 at Buffeljagsdam, Swellendam South Africa, the results of which are attached as Annex A and B.

PLACE OF ISSUE	:	CAPE TOWN
DATE OF ISSUE	:	3 MAY 1999

Exclusive Surveyor

latest published Rules of the Bureau Veritas Marine Division and the General Conditions therein are applicable.
dernière édition des Règlements de la Division Marine du Bureau Veritas ainsi que les Conditions Générales qui y figurent sont applicables.

BUREAU VERITAS

International Register for Classification of Ships - Established 1828 -
Registre International de Classification de Navires - Fondé en 1828 -

Marine Division
Division Marine

ANNEX B

CALCULATIONS
FOR FALCON 510 SR

Maximum permissable number of persons

$$n = \frac{(3.925 \times 1.2) - 0.395}{0,3}$$

$\therefore$ n = 14 Persoas

Maximum motor power

$$P = 10\ (5,1 \times 2,15) - 33$$

$\therefore$ P = 76,65 KW

Maximum Load Capacity

$$M = (0,75 \times 1,8 \times 1000) - 278$$
$$= 1072\ KG$$

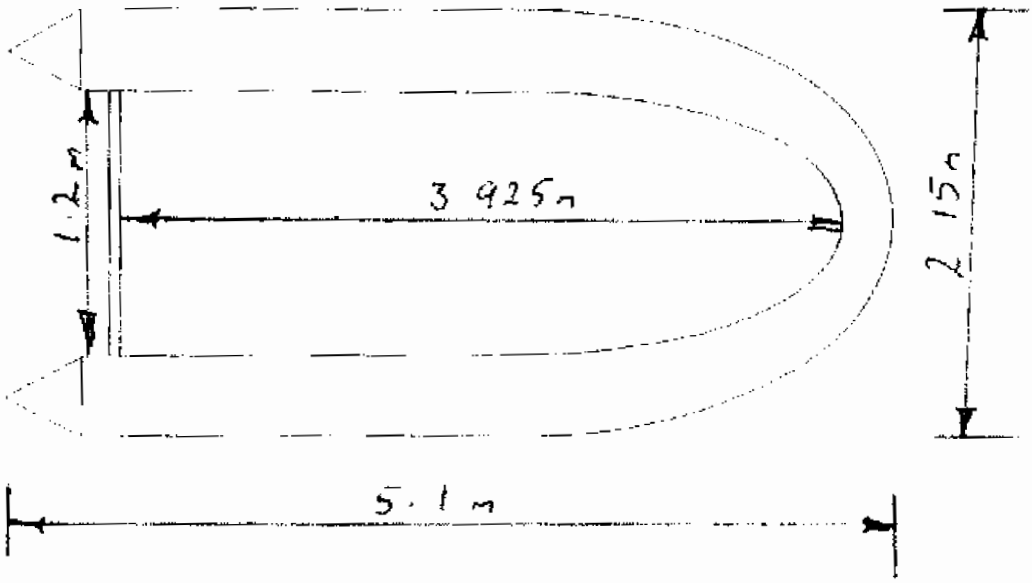
CAPT [illegible]

BUREAU VERITAS

International Register for Classification of Ships - Established 1828 -
Registre International de Classification de Navires - Fondé en 1828

Marine Division
Division Marine

ANNEX A



DESIGN CATEGORY		VII
MODEL		FALCON 510 SR
CATEGORY		150 6185 - 3
LENGTH OVERALL		5,1m
BEAM OVERALL		2,15m
INTERNAL LENGTH		3,925m
INTERNAL BEAM		1,2m
TUBE DIAMETER		0,5m
AIR CHAMBERS		3
PERSONS CARRIED		9
PAY LOAD		1080 kg
WEIGHT OF BOAT		250 kg
RECOMMENDED MAX KW		70 KW
STABILITY TEST		SATISFACTORY
MINIMUM RESERVE BOUYANCY TEST		SATISFACTORY
TEST LOAD		685 kg
MANOEUVRABILITY TEST	:	SATISFACTORY
HIN NUMBER	:	ZA - FAL51 ----
AIR TEST (24 HRS)	:	SATISFACTORY

CAPE TOWN

NOTE: HIN NUMBER REMARKS AS PER FALCON 450 SR

Annex E

Bureau Veritas attestation of conformity for Falcon SR range

Directive Navires de Plaisance

Recreational Craft Directive

CE

Direction Marine
Marine Division

Attestation/Certificate N°: 6633. 0270.A0.9 CE-RCD
Dossier/File N°: BV ON 57-03, 04, 05 & 06

ATTESTATION DE CONFORMITE
STABILITE ET FRANC-BORD / FLOTTABILITE

ATTESTATION OF CONFORMITY
STABILITY AND FREEBOARD / BUOYANCY AND FLOTATION

Le soussigné, agissant dans le cadre de la notification du Bureau Veritas S.A., atteste que le type de bateau identifié ci-après, est conforme aux exigences essentielles 3.2 (stabilité et franc-bord) et 3.3 (flottabilité) de la Directive 94/25/CE transposée en droit national français par le Décret N° 96/611 du 4 Juillet 1996. / *The undersigned, acting within the scope of Bureau Veritas S.A.'s notification, certifies that the boat type hereafter identified, complies with the essential requirements 3.2 (stability and freeboard) and 3.3 (buoyancy and flotation) of the Directive 94/25/CE transposed in the french national law by Decree Nr 96/611 of 4th July, 1996.*

Demandeur/*Applicant*: **FALCON INFLATAB**

Adresse/*Address*: **154, VOORTREKKER ROAD – PO BOX 225 - SWELLENDAM 6740 SOUTH AFRICA**

Cette attestation n'est valide que pour le bateaux mentionné ci-après / *This certificate is valid only for the boat types specified hereafter*:

FALCON 450 SR
FALCON 550 SR
FALCON 510 SR
FALCON 640 SR

Cette attestation comporte une annexe de 1 page, qui décrit le type de bateau, les normes ou règles appliquées, les plans et informations soumis, ainsi que les rapports d'essai realisés. / *This certificate is accompanied by an annex of 1 page, describing the boat type, the standards or rules applied, the drawings and informations submitted, as well as test reports done.*

Etabli à / *Issued at* Paris La Défense le/*on*: **02/06/1999**

Responsable Plaisance
Pleasure Crafts

Directive Navires de Plaisance

Recreational Craft Directive

Attestation/Certificate N°: 6633. 0270.A0.9 CE-RCD
Dossier/File N°: BV ON 57-03, 04, 05 & 06

FALCON 450 SR (ON 57-03) - FALCON 550 SR (ON 57-04)
FALCON 510 SR (ON 57-05) - FALCON 640 SR (ON 57-06)

I. Types de bateaux / *Boat type:*

Powered Rigid Inflatable Boat , Design Category C.

II - Plans et documents soumis pour examen / *Drawings and documents submitted for examination:*

General documentation
Air Compartment Layout (4)
Test Report LCP/99/17/IFA dd 03/05/99

III. Conformité au décret 96/611 du 4/7/96 Annexe I / *Co or to decree 96/611 o 4/7/96 Annex D:*

Point 3.2: Stabilité et flottabilité / Standard ISO 6185-2 dated 30 12 93. VII
Point 3.3: Flottabilité / *Buoyancy and flotation:* CD 6185-2 dated 30 12 93

Model	450 SR	510 SR	550 SR	640 SR
Category as per ISO Standard	VII	VII	VII	VII
Length Overall (m)	4,5	5,10	5,75	6,4
Beam Overall (m)	1,98	2,15	2,5	2,5
Inboard Length (m)	3,5	3,925	4,5	4,95
Inboard Beam (m)	1,0	1,2	1,5	1,5
Tube Diameter (m)	0,45	0,5	0,5	0,5
Number of Chambers	4	6	6	6
Maximum Number of Persons	7	9	10	12
Maximum Load (kg)	750	1080	1650	1853
Maximum Motor Power (kW)	45	70	110	125

IV. Conclusion:

The crafts fulfill the technical requirements allowing conformity to the Decree. The following informations will be indicated on the builder's plate.

Model	450 SR	510 SR	550 SR	640 SR
Design Category	C			
Maximum Number of Persons	7	9	10	12
Maximum Load (kg)	750	1080	1650	1853
CE 0062 (nota: No production survey performed)				

V. European Authorised Representatives of the builder:

French Counter - Keribuelo - 56 690 Landaul - France

Annex F

Falcon 510 SR manufacturer’s self-certification document

Falcon Inflatables (Pty) Ltd
Koringland Street, Industria North, Swellendam, 6740, South Africa
Tel + 27 (0)28 514 2010 | Fax + 27 (0)28 514 XXXX
Email info@falconinflatables.co.za

MANUFACTURER'S CERTIFICATION DOCUMENT

Falcon Inflatables (Pty) Ltd hereby certify that the

Falcon Model 510 SR

Rigid Inflatable Boat (RIB)

complies with

ISO 6185-3: INFLATABLE BOATS, PART 3

(*Boats with a maximum motor power rating of 15 kW or greater)*

Certified by		
Position	Marketing Director	
Signature / Date		

Authorised by		
Position	Owner & Chief Executive	
Signature / Date		

This document provide the detailed requirements in terms of the compliance with ISO 6185-3 / CE Code of Practice. It also contains details of our test methodologies and test results, results of laboratory analyses, factory tests on the completed hull, as well as physical water tests on completed boats, by way of declarations of conformity with the standards.

TECHNICAL DATA: FALCON 510 SR

DIMENSIONS	**VALUE / UNITS**	***REMARKS***
Overall length	5100 mm	
Solid hull length	4250 mm	
Width (beam)	2100 mm	*Measured at transom*
Inside deck length	mm	
Inside deck width (average)	mm	

MASS, VOLUME, CAPACITIES	**VALUE / UNITS**	***REMARKS***
Mass of unladen boat	350 kg	*Hull & pontoon*
Mass of typical rigging	100 kg	*Console, rails, seating etc*
Mass of motors (maximum)	130 kg	
Mass of fuel (maximum)	90 kg	*100 Litres*
Mass of persons (maximum 9)	675 kg	*See section 6.1*
Available load, with 9 persons on-board	150 kg	
Max. displacement	1495 kg	*Sum of above masses*
Pontoon volume	1.74 m^3	
Residual buoyancy (B_r)	245 kg	B_r = *Pontoon volume – max displacement*

POWER / PERFORMANCE	**VALUE / UNITS**	**REMARKS**
Manufacturer's recommended minimum motor power	44 kW / 60 hp	See section 6.2
Manufacturer's recommended motor power	66 kW / 90 hp	
Maximum permitted motor power	73 kW / 100 hp	

1. FOREWORD, SCOPE & STRUCTURE OF CERTIFICATION DOCUMENT

1.1 The ISO Standard

The International Standards Organization is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work.

International Standard ISO 6185-3 was prepared by Technical Committee ISO/TC 188, Small craft; it supercedes ISO 6185:1982.

The new standard differs significantly from ISO 6185:1982 as it now cover boats made from unsupported materials, whereas the former only covered boats made from reinforced materials.

1.2 Scope

ISO 6185 consists of the following parts, under the general title Inflatable Boats:

- Part 1: Boats with a maximum motor power rating of 4.5 kW
- Part 2: Boats with a maximum motor power rating of 4.5 kW to 15 kW
- Part 3: Boats with a maximum motor power rating of 15 kW and greater

This document is concerned only with Part 3, which sets out standards for Type VII & Type VIII boats.

The Falcon 510 SR is classified as a type VII boat.

1.3 Document Structure

This document follows the broad outline of ISO 6185-3. Under each heading we reproduce the requirements laid down in the standard, then give some interpretation if we feel it is required, then describe the tests done by ourselves or by our suppliers or agents, and then finally we provide documentary evidence in respect of compliance to each section in the standard.

2. NORMATIVE REFERENCES

See Annex C for references to related standards.

3. TERMS AND DEFINITIONS

See Annex D for definitions of terms used in the standard

4. MATERIALS

4.1 General

- All materials shall be selected by the manufacturer according to the stresses to which the craft is to be subjected (shape, dimensions, maximum load, installed power, etc.) and also to the intended service conditions.

- Use under normal seagoing conditions shall not materially impair their performance and they shall meet the requirements specified in 4.2 to 4.5.
- All materials of the inflatable boat shall be inherently rotproof

General Declaration
(see also specific declarations and assurances below)

Falcon Inflatables (PTY) Ltd declares that all materials used in construction of the Falcon 510 SR are fit and appropriate for the design limits of the boat, and capable of withstanding stresses expected from normal service conditions, and that all materials used are inherently rot-proof.

4.2 Reinforced materials making up the hull *(excl GRP components)*

This section applies to all materials going to make up the 'hull' of the boat, except for the glass-fibre reinforced plastic (GRP) parts, which are dealt with in Section 4.5.

In the case of a RIB, like the 510 SR, the term 'hull' refers to both the rigid part and the inflatable part, hence section 4.2 relates to the materials of which the tube or pontoon is constructed.

The necessary evidence of compliance is provided under each heading from lab results provided by Mehler Texnologies GmbH, Germany, manufacturers of the Valmex® fabric from which the Falcon 510 SR pontoons are constructed: See Annexure A for complete test results.

4.2.1 Requirements

- All materials contributing to the integrity of the boat shall meet the requirements stipulated below and shall retain their full serviceability within the operating temperature range (– 20°C to + 60°C).

4.2.2 Test methods

4.2.2.1 Sampling

- Carry out the test with test pieces taken from the constituent materials prior to manufacturing the boat.
- If the boats are vulcanized during manufacture, the test pieces shall also be vulcanized.

4.2.2.2 Resistance to liquids

Resistance to liquids

Carry out the test on the external side or the sides of the material contact with the ambient environment as specified in ISO 1817 but using ASTM Oil No.1.

In cases a) and b) shown in Table 1, the change in mass per unit area shall not exceed 100 g/m² following the stipulated period of contact with the test fluid at a temperature of 70°C +/- 2°C.

Table 1 – Test liquids

Test liquid	Period of contact
a) Oil	22 h +/- 0,25 h
b) Salt water	336 h

Result: pass

4.2.2.3 Resistance to ozone

Resistance to ozone

Carry out the test on the external side or the sides in contact with the ambient environment as specified in ISO 3011.

Exposure time	72 h
Temperature of test	30°C +/- 2°C
Concentration	50 pphm (= parts of ozone per hundred million of air by volume)
	that is to say a volume fraction of 0,5 x 10^{-6}
Mandrel diameter	5 times the material thickness

There shall be no signs of cracking on completion of the test when the test samples are examined under a magnification of 10 x.

Result: pass

4.2.2.4 Resistance to cold

Resistance to cold

All materials shall satisfy the requirements of ISO 4646 at a temperature of – 15°C.

Result: pass

4.2.2.5 Tear Strength

Tear strength

ISO 4674-1 (Dec.2003) Method B: minimum requirements 250 N

Result: pass

4.2.2.6 Coating adhesion

Adhesion

ISO 2411 – Adhesion measured as per ISO 2411 – Method HF – Welding:
Minimum requirements 20 N / cm (10 daN / 5 cm)

Result: pass

4.2.2.7 Seam strength testing of buoyancy chambers

- Join two pieces of material together in the same manner as used in the boat construction (method, material, dimensions) to form a 50 mm wide test piece.
- Apply a static load at 60 °C over a period of 4 h.
- Where more than one method of seam construction is used in the manufacture of the boat, carry out the test for each method.
- The value of the load, in newtons, is given by the formula.

$$3.75d\ (1.14p + 0.14)$$

Where:	**Falcon 510 SR**
d is the maximum tube diameter, in millimetres, measured within the straight sections of the buoyancy tube section	490 mm
p is the recommended working pressure, in bars, at 20°C.	0.25 bar

result of formula = 3.75 x 490 x ([1.14 x 0.25] + 0.14)
for Falcon 510 SR = 1875 x (0.285 + 0.14)
= 1875 x 0.425
≈ **781 N**

Dividing this value by 9.81 (gravitational constant) gives the static load to be applied, in kilogrammes:

= 781 / 9.81
≈ **79.6 kg**

Pass / Fail criteria:

- There shall be no slipping or other failure at any part of the seam.

Declaration: Seam Strength

Falcon Inflatables (PTY) Ltd declares that all buoyancy chamber seams comply with the requirements of the standard

4.3 Wood

4.3.1 General

- The types of timber and plywood used shall be suitable for the application and the marine environment.
- All exposed timber and plywood shall be given weathertight protection, such as paint, varnish or preservative, suitable for a marine environment.

4.3.2 Plywood

- All plywood used shall incorporate only hardwoods for both internal and external veneers and the bonding adhesive shall be waterproof and boil proof.
- The timber used shall be seasoned and free from sapwood, decay, insect attack, splits and other imperfections likely to adversely affect the performance of the material. The timber shall be generally free from knots but an occasional sound intergrown knot is acceptable.
- Other timbers, e.g. Douglas fir, may be used for the veneers provided that they are treated to give protection against rot, fungal decay and marine borers. Adjoining edges and/or surfaces, including any end-grain, shall be effectively sealed.

4.3.3 Constructional timbers

– The timber used in the construction shall be seasoned and free from sapwood, shakes and other defects.

Declaration –Constructional Timbers

Falcon Inflatables (PTY) Ltd declares that :

a) all timbers and plywood used are certified for use in a marine environment

b) all timbers used in the construction of the Falcon 510 SR are inspected and selected to be free from visible damage and/or imperfections

b) there are no exposed timbers in the completed 510 SR: all structural timber elements are fully sealed in glass-fibre within the hull structure and hence fully protected from the marine environment.

4.4 Metal and synthetic material parts

Materials used shall be of a type, strength and finish suitable for the intended purpose of the components and compatible with the marine environment.

Declaration – Metal and synthetic material parts

Falcon Inflatables (PTY) Ltd declares that all metal and synthetic materials used in construction of the Falcon 510 SR and/or any fitments or accessories supplied by us for purposes of attachment to or for use on the Falcon 510 SR are of a type, strength and finish suitable for the intended purpose of the components and compatible with the marine environment.

4.5 Glass-fibre-reinforced plastics

Resins, reinforcements and laminates shall comply with the requirements of ISO 12215-1.

Declaration – Glass-fibre-reinforced plastics

Falcon Inflatables (PTY) Ltd declares that all resins, reinforcements and laminates comply with the requirements of ISO 12215-1.

5 FUNCTIONAL COMPONENTS

5.1 Conditioning

All tests shall be performed at a temperature of 20 °C ±3 °C.

5.2 Hull fittings

5.2.1 Requirement

- The materials and method of construction used shall be compatible with that of the hull itself.
- Any load-bearing fitting attached to the boat (see 3.1 and 3.2) shall not, when loaded as described in 5.2.2, result in any impairment in airtightness or water integrity.

Declaration – Hull fittings

Falcon Inflatables (PTY) Ltd declares that:
a) the materials and method of construction of all hull fittings are compatible with that of the hull itself, and that
b) any load-bearing fitting attached to the boat may be loaded as described in 5.2.2 without any impairment in airtightness or water integrity.

5.2.2 Test method

- Any cordage used for test purposes shall have a diameter of 8 mm.
- Gradually load the fittings in any direction up to breaking point but not exceeding 2 kN. If 2 kN is reached, maintain this load for 1 min.

5.3 Manual lifting and carrying devices

5.3.1 Requirement

- Boats with a buoyancy less than 9kN shall be equipped with a means of carrying it.
- The fitting of lifting and carrying devices on boats with a buoyancy of 9kN or greater is optional.
- There shall be no failure of the device when tested as described in 5.3.2.

5.3.2 Test method

- Any cordage used for test purposes shall have a diameter of 8 mm.
- Gradually load the device with a force of 1,5 kN for 1 min in the appropriate directions.
- Where lifting or carrying devices also function as safety ropes or grab handles, they shall also conform to the requirements of 6.7.1.

Declaration – Manual lifting and carrying devices

Falcon Inflatables (PTY) Ltd declares that all lifting and carrying devices conform to the requirements of the standard:

5.4 Valves

5.4.1 Inflation

- The assemblies shall be made of corrosion-resistant materials and shall not be capable of damaging the boat materials.
- The type and arrangement of the inflation valves fitted to an inflatable boat shall ensure that:
  a) the valves will be readily accessible for connection of the inflation device whether the boat is on land or in the water,
  b) the valves will not inconvenience the persons in their predetermined seating positions,
  c) the valves will not interfere with the operation of the boat,
  d) the valves will not interfere with loading and unloading of the boat,
  e) the valves cannot be damaged or torn off by lines, lifelines or movable components of the boat construction or by normal movements of the passengers and load,
  f) the valves shall be equipped with a cap that can independently seal the valve and that the cap shall be connected to the valve in a secure manner that prevents it from being accidentally lost, and
  g) a controlled reduction in buoyancy chamber pressure and of measuring that pressure is possible.

5.4.2 Deflation

- Deflation of the hull shall be by manual operation, either by using the inflation valve or by using a separate device.
- Where separate devices are fitted then these shall be made of corrosion-resistant materials and shall not be capable of damaging the boat material.
- The design and location of such devices shall meet the requirements of 5.4.1 b) to e) inclusive.
- The deflation of any one compartment shall not cause a loss of air or gas from any of the remaining compartments.

Declaration: Inflation Valves

Falcon Inflatables (PTY) Ltd declares that the valves fitted to the Falcon 510 SR comply with the above standards.

5.5 Rowlocks and oars

5.5.1 Requirements

- The provision of rowlocks and oars is not mandatory. If they are provided as standard or optional equipment, they shall meet the requirements, given in 5.5.2 to 5.5.5.

  Rowlocks are not provided, hence this section is not applicable

5.6 Transom (where applicable)

5.6.1 Requirement

- The transom or motor mount and its attachment to the boat shall be designed to withstand, under normal use, the maximum stresses arising from:
  - the output power and torque of the motor(s) specified by the manufacturer, and
  - the weight of such motor(s).

5.6.2 Test method

- Visual inspection during and following in-water performance tests described in 7.3

Declaration: Transom Strength

Falcon Inflatables (PTY) Ltd declares that the transom of the Falcon 510 SR and its attachment to the boat is capable of withstanding, under normal use, the maximum stresses arising from fitment and use of motor/s up to and including the maximum mass and power ratings given in the owner's manual for this boat.

5.7 Hull drainage

- If the boat is fitted with a transom, it shall be equipped with at least one drainplug or one bailing system.
- For RIBs fitted with an integral closed hull/deck assembly which is not filled with closed-cell foam or equivalent, a facility shall be provided for draining the interior part of the hull (bilge).
- Type VIll boats shall be capable of having totally flooded deck areas bailed or drained overboard without the use of a bilge pump (unless with a permanently installed manual bilge pump) in less than 3 min.
    - See bailing test in 7.8.

Declaration: Hull Drainage

Falcon Inflatables (PTY) Ltd declares that the Falcon 510 SR complies with all the hull drainage requiremens of the standard.

5.8 Remote steering system (where offered as standard or optional equipment)

- Any remote steering system shall conform to the requirements of one or more of the following International Standards: ISO 8848, ISO 9775, ISO 10592 or ISO 15652.
- There shall be no damage or malfunction to either the system or to any related attachments to the boat when tested in accordance with clause 7.
- Type VIII boats shall be fitted with a factory installed remote steering system.

Declaration: Remote Steering System

Falcon Inflatables (PTY) Ltd declares that steering systems fitted by Falcon conform to the above standard.

Disclaimer:
Falcon can make no declaration, and can not be held liable for steering systems not fitted by itself, for example where a hull has been supplied to a dealer. In such cases the dealer must provide such warranty.

5.9 Motor-securing line attachment (outboard engines only)

- A means for attaching a motor-securing line shall be provided at an appropriate position.

Declaration: Motor-securing line attachment

Falcon Inflatables (PTY) Ltd declares that:
A means has been provided for attaching a motor-securing line at an appropriate position.

5.10 Towing device (all types)

All boats shall have, at their bow, a towing device suitable for securing a towline. See 7.4 for strength test.

Declaration: Towing device

Falcon Inflatables (PTY) Ltd declares that:
The 510 SR has, at the bow, a device suitable for securing a towline.

5.11 Seating and attachment systems

(where offered as a standard or optional equipment)

- There shall be no damage or malfunction to either the seating or to any related attachment systems when tested in accordance with clause 7.
- Type VIII boats have a factory-installed seating and attachment system.

Declaration: Seating and attachment systems

Falcon Inflatables (PTY) Ltd declares that seating and attachment systems fitted by Falcon conform to the above standard.

Disclaimer:
Falcon can make no declaration, and can not be held liable for such systems not fitted by itself, for example where a hull has been supplied to a dealer. In such cases the dealer must provide such warranty.

5.12 Electrical installations (where offered as standard or optional equipment))

- Any electrical installations shall conform to the requirements of the following International Standards, as applicable:
- ISO 10133, ISO 9097 or ISO 8849.
- Type Vlll boats shall be fitted with a factory-installed electrical system that conforms to ISO 10133.
- Navigation lights, if fitted, shall meet the requirements of Colreg 72.

Declaration: Electrical installations

Falcon Inflatables (PTY) Ltd declares that electrical systems fitted by Falcon conform to the above standard.

Disclaimer:
Falcon can make no declaration, and can not be held liable for such systems not fitted by itself, for example where a hull has been supplied to a dealer. In such cases the dealer must provide such warranty.

5.13 Fuel systems (where applicable)

- Permanently installed fuel systems and fixed fuel tanks shall conform to ISO 10088.
- Type VIII boats shall be fitted with a factory-installed permanent fuel system including permanent fuel tank(s).

Declaration: Fuel systems

Falcon Inflatables (PTY) Ltd declares that fuel systems fitted by Falcon conform to the above standard.

Disclaimer:
Falcon can make no declaration, and can not be held liable for such systems not fitted by itself, for example where a hull has been supplied to a dealer. In such cases the dealer must provide such warranty.

5.14 Ventilation of petrol motor and petrol tank compartments (where applicable)

- Ventilation of petrol motor and petrol tank compartments shall conform to ISO 11105.

Declaration: Ventilation of petrol motor and petrol tank compartments

Falcon Inflatables (PTY) Ltd declares that ventilation of petrol motor and petrol tank compartments fitted by Falcon conform to the above standard.

Disclaimer:
Falcon can make no declaration, and can not be held liable for such systems not fitted by itself, for example where a hull has been supplied to a dealer. In such cases the dealer must provide such warranty.

6 SAFETY REQUIREMENTS OF THE COMPLETED BOAT

6.1 Maximum permissible number of persons

- The maximum permissible number of persons *n* carried shall be determined by the manufacturer and shall not exceed that calculated using the following formula:

$$n = (A_i - x) / 0.3$$

where

- A_i is the inboard area, in square metres;
- x is the area, in square metres, of the inboard area which cannot be utilized for the accommodation of persons. (e.g. steering console,

exposed fuel tank(s), etc.).

- Under no circumstances, shall the value n expressed in body mass exceed the maximum load capacity (see 6.4).
- The value n shall always be rounded down to the nearest integer but, if the first decimal place is greater than 5, a child may be added or, if greater than 7, an adult may be added.
- For calculations, the body mass of a child is defined as 37.5 kg and the body mass of an adult as 75 kg.
- The data displayed on the builder's plate(s), see clause 8 e), shall include at least one adult and not more than one child.

- For the 510 SR : $n = (A_i - x) / 0.3$
  $= (3.46 - 0.52) / 0.3$
  $= 9.8$
  <u>= 9 adults + 1 child*</u>

**the boat has sufficient buoyancy to carry more persons, but practically, and for safety reasons, the manufacturer recommends a maximum of 9, according to deck space, number of seats & safety handles, and a safety margin allowing for deflation of 2 out of 6 air compartments.*

6.2 Maximum motor power

- The maximum motor power, in kilowatts, for inboard and outboard propeller-driven boats shall be determined by the manufacturer and shall not exceed that calculated using the following formula:

$$P_{max} = 10 \times F(d) - 33$$

  where
  - P_{max} is the maximum motor power rating, in kilowatts, determined in accordance with ISO 8665;
  - $F(d)$ is the dimensional factor = l x b
  - l is the overall length of the boat, in metres, from the bow to the extremity of the rear float (excluding handholds or other fittings);
  - b is the overall beam of the boat, in metres (excluding handholds or other fittings).

- NOTE The motor maximum power rating may be increased for boats supplied with a remote steering system installed by the manufacturer as standard equipment, provided they conform to the manoeuvring test procedure specified in ISO 11592.

- For the 510 SR : $P_{max} = 10 \times F(d) - 33$
  $= 10 \times (5.10 \times 2.10) - 33$
  $= 10 \times 10.71 - 33$
  $= 107.1 - 33$
  = 74.1 kW
  <u>≈ 102 hp</u>

6.3 Static stability of the boat

6.3.1 Requirement

- The boat equipped with the manufacturer's maximum rated motor(s) (see 6.2) shall not capsize when the maximum permissible number of persons recommended by the manufacturer (see 6.1) move to one side of the boat.

6.3.2 Test method

- Carry out the test with the motor(s) fitted but without a fuel tank and battery. Evenly distribute the test load (persons) over the test loading area of the boat as shown in Figure 2.
- The total test load m_t , in kilograms, shall be calculated using the following formula.

$$m_t = 75n + 37.5 \text{ (for a child, if applicable)}$$

where

  - n is the maximum permissible number of adults determined by the manufacturer (see 6.1), i.e. 75 kg for each permissible adult and 37.5 kg for a child, if applicable.

- For the 510 SR : $m_t = 75n$
  $= 75 \times 9$
  $= 675$ kg

Declaration: Static stability of the boat

Falcon Inflatables (PTY) Ltd declares that the static stability of the boat conforms to the above standard.

6.3.3 Stability factor (Type VIII boats only)

- The stability factor of Type VIII boats shall be determined by the manufacturer using the following formula:

$$F(s) = m \times (l^2 \times b^3) / 1000$$

where

  - $F(s)$ is the stability factor;
  - m is the total mass of the boat. See 6.4.1;
  - l is the overall length of the boat, in metres, see 6.2;
  - b is the overall beam of the boat, in metres, see 6.2.

For Type VII: $F(s) \leq 250$; For Type VIII: $F(s) > 250$

The 510 SR is a Type VII boat, hence this section is not applicable

6.4 Maximum load capacity

6.4.1 Requirement

- The maximum load which may be carried by the boat shall be determined by the manufacturer and shall not exceed that calculated using the following formula.

For type VII: $m = (0.75 \times V \times 1000) - m_b$

where

- m is the maximum load capacity, in kilograms (total mass on board including persons, equipment, motor(s) and fuel);
- V is the volume, in cubic metres, of the buoyancy of the boat;
- m_b is the total mass, in kilograms, of the boat as supplied by the manufacturer [inclusive of all permanently installed equipment supplied with the boat: hull, fittings and similar items but without motor(s) and fuel].
- Permanently installed engine(s) and drive systems shall also be included.

- For the 510 SR : $m = (0.75 \times V \times 1000) - m_b$
  $= (0.75 \times 1.741 \times 1000) - 450$*
  = 856 kg

  (* 450 = 350 + 100kg for rigging)

6.4.2 Test method

- Calculate the maximum load capacity and compare with the manufacturer's rated value.

6.5 Design working pressures

- The design working pressures shall be specified by the manufacturer for each compartment (including buoyancy chambers, keel, seats, awning, etc.) of the fully inflated boat.
- These pressures shall be indicated either on the appropriate compartment or in the operator's instruction booklet (or both) and, for the buoyancy chambers of the boat, on the builder's plate (see clause 8).
- In order that the user may ascertain that the specified working pressure has been reached, the manufacturer shall provide appropriate equipment or a pressure gauge for this purpose. Alternatively, instructions shall be included in the operator's instruction booklet supplied (see clause 9) which will enable a sufficiently close estimate to be made.
- The working pressure shall be consistently expressed in bars with psi (pounds per square inch) as an additional unit at the option of the manufacturer.

- **The design working pressure of all compartments (when inflated at 20°C) is 0.25 bar**

6.6 Strength of the hull

6.6.1 Requirement

- The boat shall remain airtight (see 6.6.2.4) after each of the tests described in 6.6.2.

6.6.2 Test method

6.6.2.1 Test temperature

- All tests shall be performed at a temperature of 20 °C ±3 °C, unless specified otherwise.

6.6.2.2 Heat test (all boats types)

- Assemble the boat in accordance with the manufacturer's instructions and inflate it to a pressure of 1,2 times the design working pressure.
- When assembled, place the boat in a heat chamber, set at 60 °C, for a period of 6 h.
- On completion of the test period, remove the boat from the heat chamber and allow to cool down to ambient temperature.
- Test the airtightness of the boat in accordance with the test specified in 6.6.2.4.

6.6.2.3 Overpressure test

- Inflate each compartment of the buoyancy tube to 1,5 times the manufacturer's design working pressure for 30 min.
- When separate compartments have common envelope parts (for example, internal partition bulkheads), these compartments shall be individually tested with adjacent compartments deflated.
- No damage or rupture shall occur and the boat shall be tested for airtightness as described in 6.6.2.4.

6.6.2.4 Airtightness test

- Support or insulate the boat from the floor and do not expose it to any draught of air or direct sunlight.
- Inflate the boat (all compartments) for 30 min to a pressure that is 20 % in excess of the manufacturers design working pressure (see 6.5) in order to pre-stretch the boat.
- Then reset the pressures to the design working pressure for a further 30 min period in order to stabilize conditions.
- Reset the pressures to the design working pressure and record the ambient temperature and atmospheric pressure.
- Following a test period of 24 h, the pressure drop shall not be greater than 20 % in any compartment. Record the final ambient temperature and atmospheric pressure.
- The temperature difference between the start of the test and the test readings shall not exceed ±3 °C.
- The atmospheric pressure difference between the start of the test and the test readings shall not exceed 1%.
- For each rise or fall in ambient temperature of 1 °C, an allowance of 0,004 bar may be respectively subtracted from, or added to, the recorded boat pressure.

Declaration: Strength of the hull

Falcon Inflatables (PTY) Ltd declares that the hull of the 510 SR remains airtight after all of the above tests.

6.7 Safety ropes and grab handles

6.7.1 Requirement

- Boats shall be equipped with a safety rope and/or handles thereby offering a firm hold to each of the permissible number of persons when occupying the seating, standing or kneeling positions provided or when outside in the water, even if the boat has capsized.
- All handholds shall be designed to ensure, by their nature and arrangement, that the permissible number of persons can hold them, even for a long period, without risk of injury.
- There shall be no failure of the handhold assemblies when tested as described in 6.7.2.
- The handholds and assemblies shall conform to the requirements for hull fittings described in 5.2.
- Where safety ropes and grab handles also function as manual lifting or carrying devices, they shall also conform to the requirements of 5.3.

6.7.2 Test method

- Visual inspection and assessment.
- Load each handle and lifeline assembly with a force of 1,5 kN for 1 min in any direction.
- For a practical assessment in the water, see 7.3.2.

Declaration: Safety ropes and grab handles

Falcon Inflatables (PTY) Ltd declares that all safety ropes and grab handles fitted by Falcon do conform to the standard

6.8 Residual buoyancy

6.8.1 Requirement

- After failure of the largest buoyancy chamber, the residual inflated buoyancy of the hull shall be at least 50 % of the manufacturer's rated maximum load capacity (see 6.4).

6.8.2 Test method

- Calculate or measure the residual buoyancy.

Declaration: Residual buoyancy

Falcon Inflatables (PTY) Ltd declares that the residual buoyancy of the 510 SR - upon failure of the largest buoyancy chamber – does exceed 50% of the rated maximum load capacity, and hence conforms to the standard.

6.9 Manoeuvrability

6.9.1 Requirement

- An inflated boat loaded to the maximum load capacity shall be capable, upon sudden deflation of any one of its compartments, of being propelled by one of its intended means. Oars may be used as paddles.

6.9.2 Test method

- Propel the boat in a generally straight line for at least 50 m in calm water.

Declaration: Manoeuvrability

Falcon Inflatables (PTY) Ltd declares that:
Upon failure of any single buoyancy chamber – a fully-laden 510 SR may still be propelled in a straight line under motor power; hence conforming to the standard.

6.10 Compartmentation

- The inflated buoyancy shall be contained within a number of separate buoyancy chambers (compartments).
- The minimum number of compartments is specified in Table 2.

Table 2 — Minimum number of compartments

Maximum motor power rating kW	Dimensional factor $F(d)$	Number of compartments
15 to 45	⩽ 8	3
	> 8	4
> 45	⩽ 8	4
	> 8	5
NOTE The dimensional factor is defined in 6.2.		

- NOTE The dimensional factor is defined in 6.2.
- The volume of each compartment, with internal partition bulkheads (see annex A) in the neutral position, shall be within the limits ±20 % of the mean compartment volume. Thus

- Compartment volume = V / N ± 20 %

  where
  - V is the total volume, in cubic metres, of the inflated buoyancy tube (excluding ancillary compartments, see the last paragraph of this subclause);
  - N is the number of buoyancy-tube compartments.

- Ancillary inflatable compartments that are not permanently fixed to the hull (see 3.3) shall not be included in the above calculation.

Declaration: Compartmentation

Falcon Inflatables (PTY) Ltd declares that:
a) The 510 SR has 6 (six) buoyancy chambers, exceeding the standard (5)
b) The volume of any one chamber differs from the mean chamber volume by less than 20%
- hence the 510 SR conforms to the standard.

6.11 Field of vision from the helm position

- The field of vision from the main helm position shall conform to the requirements of ISO 11591.

Declaration: Field of vision from the helm position

Falcon Inflatables (PTY) Ltd declares that the field of vision at the helm of the 510 SR conforms to the above standard.

6.12 Provision for liferaft/s (Type VIII boats only)

- There shall be provision made for liferaft/s to be stowed on Type VIII boats that can carry the maximum permissible number of persons.
- If the liferaft is a rigid canister type, it shall be mounted on the deck, ready for use.
- If the liferaft is contained in a soft bag then it can be stowed in a compartment but readily available for use.

The Falcon 510 SR is a type VII boat, and is hence not subject to this requirement; however, there is sufficient capacity for stowage of liferafts to carry the maximum permissible number of persons.

7 PERFORMANCE TEST

7.1 General

- Assemble the boat in accordance with the manufacturer's instructions and inflate it to the recommended working pressure.
- Perform the tests in the order given in 7.2 to 7.8.
- Perform tests 7.3, 7.4 and 7.5 in conditions with observed significant wave heights as shown in Table 3.

Table 3 — Sea conditions

Boat type	Dimensional factor $F(d)$	Observed significant wave height mm
Type VII	$\leqslant 8$	600
	> 8	900
Type VIII	N/A	1 200
NOTE The dimensional factor is defined in 6.2.		

7.2 Drop test (RIBs only)

7.2.1 Requirement

- Test the boat in the manner described in 7.2.2.
- Closely examine the boat at the end of the test.
- There shall be no structural failures in the form of fractures, cracks, tears, separation, etc. on any part of the hull or boat component, such as the deck or thwarts, and including any boundary interface such as floor/hull,

deck/transom, buoyancy tube/hull, etc.

7.2.2 Test method

- Load the boat to the maximum load capacity recommended by the manufacturer.
- The distribution of this load shall represent the boat fitted with motor(s) of the maximum power rating (as specified by the manufacturer) and passengers seated in their normal positions.
- Consecutively drop the loaded boat from a height of 2 m (from water to lowest point of boat) into the water using three different boat attitudes:
    - horizontal;
    - bow down 45°;
    - stern down 45°.

Declaration: Drop-test

Falcon Inflatables (PTY) Ltd declares that the 510 SR conforms to the drop-test standard.

7.3 In-water performance

7.3.1 Requirement

- The boat shall be equipped with any load-bearing accessories offered by the manufacturer as standard or optional equipment.
- Test the boat, in the manner described in 7.3.2, fitted with motor(s) of the maximum power rating as specified by the manufacturer.
- Closely examine the boat at the end of the test period.
- There shall be no structural failures in the form of frac tures, cracks, tears, separation, etc. on any part of the hull or boat component, such as the deck or thwarts, and including any boundary interface such as floor/hull, deck/transom, buoyancy tube/hull, etc.
- There shall be no damage to any accessory or to the method of attachment to the boat.
- There shall be no signs of abrasion that could result in subsequent structural damage or failure.
- The boat shall not overturn.
- The boat shall remain reasonably dry.
- The coxswain shall maintain reasonable visibility at all times.

7.3.2 Test methods

7.3.2.1 General

- Use the remote steering system if it is supplied as standard equipment. If it is offered as optional equipment, carry out the test using both tiller and remote steering systems consecutively.
- Use the coxswain and crew-member seating systems if they are supplied as standard or optional equipment.

7.3.2.2 Testing — Lightly loaded

- Embark a coxswain only.

- The total period of test shall be not less than 45 min with the motor controls set to develop maximum forward thrust.
- Head the boat directly upwind and then successively downwind on courses of approximately 45° separation (see Figure 3). This will give a minimum of at least five separate courses encountering a head-on, bowquarter, beam,
- stern quarter and following sea condition. Turn the boat sharply towards the end of each course to port and starboard (see Figure 3).

7.3.2.3 Testing — Fully loaded

- Repeat the test described in 7.3.3.2 but with the boat uniformly loaded with the maximum load capacity recommended by the manufacturer (see 6.4).
- The load shall include the manufacturer's maximum permissible number of persons (see 6.1).
- All handholds shall be clearly seen to have satisfied the requirements of 6.7.1.
- All seating and attachment systems shall be clearly seen to have satisfied the requirements of 5.11.

Declaration: In-water performance

Falcon Inflatables (PTY) Ltd declares that the 510 SR conforms to the in-water performance standard.

7.4 Strength of the towing device

7.4.1 Requirement

- When the boat is closely examined at the end of the test period, there shall be no structural failures on any part of the hull or boat component, such as the deck or thwarts, and including any boundary interface such as floor/hull.
- During the test, there shall be no tendency for the bow to submerge or to lift in a manner likely to submerge the motor or overturn the boat.

7.4.2 Test method

- Embark the maximum permissible number of persons recommended by the manufacturer (see 6.1).
- Tow the boat by its designated towing point (see 5.10) at a speed of not less than 4 knots with a towline of length equal to 3 x boat length (± 15 %).
- Carry out towing manoeuvres for not less than 15 min.

Declaration: Strength of towing device

Falcon Inflatables (PTY) Ltd declares that the towing device fitted to the 510 SR conforms to the standard.

7.5 Rowing test (where applicable, see 5.5)

- Row the boat for a distance of not less than 300 m in both the lightly loaded condition (see 7.3.3.2) and the fully loaded condition (see 7.3.3.3).

- Examine the rowlock system during and on completion of the test, and measure the unrestricted movement of the oars.

Not applicable

7.6 Water tightness test (not applicable to open floor, self-bailing craft)
7.6.1 Requirement

- Closely examine the boat at the end of the test.
- There shall be no evidence of water within the boat.

Not applicable

7.6.2 Test method

- Ensure that there is no water within the boat.
- Load the boat to the maximum load capacity recommended by the manufacturer.
- The distribution of this load shall represent the boat fitted with motor(s) of the maximum power rating (as specified by the manufacturer) and passengers seated in their normal positions.
- Allow the boat to remain static in the water for 20 min.

7.7 Manoeuvring-speed test

- RIB's capable of a top speed of 30 knots or more, which are supplied with a remote steering system, installed by the manufacturer as standard equipment, shall conform to the manoeuvring-test procedure specified in ISO 11592.

Declaration: Manoeuvring at speed

Falcon Inflatables (PTY) Ltd declares that any 510 SR supplied fully-rigged by Falcon will conform to this standard.

Disclaimer
Falcon is not able to make his declaration for any boat not fitted-out by ourselves – it will be for the dealer or other person/s fitting out the boat with steering and motors to provide such assurances.

7.8 Bailing test (Type VIII boats only)
7.8.1 Requirement

- Test the boat in the manner described in 7.8.2.
- Closely examine the boat at the end of the test.
- The deck area shall be substantially free of residual water.

7.8.2 Test method

- Ensure that there is no water within the boat.
- Load the boat to the maximum load capacity recommended by the manufacturer.

    - The distribution of this load shall represent the boat fitted with motor(s) of the maximum power rating (as specified by the manufacturer) and passengers seated in their normal positions.
- Close any deck drains and scuppers while filling.
- Fill the deck areas with water until it starts to flow out overboard.
- Evacuate the water from the flooded deck areas in less than 3 min by opening the deck drains and scuppers, and, if necessary, by the forward motion of the boat or by other means without using loose equipment or an electric bilge pump.

The Falcon 510 SR is a type VII boat, and is hence not subject to this requirement; however, the boat would be capable of passing the bailing test.

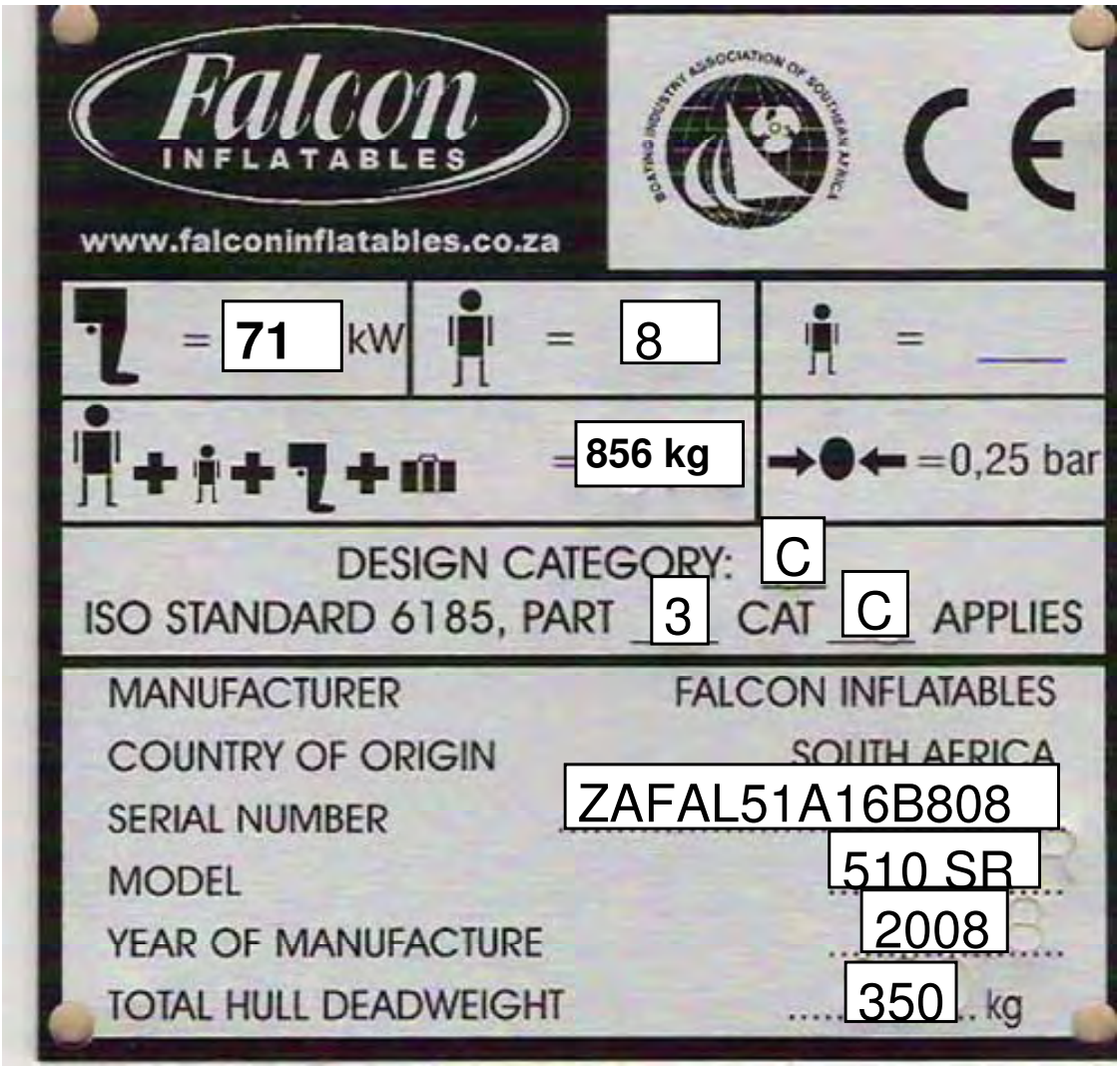
8 BUILDER'S PLATE(S)

- The craft shall be equipped with one or two clearly and indelibly printed or engraved plates displaying all the relevant data listed below.
    a. Number of this part of ISO 6185 and type(s) to which the craft conforms.
    b. Name of manufacturer or importer and country of origin.
    c. Serial number and date of manufacture and type or model number.
        i. It is recommended to use the Hull Identification Number (HIN) coding system as detailed in ISO 10087.
    d. Maximum motor power, in kilowatts
    e. Maximum number of persons
    f. Maximum load capacity
    g. Recommended working pressure (shown by symbol).

- For manufacturers who wish to show more than the maximum load capacity for a boat that falls into more than one Boat Design Category (European Directive 94/25/EC), they may show this on the Builder's plate.

- Additional data may be supplied at the option of the manufacturer (maximum mass of motor(s), etc.).
- Where the HIN coding system is used, the data specified in c) need not be on the builder's plate.
- For the data d) to g) inclusive, the symbols shown in the standard shall be used.

Example of a Builder's Plate for the Falcon 510 SR, which conforms to the standard:



ANNEX A: TEST RESULTS – INFLATABLE HULL MATERIALS

Aussteller: EAL Verteiler: Vertrieb, Kunde

Workscertificate

Workscertificate (EN 10204 2.1)

These indicated technical data are based to the form „Artikelspezifikation – Technisches Datenblatt“

Article	**Valmex® Inflatable boat material**
Article - No.:	**7311 / 7318 / 7307 / 7321**

Resistance to liquids

Carry out the test on the external side or the sides of the material contact with the ambient environment as specified in ISO 1817 but using ASTM Oil No.1.

In cases a) and b) shown in Table 1, the change in mass per unit area shall not exceed 100 g/m² following the stipulated period of contact with the test fluid at a temperature of 70°C +/- 2°C.

Table 1 – Test liquids

Test liquid	Period of contact
a) Oil	22 h +/- 0,25 h
b) Salt water	336 h

Result: pass

Resistance to ozone

Carry out the test on the external side or the sides in contact with the ambient environment as specified in ISO 3011.

Exposure time	72 h
Temperature of test	30°C +/- 2°C
Concentration	50 pphm (= parts of ozone per hundred million of air by volume)
	that is to say a volume fraction of 0,5 x 10^{-6}
Mandrel diameter	5 times the material thickness

There shall be no signs of cracking on completion of the test when the test samples are examined under a magnification of 10 x.

Result: pass

Tear strength

ISO 4674-1 (Dec.2003) Method B: minimum requirements 250 N

Result: pass

Adhesion

ISO 2411 – Adhesion measured as per ISO 2411 – Method HF – Welding:
Minimum requirements 20 N / cm (10 daN / 5 cm)

Result: pass

Resistance to cold

All materials shall satisfy the requirements of ISO 4646 at a temperature of – 15°C.

Result: pass

Mehler Texnologies GmbH

Fulda, den 02.04.07

Wiegard
Technical Department

ANNEX B: GLASSFIBRE LAYUP SPECIFICATION: FALCON 510 SR

HULL:

1 x 300 CSM
1 x 450 CSM
1 x 850 QUAD
1 x 450 CSM
Foam stringers
1 x 450 CSM

DECK:

1 x 300 CSM
1 x 300 CSM
1 x 850 QUAD
Plywood support structure
1 x 450 CSM

HULL SUPPORT SYSTEM

1. 1. 2 x 18mm x 100mm Marine Ply Beams adjacent to centre channel connected to 2 knees & transom, glassed with 1 x 1130 quad (300mm) tape.
2. Foam stringers (6) covered with last layer of 300 CSM, glassed over with 1 additional layer of 1130 quad (150mm) tape.
3. Marine ply keel strip, covered with last layer of 300 CSM and glassed over with 1 x 1130 quad (150 mm) tape.

Interpretation:

The hull is composed of a isophthalic gelcoat layer, supported by 8 layers of GRP: For the first two layers on the hull, an isophthalic resin is used; for the remaining layers a Lloyds approved boatbuilding polyester resin is used.

'CSM' is chopped strand mat, a non-woven glass fibre textile.
'BIA' and 'QUAD' are woven glassfibre textiles.
Values are grammes per square metre.

ANNEX C: NORMATIVE REFERENCES

The following normative documents contain provisions which, through reference in this text, constitute provisions of this part of ISO 6185.

For dated references, subsequent amendments to, or revisions of, any of these publications do not apply. However, parties to agreements based on this part of ISO 6185 are encouraged to investigate the possibility of applying the most recent editions of the normative documents indicated below. For undated references, the latest edition of the normative document referred to applies.

ISO 1817:1999, Rubber, vulcanized — Determination of the effect of liquids
ISO 2411:2000, Rubber- or plastics-coated fabrics — Determination of coating adhesion
ISO 3011:1997, Rubber- or plastics-coated fabrics — Determination of resistance to ozone cracking under static conditions
ISO 4646:1989, Rubber- or plastics-coated fabrics — Low-temperature impact test
ISO 4674:1977, Fabrics coated with rubber or plastics — Determination of tear resistance
ISO 7000:1989, Graphical symbols for use on equipment — Index and synopsis
ISO 8665:1994, Small craft — Marine propulsion motors and systems — Power measurements and declarations
ISO 8848:1990, Small craft — Remote steering systems
ISO 8849:1990, Small craft — Electrically operated bilge pumps
ISO 9097:1991, Small craft — Electric fans
ISO 9775:1990, Small craft — Remote steering systems for single outboard motors of 15 kW to 40 kW power
ISO 10088:2001, Small craft — Permanently installed fuel systems and fixed fuel tanks
ISO 10133:2000, Small craft — Electrical systems — Extra-low-voltage d.c. installations
ISO 10592:1994, Small craft — Hydraulic steering systems
ISO 11105:1997, Small craft — Ventilation of petrol motor and/or petrol tank compartments
ISO 11192:—1), Small craft — Graphical symbols
ISO 11591:2000, Small craft, engine driven — Field of vision from helm position
ISO 11592:2001, Small craft of hull length less than 8 m — Determination of maximum propulsion power rating
ISO 12215-1:2000, Small craft — Hull construction and scantlings — Part 1: Materials: Thermosetting resins, glassfibre reinforcement, reference laminate
ISO 15652:—1), Small craft — Remote steering systems for inboard mini jet boats
Colreg 72, Convention on the international regulations for preventing collisions at sea

RIB-X warranty and registration form

Welcome to your new Rib-X !

We hope that your new Rib-X Rigid Inflatable Boat will give you many years of good service. By following the suggestions within this manual, your boating experience will be greatly enhanced, and the exemplary performance of your new boat will be assured. At Rib-X we are constantly striving to enhance your boating pleasure, and we are delighted that you have taken the first step to enjoying the Rib-X experience with the acquisition of one of our superb boats.

We are always pleased to receive feedback from the ever-increasing family of Rib-X owners, so do not hesitate to contact us with your comments and experiences.

WARRANTY

Rib-X warrants the hull structure of each new product to be free of defects in workmanship and materials for a period of two (2) years. The tubes on each new product carry a seam warranty against defective workmanship of five (5) years from the date of sale. The Hypalon tube fabric carries a ten (10) year warranty against defective workmanship, the Hypatex fabric carries a five (5) year warranty against defective workmanship.

In the unlikely event of a claim arising during this period, all claims must be directed to the authorised dealers. All repairs must be authorised and approved by the dealer if they are to fall within the conditions of this warranty. Any claims made post repair by an unauthorised person however arising, may be disallowed and can invalidate the warranty.

Warranty Benefits and Conditions

Rib-X guarantees that throughout the Warranty period, it will replace or repair any part of the product which has failed through either a materials defect or defective workmanship, free of charge, providing:

Conditions

1. The product bears the original hull identifications/CE plate.
2. The product has been maintained as specified in the relevant Owner's Manual and is used in accordance with the instructions therein.
3. The item to be replaced is part of the original equipment.
4. The product has not been subject to misuse or negligence and has not been used for purposes other than those for which it was designed.

Notes

I. Any statement, description, condition, Warranty, re-presentation or otherwise contained in any catalogue, advertisement, leaflet or other publication shall not be construed as enlarging, varying, or overriding anything contained herein.
II. Nothing in this Warranty shall be construed as an admission of the existence of any duty of care owed by Rib-X in respect of Rib-X products.
III. This Warranty shall be construed in accordance with English law and any question from this Warranty shall be subject to the jurisdiction of the English courts.
IV. This Warranty does not give any entitlement to a replacement unit in the event of a warrantable failure.

The Warranty does not include the following:

1) Damage caused by improper use for a purpose other than originally designed or intended
2) Damage caused by work carried out by a dealer other than one authorised by Rib-X
3) Damage caused by improper maintenance and/or set up by a dealer or customer.
4) Damage or malfunction on any boat or any part of a boat that has been modified or altered from the original specification.
5) Normal maintenance service and periodic inspection
6) Accessories or equipment made by other manufacturers and not sold or supplied by the manufacturer, including consequential damage to items normally covered by this warranty that has occurred as a result of the fitting or use of non-manufacturer supplied or approved equipment.
7) Discolouration, blistering, gelcoat cracking or crazing.
8) Window breakage
9) Upholstery damage.
10) Any claims arising from or as a result of neglect, lack of maintenance, misuse, racing, competition or immersion. Claims arising from commercial use may be disallowed except where specified by the manufacturer.
11) Exceeding maximum recommended horsepower.
12) Normal wear and tear
13) Damage caused by cleaners, polishes and chemicals not supplied by or approved by the manufacturer.
14) Damage caused by fuel spillage, marine growth or air pollution.
15) Transport costs to the factory or dealer for the execution of any repairs.
16) Damage caused by improper transportation or storage, carnage or lifting charges.
17) Consequential claims arising from the failure of any boat or any component of the boat, whether or not the initial failure is covered under this warranty.
18) Loss of earnings or other expenses arising from any failure or breakage whether or not the failure or breakage is covered under this warranty.
19) Damage caused by an act of God, fire, collision or accident.

Your statutory rights are not affected.

Customer Liability

1. The customer shall ensure the boat is operated and maintained properly, in compliance with the instructions and guidelines in the Owner's Manual.
2. The customer shall bear the cost of regular service and maintenance as well as replacement costs of normal wear items.
3. The customer is also liable for failure and damage caused by abuse, neglect and accidents, including incidental and consequential costs.
4. In the event of a suspected defect, the customer shall notify the dealer immediately and present the unit to an authorised Rib-X Dealer within ten days of the suspected defect being noticed.
5. The customer is liable for any subsequent repairs that are not Warranty-covered.

NOTE: Only registered craft may enjoy the benefits of this Warranty. To ensure that you are fully covered under the terms of this warranty, you must complete and return the registration page that follows, within 28 days. The Warranty expressed above may be transferred to a second owner only upon the receipt of a completed registration page, which is also attached for your convenience. It will be regarded that the Warranty will be void for the period of time between the moment of the sale of the craft to which the Warranty applies and the day of receipt of the second owner registration card by the factory.

How do I file a Claim?

If you experience a problem with the product which you believe should be dealt with under the Warranty, please promptly contact your Rib-X dealer, to arrange for it to be inspected.
Do not forget to present your Registration Document before the repairs are carried out. Unless this document is presented, you may not be entitled to Warranty repairs.
If a problem develops which you believe may render the product unsafe to use, please call your Dealer for help and do not use it until it has been inspected.
All claims under Warranty must be submitted on your behalf through your Rib-X Dealer.

(Dealer to send to Rib-X)

RIB – X NEW BOAT REGISTRATION PAGE

To the new owner – we will be extremely grateful for the completion and return of this page within 28 days from date of purchase. Please send it to: Rib-X, Brockhall Buildings, Pebble Hall Farm, Theddingworth, nr Lutterworth, Leicestershire LE17 6NJ

Please note that your boat will not be registered to yourself until we receive this completed form, and the warranty printed on page 5 will not be effective until this time.

Owners Name: _____

Address: _____

_____

_____

Tel (day): _____ Tel (evening) : _____ Mobile: _____

E-mail address: _____

Dealer Stamp:

BOAT DETAILS:

Model: _____ Serial Number: _____

Engine details: _____

Purchase price of completed boat: _____

Package ☐ or single unit ☐ (Please tick appropriate)

All of the above information is required for the effective commencement of the Warranty provided by Rib-X.

I have read and agreed the warranty conditions supplied to me.

Signed: _____ Date: _____

Print Name: _____

It will be most appreciated and helpful if you wouldn't mind filling out the short questionnaire overleaf. The information will be treated in the utmost confidence, and will be used solely by Rib-X for the purpose of product and service improvement.

Annex H

Buider’s plate and CIN requirements

Builder's plate and CIN requirements

ISO 14945:2004 Small craft – Builder's plate

This standard establishes requirements for the information displayed on small craft with a hull length up to 24m. Inflatable boats covered by ISO 6285 are excluded.

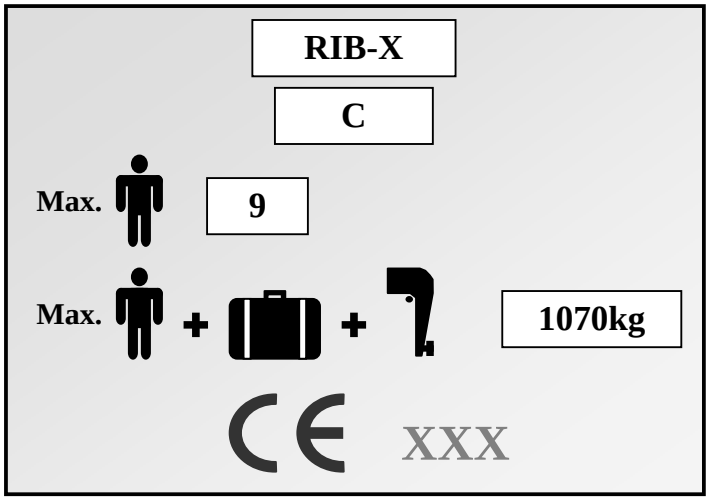
Manufacturer's Name

Boat design Category

Maximum Persons

Maximum Load:
Including the mass of the outboard motor(s) but excluding the contents of the fixed & water tanks when full

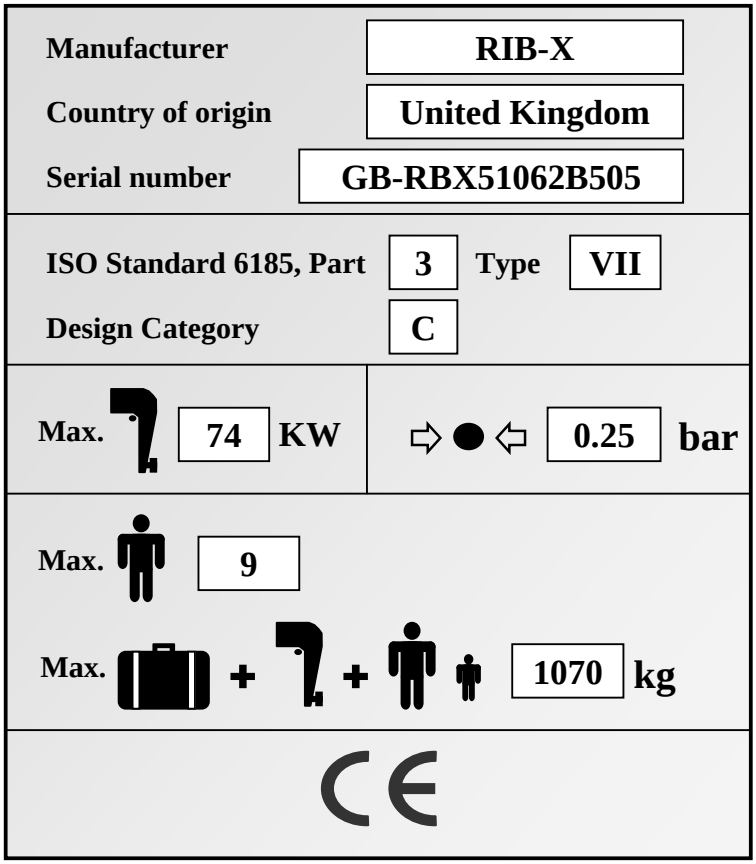
CE mark & notified body's identification number (if applicable)



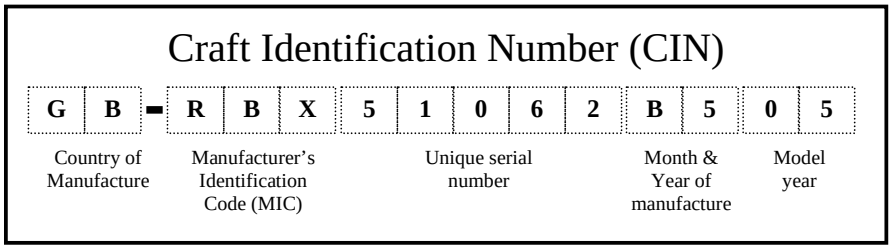
ISO 6185-3:2001 – Clause 8 – Builder's plate(s)

The craft shall be equipped with one or two clearly and indelibly printed or engraved plates displaying all the relevant data listed below:

a) Number of this part of ISO 6185 and type(s) to which the craft conforms.
b) Name of manufacturer or importer and country of origin.
c) Serial number and date of manufacture and type or model number. It is recommended to use the hull identification number (HIN) coding system as detailed in ISO 10087.
d) Maximum motor power, in kilowatts (shown by symbol).
e) Maximum number of persons (shown by symbol).
f) Maximum load capacity (shown by symbol).
g) Recommended working pressure (shown by symbol).



ISO 10087:2006 Small craft – Hull identification – Coding system



Annex I

Blank Declaration of Conformity

Declaration of Conformity of Recreational Craft with the Design, Construction and Noise Emission requirements of Directive 94/25/EC as amended by Directive 2003/44/EC

(To be completed by boat builder)

Name of craft manufacturer: _____

Address : _____

Town: _____ **Post Code:** _____ **Country:** _____

Name of Authorised Representative (if applicable): _____

Address: _____

Town: _____ **Post Code:** _____ **Country:** _____

Name of Notified Body for design and construction assessment (if applicable): _____

Address: _____

Town: _____ **Post Code:** _____ **Country:** _____ **ID Number:** _____

ECtype-examination Certificate number: _____ **Date:** (yr/month/day) ___ / ___ / ___

Name of Notified Body for noise emission assessment (if applicable): _____

Address: _____

Town: _____ **Post Code:** _____ **Country:** _____ **ID Number:** _____

Module used for construction assessment: ☐A ☐Aa ☐B+C ☐B+D ☐B+E ☐B+F ☐G ☐H

Module used for noise emission assessment : ☐A ☐Aa ☐G ☐H

Other Community Directives applied: _____

DESCRIPTION OF CRAFT

Craft Identification Number ☐☐ ☐☐☐☐☐☐☐☐☐☐☐☐

Brand name of the craft: _____ **Type or number:** _____

Type of craft:
- ☐sailboat
- ☐motorboat
- ☐inflatable
- ☐other (specify): _____

Type of hull:
- ☐monohull
- ☐multihull
- ☐other (specify): _____

Construction material:
- ☐aluminium, aluminium alloys
- ☐plastic, fiber reinforced plastic
- ☐steel, steel alloys
- ☐wood
- ☐other (specify): _____

Maximum Design Category: A☐ B☐ C☐ D☐

Engine power: **Max. Recommended:** _____**kW,**
Installed: _____**kW (if applicable)**

Length of hull L_h: _____**m** **Beam of hull B_h:** ____**m** **Draught T:** ____**m**

Type of main Propulsion:
- ☐sails
- ☐petrol engine
- ☐diesel engine
- ☐electric motor
- ☐oars
- ☐other (specify): _____

Type of engine:
- ☐outboard
- ☐inboard
- ☐z or sterndrive without integral exhaust
- ☐z or sterndrive with integral exhaust
- ☐other (specify): _____

Deck
- ☐fully decked
- ☐partly decked
- ☐open
- ☐other (specify): _____

This declaration of conformity is issued under the sole responsibility of the manufacturer. I declare on behalf of the craft manufacturer that the craft mentioned above complies with all applicable essential requirements in the way specified (and is in conformity with the type for which above mentioned EC type examination certificate has been issued) – delete text between brackets if no EC type examination certificate has been issued.

Name and function: _____
(identification of the person empowered to sign on behalf of the manufacturer or his authorised representative)

Signature and title: _____
(or an equivalent marking)

Date and place of issue: **(yr/month/day)** ___ / ___ / ___

Essential requirements (reference to relevant articles in Annex IA & IC of the Directive)	Standards	Other normative document/ methods	Technical file	Please specify in more detail (*: Mandatory Standards)
General requirements (2)	☒			EN ISO 8666:2002 *
Craft Identification Number – CIN (2.1)	☒			EN ISO 10087:2006 *
Builder's Plate (2.2)	☐	☐	☐	
Protection from falling overboard and means of reboarding (2.3)	☐	☐	☐	
Visibility from the main steering position (2.4)	☐	☐	☐	
Owner's manual (2.5)	☐	☐	☐	
Integrity and structural requirements (3)				
Structure (3.1)	☐	☐	☐	
Stability and freeboard (3.2)	☐	☐	☐	
Buoyancy and floatation (3.3)	☐	☐	☐	
Openings in hull, deck and superstructure (3.4)	☐	☐	☐	
Flooding (3.5)	☐	☐	☐	
Manufacturer's maximum recommended load (3.6)	☐	☐	☐	
Liferaft stowage (3.7)	☐	☐	☐	
Escape (3.8)	☐	☐	☐	
Anchoring, mooring and towing (3.9)	☐	☐	☐	
Handling characteristics (4)	☐	☐	☐	
Engines and engine spaces (5.1)				
Inboard engine (5.1.1)	☐	☐	☐	
Ventilation (5.1.2)	☐	☐	☐	
Exposed parts (5.1.3)	☐	☐	☐	
Outboard engine starting (5.1.4)	☐	☐	☐	
Fuel system (5.2)				
General – fuel system (5.2.1)	☐	☐	☐	
Fuel tanks (5.2.2)	☐	☐	☐	
Electrical systems (5.3)	☐	☐	☐	
Steering systems (5.4)				
General – steering system (5.4.1)	☐	☐	☐	
Emergency arrangements (5.4.2)	☐	☐	☐	
Gas systems (5.5)	☐	☐	☐	
Fire protection (5.6)				
General – fire protection (5.6.1)	☐	☐	☐	
Fire-fighting equipment (5.6.2)	☐	☐	☐	
Navigation lights (5.7)	☐	☐	☐	
Discharge prevention (5.8)	☐	☐	☐	
Annex I.B – Exhaust Emissions	see the Declaration of Conformity of he engine manufacturer			
Annex I.C – Noise Emissions[1]	☐	☐	☐	
Noise emission levels (I.C.1)	☐	☐	☐	
Owner's manual (I.C.2)	☐	☐	☐	

[1] Only to be completed for boats with inboard engines or sterndrive engines without integral exhaust

Annex J

RIB-X Declaration of Conformity

Rib-X

DECLARATION OF CONFORMITY

MODEL Rib-X (Falcon)	**eXplorer Xp 510**
SERIAL NUMBER HIN	**ZAFAL????????**

This is to declare that the above model complies with the essential safety requirements prescribed by Directive 94/25/EC and as envisaged in ISO 6185.

Falcon Inflatables PO box 557 Swellendam 6740 South Africa	Dealer stamp

MAX PERSON	9
MAX LOAD KG	1080kgs
MAX KW	74.57kw
Materials used	GRP
Length of hull	5.1 mtrs
Beam of hull	2.15 mtrs
Height of boat (max)	1.8 mtrs

SIGNATURE

20-Jun-08

DATE

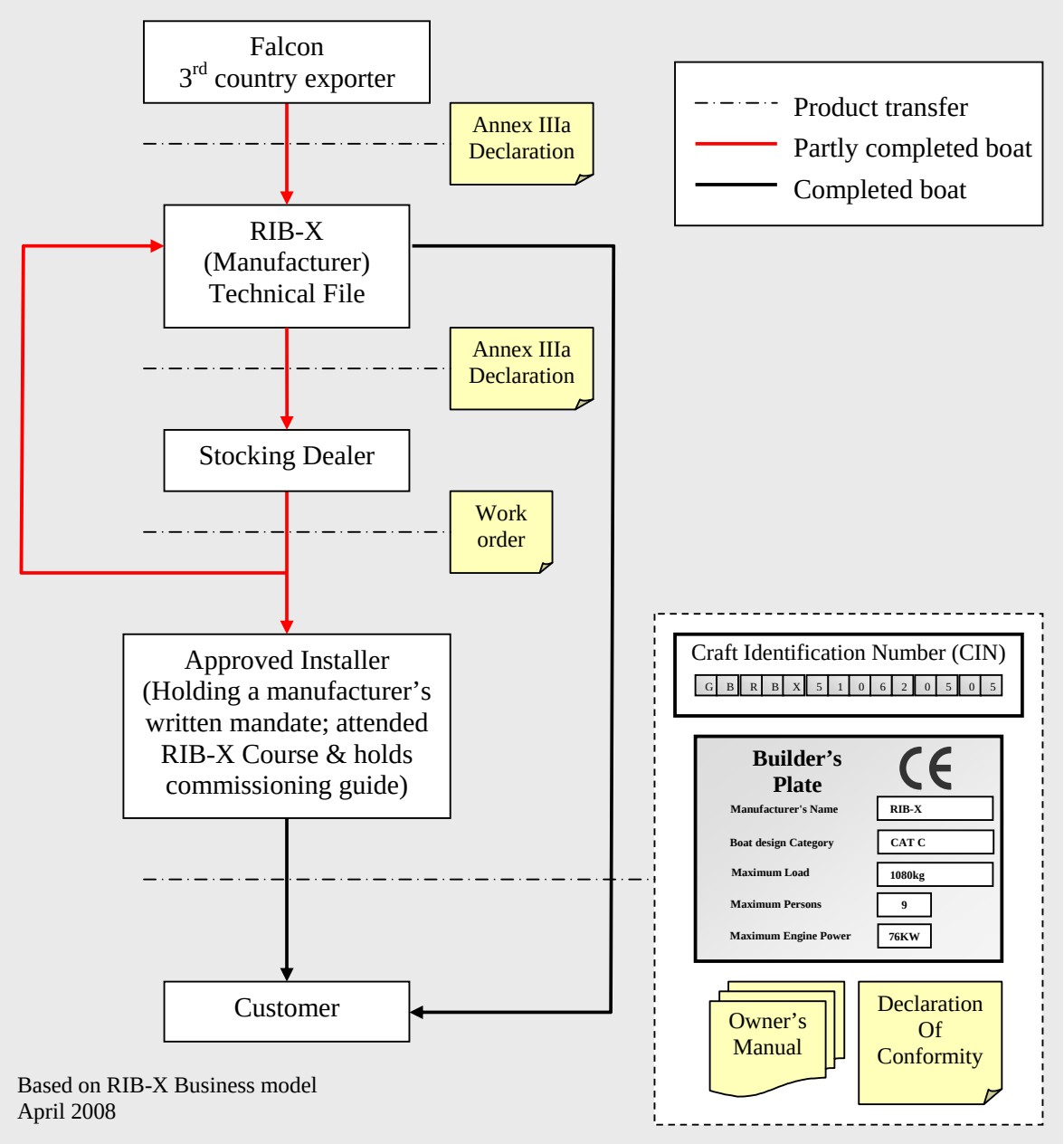
BEWARE OF OFFSHORE CURRENTS AND WINDS

DESIGN CATEGORY C

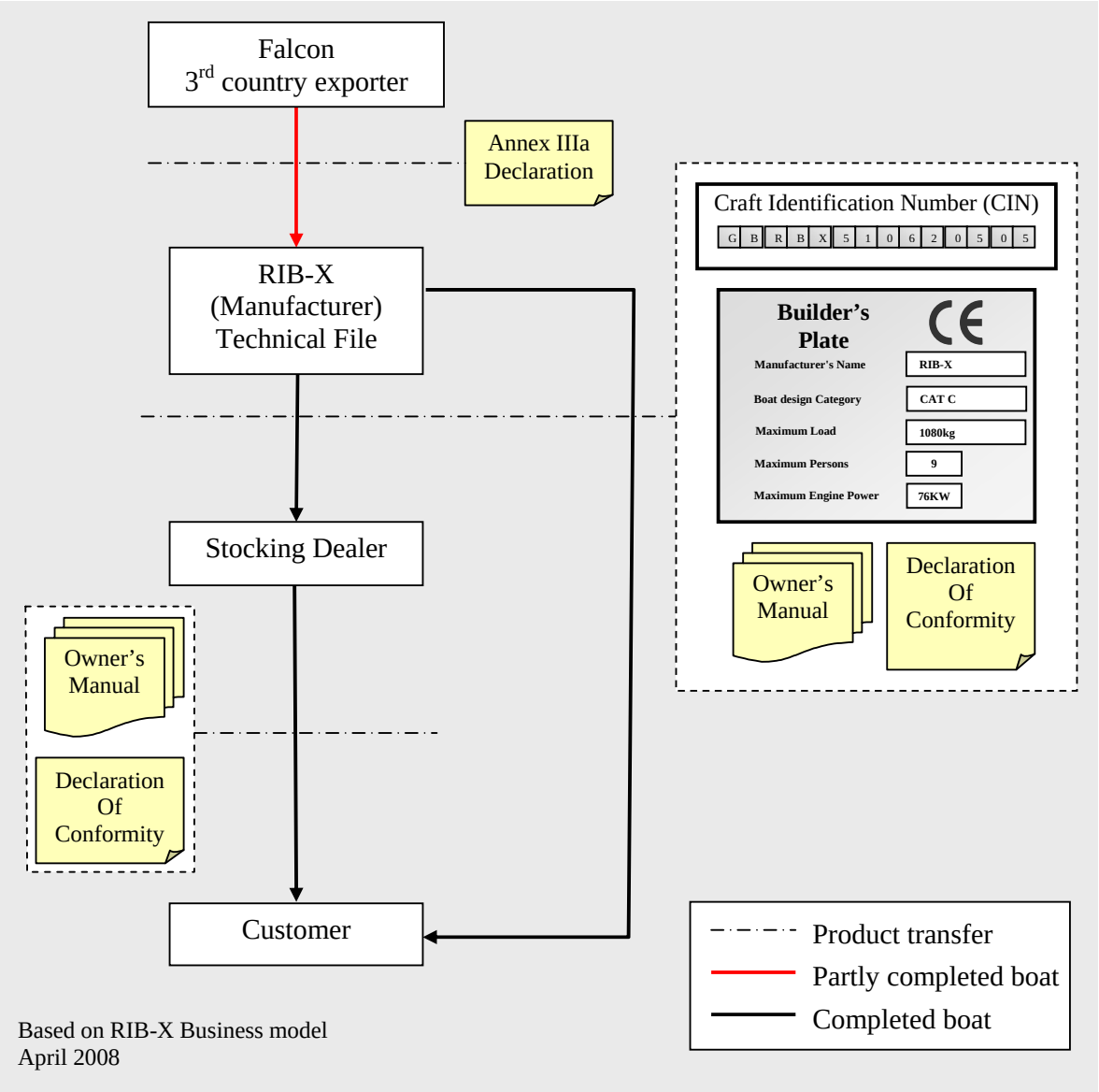
Annex K

Illustration of the documentation requirements for the transfer of RIBs when following the RIB-X procedures

Documentation management example for a partly completed boat



Documentation management example for a completed boat



Based on RIB-X Business model
April 2008