

# **Cal 25 National Rules & Specifications**

**Version 3.3 (January 29, 2009)**

## **1) Interpretation**

Specifications, however complete, cannot anticipate every situation that may arise. If a point is not herein covered, a ruling shall be obtained from the National Organization Representatives. In interpreting these Rules and Specification the National Organization Representatives shall consider the intent rather than any technical construction that might be derived from the wording. They shall bear in mind at all times the basic principals of these Rules and Specifications, which is to maintain the Cal 25 Class as a National One Design class. Nothing is optional in these Rules and Specifications, unless so stated.

## **2) General Rules**

In the absence of specific rules to the contrary, the current Racing Rules of Sailing and the current U.S. Sailing Prescriptions, as published by U.S. Sailing, shall apply.

## **3) Standards**

Boats shall be basically unchanged from the design of C.W. Lapworth and as built by Cal Boats and Jensen Marine Corp. No change in the dimensions, locations, shape and materials standard for Cal 25's shall be permitted except as such changes are approved by the National Representatives.

## **4) Eligibility of Boats**

- a) All Cal 25 owners who are voting members of the local organizations and whose boats comply with the National Rules and Specifications, as well as any applicable local amendments, shall meet the requirements of this organization for one design racing.
- b) It shall be the responsibility of the local organizations to insure that members' boats abide by the National Rules and Specifications along with any local amendments. The measurement and certification of Cal 25s to be sailed in the National Championship shall be the responsibility of the

local organization. The process for measurement and certification of boats in preparation for the National Championship shall be approved by the National Representatives.

c) A Cal 25's compliance with these rules shall be challenged by means of a written document which sets forth the grounds thereof and submitting the challenge to an officer of the local organization. The challenge shall then be considered and promptly ruled upon by majority vote of an appointed Challenge Committee comprised of the fleet Captain and a minimum of two additional fleet officers of the local organization selected by the fleet captain. In the event that one or more members of the Challenge Committee either initiate the challenge or are subject thereto, then the remaining highest ranking officer shall replace this/these individuals on the Challenge Committee with another member of the local organization.

#### **5) Hulls, Keel & Rudder**

All hulls, keels and rudders shall conform to the original design specifications of the Cal 25 built by Cal boats and Jensen Marine Corp and will remain unchanged so as to preserve the one design aspect of the class. The fairing of the hull, keel and rudder to make smooth contoured surfaces is acceptable. The fairing of any through hull fittings is permissible. Filling in or eliminating the cockpit scuppers is not allowed. The reshaping or modification in any way of the leading and trailing edges of the keel and rudder are prohibited. All fairing, repairs or alterations must conform to the spirit of the rules.

#### **6) Interiors**

The interior of the Cal 25 shall not be changed so as to alter the weight or displacement characteristics of the boat beyond the specifications of Cal boats or Jensen Marine Corp. in their "A", "B" or "C" hull configuration. If replacement of bulkheads, keel stringers and/or the cabin sole becomes necessary, plywood of the same thickness and shape as the original structure shall be used.

## **7) Masts**

### **a) General**

Masts shall be one of the two original designs supplied as original equipment on Cal 25's. Section drawings for these two extrusions are included as part of this document, for reference purposes only.

### **b) Replacement Masts**

Specifications for replacement mast will be as follows:

Sections shall be Symmetrical fore and aft.

Fore/aft dimension: 5.0" Minimum

Right/left dimension: 3.5" Minimum

Weight per linear foot: 2.1 lb/ft

Replacement masts will be constructed without a taper and with spreaders and tang locations identical to the original design. The mast head design and sheave locations will also be identical. Jensen mast schematics are attached for reference purposes only.

Mains will be attached with slides or slugs. Use of bolt ropes is prohibited for masts.

Recommended replacement sections are as follows:

- Dwyer Aluminum Mast Co. Section DM-500
- Kenyon Spars Section 3550

### **c) Bands**

Masts shall have two bands. Each band shall be  $\frac{3}{4}$  inch wide, minimum, and shall contrast in color with the mast. The top of the lower band shall be 42 inches above the deck, not the raised molded area where the mast is stepped. The bottom of the upper mast band shall be 25 feet above the top of the lower mast band.

### **d) Mast Tabernacles**

Inclusion of a mast tabernacle is permissible in areas where boats may be required to lower their spar in order to pass under overhead obstruction.

## **8) Spreaders**

### **a) Specifications**

Spreaders shall be of circular cross section and shall conform to the following specifications:

Outside Diameter: 1.25"

Material: Aluminum

Spreader Assembly length: 32" Minimum

**b) Measurement**

The spreader assemble length will be measured along the centerline of the spreader from the side of the mast to the inside edge of the upper shroud.

**9) Boom**

**a) General**

Booms shall be of the original design as supplied as original equipment on Cal 25's. Section drawing of this extrusion is included as part of this document for reference only.

**b) Replacement Booms**

Specifications for replacement booms will be as follows:

Weight: 1.1 lb/linear ft minimum

Material: Extruded Aluminum

Recommended replacement sections are as follows:

- Dwyer Aluminum Mast Co. Section DM-375
- Kenyon Spars Section "D"

**c) Bands**

Booms shall have one band. The band shall be  $\frac{3}{4}$  inch wide, minimum, and shall contrast in color to with the boom. With the boom located in place on the mast, the forward edge of the band shall be located 11' feet from the aft side of the mast, not the main track.

**d) Lightening Holes**

Holes added for the purpose of lightening the boom are forbidden.

**e) Goose Neck Hardware**

There shall be no restrictions on the type or configuration of goose neck hardware.

## 10) Boom Vang

There shall be no restrictions on the use of boom vang.

## 11) Spinnaker Pole

### a) Specifications

The spinnaker pole shall be circular in cross section and shall conform to the following specification:

Outside Diameter: 1 7/8" Minimum

Material: Extruded Aluminum

Length: 10' Maximum

### b) Measurement

This measurement of spinnaker pole length shall be made as follows:

With the spinnaker pole in place on the mast fitting in a horizontal position and perpendicular to the center line of the boat, measure from the extreme outboard end of the pole fitting to the center line of the mast.

### c) Usage

The spinnaker pole may be used in conjunction with the Jib or Genoa but use of any other form of whisker pole is not allowed.

## 12) Standard Rigging

### a) General

Standard Rigging shall not differ in any way from the original design. All wire shrouds / stays shall remain in their original configuration and be constructed of the same diameter and strand count material as the original design. The following table lists the required standing rigging as well as the material specifications.

|                 |                |         |
|-----------------|----------------|---------|
| Headstay        | 5/32 inch Dia. | 1x19 SS |
| Backstay        | 5/32 inch Dia. | 1x19 SS |
| Lower Shrouds   | 3/16 inch Dia. | 1x19 SS |
| Upper Shrouds   | 5/32 inch Dia. | 1x19 SS |
| Backstay Bridle | 1/8 inch Dia   | 1x19 SS |

**b) Backstay Bridles**

The back stay bridle is considered part of the standard rigging and therefore shall not be removed.

**c) Headfoils**

Headfoils are prohibited

**d) Dual Headstays**

Dual headstays are prohibited

**13) Running Rigging**

There shall be no restriction on running rigging, or on sheet and halyard handling gear. There are no restrictions on the number of halyards. Halyards as well as the spinnaker pole lift may be run internally in the mast.

**14) Sails General**

**a) Measurement:**

Sail measurements listed herein are maximum measurements and shall, except as noted, be made from the outside edges of the cloth or bolt rope, as the situation dictates. All measurements shall be taken with the sails laid flat on the floor with tension adequate to remove all wrinkles in the line of measurement. When measuring used spinnakers, allowances for variances from the required dimensions can be made, at the discretion of the local organization, for variances that, in their judgment, reflect normal stretching of the sail under use.

**b) Certification:**

Sails shall be measured and certified to be in compliance with all requirements set forth by these rules by the local organization. All sails that are deemed to have met all requirements for certification shall be stamped, signed and dated by a local fleet measurer. The local organization shall maintain records of all sails measured and certified.

**c) Stiffening of Sails:**

Except as where specifically permitted by these rule, no battens or other means of stiffening the sails shall be used.

**d) Methods of Construction:**

There shall be no restriction on the method or processes used for the construction of any sail.

**15) Mainsails**

**a) Specifications**

Mainsails shall meet the following Specification:

Headboard Width: 4  $\frac{1}{2}$ " Maximum

Number of battens: 4 maximum

Batten Length: No restrictions

Girths:

Mid: 65% of "E" or 85  $\frac{13}{16}$ " Maximum

Upper Quarter Girth: 38% of "E" or 50  $\frac{5}{32}$ " Maximum

Leach Length: 28' Maxi

The luff of the main shall be attached to the mast with slides or slugs.

Mains may be loose footed.

There shall be no restrictions on the use of zippers, leach lines or other devices for adjusting the draft or set of the sail.

The luff and foot of the mainsail, when set, shall not overlap either the boom or mast bands which are defined in sections 7c and 9c.

Mainsails will have a class emblem, configured in accordance with attachment "A".

**b) Materials:**

The body of the sail shall be constructed of woven ply of polyethylene terephthalate (PET) commonly known by the trade name Dacron.

**c) Measurement:**

Headboards shall be measured horizontally across the top from edge to edge.

The mid girth is measured by laying the sail flat and then folding the head (forward most point on the head) down to the clew (intersection of the leach and the foot). A mark is then added to the leach which is the

mid girth. A measurement is then taken on a line that is perpendicular to the luff and also intersects the mark.

The quarter girth measurement is taken in the same way as the mid girth except that the head is folded to the mid girth mark and a new mark is made which is used for measuring the quarter girth.

## **16) Genoa's & Jibs**

### **a) Specifications:**

All headsails other than spinnakers will be fitted with conventionally spaced snaphooks, all of which, when the sail is set, must be attached to the headstay.

All headsails shall be tacked to the stem of the boat and flown inside the spinnaker sheets when the spinnaker is set.

The maximum L.P. of any headsail shall be limited to 150% of "J" or 15' 0".

Battens that meet the following requirements are allowed only on jibs of 110% L.P. or less:

- A maximum of three equally spaced battens are allowed

- Top Batten may be full length

- All other battens shall be 30" or less in length

### **b) Materials:**

The body of the sail and sail reinforcements shall be constructed of either woven ply and/or laminate ply made from one or more of the following materials: Polyethylene Terephthalate (PET) known by the trade name Dacron, Polyethylene Naphthalate (PEN) known by the trade name Pentax, mylar and/or glass fiber.

### **c) Measurement:**

L.P. shall be measure by constructing two parallel lines on the floor 15' 0" apart. Hold the luff of the sail on one line and the clew shall fall on or within the second line.

All headsails with battens shall be measure to insure conformance to 110% L.P. or less specification.

## **17) Spinnakers**

### **a) Specifications:**



Spinnakers shall meet the following specifications:

Luff and leach length: 29' 9 5/8" Maximum

Girths and foot: 18' 0" Maximum

**b) Materials:**

Materials: No restrictions

Material Weight: The weight of the ply of the body of the sail shall not be less than 36 gm/sq. meter.

**c) Measurement:**

Girths and foot measurements shall be made across the entire sail. Refer to section 14 a) for additional information

**18) Spinnaker Staysails**

Spinnaker staysails and double head rigs are not allowed in class racing.

**19) Restrictions on the Use of Sails for Racing**

In the absence of any stipulations for an event or series, it shall be assumed that participants in Class racing may make their own choices of class approved sails without restrictions.

**20) Restrictions on the Purchase of New Sails**

Boat shall be limited to the purchase of no more than one sail from each of the following categories of sails in any calendar year:

Mains, 150% Genoas and Spinnakers

An exception to this rule may be made by the local officers if a sail is lost or damaged. Owners must tender a damaged sail for inspection to the local officers at the time that a request is made for authorization to purchase a replacement sail.

Owners who are racing in the class for the first time will receive a one year exemption to this limitation.

There shall be no restrictions on the purchase of new sails for use in the National Championship.

## **21) Crew Limitations**

Crew, for Cal 25 one design multi-race regattas, shall be limited as follows:

The maximum number of crew, counting the skipper, shall be six.

The maximum number of Group 2 or Group 3 crew, as defined by ISAF, shall be one. A description of the competitor classification codes can be found on the International Sailing Federation web site under "Regulation 22 - Sailor Classification Code" of the ISAF Racing Rules of Sailing.

The above Group 2 or Group 3 crew must have raced in a minimum of 4 races on the concerned boat during the one year period leading up to the regatta. Owners of record of Cal 25s participating as crew in a Cal 25 regatta are exempt from the Group 2/Group 3 crew classification above.

## **22) Hiking**

Hiking is prohibited. No boat shall be sailed with any crewmember having the majority of their body outboard of the lifelines or inclined to weather beyond vertical.

## **23) Life Lines & Pulpits**

All boats shall be equipped with bow pulpits and life lines supported by stanchions. There shall be a minimum of two stanchions on each side of the boat between the bow and the cockpit and the stanchions shall be a minimum of 18" inches tall.

## **24) Outboard Motors**

All boats shall carry an outboard motor that has a minimum horse power rating of 5 HP.

## **25) Ground Tackle**

All boats shall carry an anchor with a minimum weight of 8 lbs and an anchor rode, specifically designed for that purpose, with a minimum length of 100 ft and a minimum diameter of 3/8 inch. Local fleets may specify additional requirements for ground tackle that are tailored to local conditions.

## **26) Bunk Pads**

Bunk pads of 3" minimum thickness and covering all forepeak and cabin bunk locations will be carried in their normal position during all one-design racing.

## **27) Batteries**

All boats shall carry a minimum of one and a maximum of two marine or automotive style batteries at all times.

## **28) General Equipment Requirements**

Boats shall carry on board at all times the U.S. Coast Guard defined minimum equipment for recreational vessels. Please refer to the USCG web site for a list of this equipment.

In addition, all boats shall carry the following items:

- Operable head or Porta-Potty
- Fog or signaling Horn
- Compass

*Grandfather Clause;* All sails measured prior to the local acceptance date for these rules will be grandfathered for the life of the sail. All new sails are required to conform without exception.

Currently, the following hull numbers do not comply with rule #6 (Interiors) but will be allowed to race.

Jane's Addiction (hull #752, sail #27232),

Mañana Iguana (hull # 571, sail # 56019),