

# La REAL, 1571

**SCALE: 1/72,**  
**Length: 795mm,**  
**Width: 380mm,**  
**Height: 640mm**

## **HISTORY:**

La Real, built in Barcelona at Royal Shipyard, was the flagship of Don Juan de Austria during the battle of Lepanto in 1571, Battle of Lepanto was the Largest battle between galleys in history, in which a Christian fleet of the Holly League defeated an Ottoman fleet under admiral Ali Pasha. In 1971, a replica of La Real was built and displayed in the Museu Marítim in Barcelona.

## **Recommended tool list:**

- 1) Modeler's knife or scalpel
- 2) Mini drilling machine
- 3) Drill bits
- 4) Selection of abrasive paper
- 5) Scissors
- 6) Pliers
- 7) Clothes pegs or crocodile clips
- 8) Pencil
- 9) Rule
- 10) Set of needle files
- 11) Electric plank bender
- 12) Mini-lathe

## **Before you begin:**

Before you begin to build the model it is necessary with a vengeance read building instructions and plans. Also chronology of assembly steps is necessary to keep. You check if the parts go together before you glue it respectively you make any corrections with sandpaper. During the gluing, painting, lacquering and at work with another chemical materials is necessary well ventilated in your working room. You cut the parts from sheet until actually required for fitting. You cut by knife only in direction off ward your body so that you head to injury risk. It is recommended to use water based white glue to gluing wooden parts and *cyanoacrylate glue* for gluing resin and metal parts.

## **Colouring:**

The hull of the ship was painted by red color. Decoration was gilded. Hull under water was painted by protective white coating. Decks of the ships were natural wood. Anchors and other metal parts were black colour. For colouring is possible to use modellers colours used in plastic modelling.

## **Bending of wooden strips:**

The Wooden strips will be more flexible if you will boil it in hot water about 10-15 minutes. You can bend the strips along any cylindrical area but ideal is using of special plank bender (it would be best to use electric plank bender). If you need to do very small radius so you must bend it in more s

## **Model building process:**

### **Plan 1:**

#### **I: Hull frame**

- 1) First glue frames 2-14 to the keel 1(which is composed from two parts). Then run dowel 15 through the frames and glue them together.
- 2) Then glue frames 18-21 to the keel.
- 3) Then glue reinforcements 25, 26 and 29 together with dowels 27 to the keel and reinforcements 22-24 together with dowels 34.
- 4) Then glue parts 16, 17 and 30 to the keel.
- 5) Then glue side parts 28 to the frames.
- 6) Then glue tackles 38 to the part 31 and then glue the part 31 to the frames.
- 7) Then glue parts 32 and 33 to the part 31.
- 8) Then run the ropes 35 through inner space of skeleton as it is shown in the figure.

#### **II: First planking**

- 1) First plank the deck by strips 37a.
- 2) Then plank the hull by strips 37b.
- 3) Then plank the fore deck by strips 37.
- 4) Finally grind by sand paper the hull together with reinforcements 22-24 into needed shape.

#### **III: Second planking**

- 1) First glue deck 41 to the frames 28 as it is shown in the det. a.
- 2) Then glue parts 42 and 43 to their positions.
- 3) Then glue side parts 49a, 49b and 50 to the frames 28.
- 4) Then plank the deck by strips 58b.
- 5) Then make the deck hatches from parts 58a, 59a and 59b and make the hawse holes and hem them by strips 62.
- 6) Then make a platform from parts 51a, 53, 54, 55 and 56 as it is shown in det. B.
- 7) Then plank the deck by strips 51b and glue cover 52a with handles 52b into their positions.
- 8) Then glue strips 57 to the side parts 49b.
- 9) Then glue keel 44-48.
- 10) Then glue reinforcement parts 71-73 (The parts 71 and 72 is need to grind into the shapes as it is shown in the det. C before gluing.) to the hull and plank the hull by strips 60 and 61.
- 11) Then plank the fore deck by parts 64-70.

### **Plan 2:**

#### **IV: Framing**

- 1) First glue parts 74 and 75 to the frames 42 and 43.
- 2) Then glue into their positions frames 217-226.
- 3) Then glue together parts 76a and 76b and then glue the parts 76 to the frames 42 and 43.
- 4) Then glue frames 77-210 to the deck. Position of simple frames is useful to check by notches in parts 23 which will be run to the frames later.
- 5) Finally glue parts 211-216 and 227 to the frames.

#### **V: Benches**

- 1) First glue side parts 230 with strips 228 to the frames 77-210 as it is shown in the det. D.
- 2) Then glue strips 229 to the frames 77-210 as it is shown in det. B.
- 3) Then after the det. C glue fore structure.
- 4) Then glue benches of oarsmen as it is shown in the det. D.

### **Plan 3:**

#### **VI: Details**

- Det. a:** Plank the decks by strips 256.

**Det. b:** Make the stern deck as it is shown in the figure.

**Det. c:** Finish the fore superstructure as it is shown in the figure. First glue decks 257 and 264 and strips 265 into their positions. Then glue skeleton of superstructure from parts 259, 263 and 266. Then plank the superstructure by strips 267. Finally glue parts 268 and 269 into their positions.

**Det. d:** Make the base construction for boat from parts 270-273. Then glue parts 261 and pins 456 to the beams 76.

**Det. e, f:** Glue frames 274-290 and strips 291 and 292 to the hull as it is shown in the figure.

**Det. g:** Glue parts 249 and 293-295 to the stern.

**Det. h:** Make a captain cabin on the stern. First glue frames 296 and 297 in their positions. Then plank the cabin by strips 298 and glue part 299 on its position. Then glue benches 307-310 to the inner sides of the cabin. Then glue on their places decorations 300-303. Finally make a rudder from parts 305 and 306a-c and install it to the sternpost as it is shown in the figure.

**Det. i:** Make railing from parts 312-316 as it is shown in the figure.

**Det. j:** Make stairs from parts 366-372.

**Det. k:** Make railings from parts 318, 319 and 253.

**Det. l:** Make the guns with carriages and then install them into their positions.

**Det. m:** Make galley from as it is shown in the figure and then install it into its position.

**Det. n:** Make lanterns. First glue parts 604 and 599b-d to the part 599a. Then glue together parts 599e and 599f and grind them as it would be possible to glue them together and then glue them to parts 599c. Finally glue also top parts 599b, 599c and 599g into their positions. Use the same procedure also for making of the smaller lanterns. Finally all three lanterns glue to transverse piece 232 as it is shown in the figure.

**Det. o:** Make a roof construction. First make the transverse beam from parts 322a-c and then glue it together with lanterns into its position. Then glue frames 324-338 to the transverse part as it is shown in the figure.

Glue also rest of decorations on their positions as it is shown in the plan.

#### **Plan 4:**

##### **VII: Details**

**Det. a:** Make a boat. First glue frames 421-444 to the keel 420. Then glue decks 446-448, benches 449 and parts 452-455 to the frames. Then plank the boat by planks 457a-h and 458. Start the planking with planks 457a and then glue gradually other planks 457b-h and then glue hinges 588-599 and ruder 445 to the sternpost. Then glue parts 586 with pins 587 to the hull. Finally grind the oars 591 into needed shapes. Finally install the boat on the parts 273.

**Det. b:** Tie the hawse cables to the anchors and then install the anchors into the fore superstructure as it is shown in the figure.

**Det. c:** Make masts, yards and oars by grinding from dowels.

##### **VII: Rigging, flags and sails**

**Det. a:** Detail of tying of shrouds to the main masts.

**Det. b:** Detail of tying of shrouds to the hull.

**Det. c:** Detail of tying of ropes to the cleats and eyebolts.

**Det. d:** Detail of tying of shrouds to the fore masts.

**Det. e:** Detail of tying of yard to the mast.

**Det. f:** Detail of mast top.

#### **Plan 5:**

**Det. a:** Make a stand from parts 609-611.

**Det. b:** Detail of the sail.

#### **Part list:**

1 keel

plywood 3mm

1pc.

2-14	frames	plywood 3mm	1pc.
15	reinforcement	dowel 6mm	4pcs.
16-17	mast foot	plywood 3mm	1pc.
18-21	frames	plywood 3mm	1pc.
22-24	frames	plywood 3mm	2pcs.
25-26	frames	plywood 3mm	2pcs.
27	pins	dowel 6mm	4pcs.
28	frames	plywood 3mm	2pcs.
29	frames	plywood 3mm	2pcs.
30-31	deck	plywood 3mm	1pc.
32	deck	veneer 0,6mm	1pc.
33	mast foot	wood 3mm	1pc.
34	pins	dowel 3mm	61pc.
35	rigging	rigging rope 0,75mm	20m
36	block	block 12x5 mm	2pcs.
37	planking	strip 2x5mm	50pcs.
38	block	dowel 2mm	1pc.
39	hinges	wire 0,5mm	0,2m
40	-----		
41	deck	veneer 0,6mm	1pc.
42,43	frames	wood 2mm	1pc.
44-48	keel	wood 3mm	1pc.
49a,b	beam	veneer 0,6mm	2pcs.
50	beam	veneer 0,6mm	4pcs.
51,51a	deck	veneer 0,6mm	20Pcs.
52a	cover	veneer 0,6mm	1pc.
52b	handles	photoetched parts	2pcs.
53	platform	wood 2mm	2pcs.
54	platform	strip 1x3mm	60pcs.
55	tackle	dowel 2mm	1pc.
56	platform	strip 2x2mm	20pcs.
57	beam	strip 1x1mm	14pcs.
58	deck	veneer 0,6mm	20pcs.
58a	hatches	veneer 0,6mm	5pcs.
59a	hatches	veneer 0,6mm	10pcs.
59b	hatches	veneer 0,6mm	5pcs.
60a-c	wales	strip 2x2mm	20pcs.
61	planking	strip 1x3mm	60pcs.
62	hawse holes	strip 1x1mm	14pcs.
63	bending jig	plywood 3mm	1pc.
64-69	deck	veneer 0,6mm	2pcs.
70	deck	veneer 0,6mm	1pc.
71	Reinforcements	wood 2mm	2pcs.
72	Reinforcements	wood 2mm	2pcs.
73	Reinforcements	strip 1x1mm	10pcs.
74,75	frames	wood 2mm	2pcs.
76a	beam	wood 2mm	2pcs.
76b	beam	veneer 0,6mm	2pcs.
77-143	frames	plywood 1,5mm	1pc.
144-210	frames	plywood 1,5mm	1pc.
211	beam	strip 2x2mm	20pcs.
212	beam	strip 1x2mm	12pcs.
213	beam	wood 2mm	2pcs.
214	beam	wood 2mm	1pc.
215	beam	veneer 0,6mm	2pcs.
216	beam	veneer 0,6mm	2pcs.
217-226	frames	plywood 1,5mm	2pcs.
227	beam	strip 1x3mm	60pcs.
228	beam	strip 1x1mm	14pcs.
229	beam	strip 1x2mm	12pcs.
230	side wals	veneer 0,6mm	2pcs.
231-233	beam	strip 2x2mm	20pcs.
234	stanchions	wood 2mm	4pcs.
235	beam	wood 2mm	3pcs.
236-238	beam	wood 2mm	2pcs.

239	benches	veneer 0,6mm	59pcs.
240,241	benches	strip 2x2mm	20pcs.
242	benches	veneer 0,6mm	59pcs.
243	benches	veneer 0,6mm	59pcs.
244	strip	veneer 0,6mm	3pcs.
245	benches	strip 2x2mm	20pcs.
246	benches	wood 2mm	59pcs.
247,248	deck	veneer 0,6mm	2pcs.
249	-----		
250	deck	veneer 0,6mm	2pcs.
251	deck	veneer 0,6mm	1pc.
252	deck	veneer 0,6mm	38pcs.
253	railing	veneer 0,6mm	1pc.
254	deck	veneer 0,6mm	81pc.
255	-----		
256	deck	veneer 0,6mm	13pcs.
257	deck	veneer 0,6mm	20pcs.
258	deck	veneer 0,6mm	20pcs.
259	strip	strip 2x2mm	20pcs.
260	strip	strip 2x2mm	20pcs.
261	thin plate	strip 1x2mm	12pcs.
262	strip	strip 2x2mm	18pcs.
263	beam	wood 2mm	2pcs.
264	deck	veneer 0,6mm	20pcs.
265	strip	strip 1x1mm	14pcs.
266	reinforcement	wood 2mm	6pcs.
267	strip	strip 1x3mm	60pcs.
268,269	transverse beam	wood 2mm	3pcs.
270, 271	boat stand	strip 2x2mm	20pcs.
272	reinforcement	wood 2mm	2pcs.
273	boat stand	wood 2mm	2pcs.
274-290	frames	plywood 1,5mm	2pcs.
291, 292	strip	strip 1x2mm	12pcs.
293a	decoration	wood 3mm	1pc.
293b	decoration	resin part	1pc.
294	frames	plywood 3mm	3pcs.
295	strip	strip 1x3mm	60pcs.
296,297	frames	wood 2mm	1pc.
298	stripy	strip 1x3mm	60pcs.
299	board	wood 1,5mm	1pc.
300-303	decoration	resin part	1pc.
304	board	wood2mm	1pc.
305	rudder	wood 3mm	1pc.
306a,b	rudder	wood 3mm	1pc.
306c	rudder	wood 2mm	2pcs.
307	benches	veneer 0,6mm	2pcs.
308,309	benches	veneer 0,6mm	1pc.
310	benches	veneer 0,6mm	9pcs.
311	railing	veneer 0,6mm	32pcs.
312-314	railing	wood 2mm	32pcs.
315	railing	strip 2x2 mm	20pcs.
316	railing	strip 1x2mm	12pcs.
317	reinforcement	wood 2mm	1pc.
318,319	railing	resin part	1pc.
320,321	-----		
322a-c	příčný strip	wood 2mm	2pcs.
323a	lantern	veneer 0,6mm	2pcs.
323b	lantern	veneer 0,6mm	1pc.
324-335	roof frames	plywood 1,5mm	1pc.
336	strip	wood 2mm	2pcs.
337	strip	veneer 0,6mm	20pcs.
338	strip	veneer 0,6mm	5pcs.
339	swivel gun	resin part	10pcs.
340	swivel gun stand	strip 3x3mm	1pc.
341a	swivel gun	veneer 0,6mm	10pcs.

341b	swivel gun	wood 2mm	10pcs.
342	gun	resin part	1pc.
343,344	gun	resin part	2pcs.
345	gun carriage	wood 2mm	2pcs.
346	gun carriage	wood 1,5mm	4pcs.
347	gun carriage	wood 1mm	4pcs.
348	gun carriage	wood 2mm	1pc.
349	gun carriage	wood 1,5mm	2pcs.
350	gun carriage	wood 1mm	2pcs.
351	gun carriage	wood 2mm	1pc.
352	gun carriage	wood 2mm	2pcs.
353	gun carriage	wood 2mm	2pcs.
354	galley	strip 2x2mm	20pcs.
355	galley	veneer 0,6mm	1pc.
356	galley	veneer 0,6mm	2pcs.
357	galley	veneer 0,6mm	2pcs.
358-360	galley	resin part	1pc.
361	galley	wire 0,5mm	0,2m
362	galley	wire 0,5mm	0,2m
363	galley	chain	0,1m
364	galley	wire 0,3mm	0,1m
365	galley	wire 0,3mm	0,1m
366a	stairs	veneer 0,6mm	2pcs.
366b	stairs	veneer 0,6mm	6pcs.
367-372	stairs	veneer 0,6mm	2pcs.
373-375	gun carriage ironwork	photoetched part	2pcs.
376,377	decoration	photoetched part	2pcs.
378,379	decoration	photoetched part	3pcs.
380	decoration	photoetched part	3pcs.
381	dead eyes fitting	photoetched part	16pcs.
382	eyebolt	eyebolt	50pcs.
383	eyebolt	eyebolt	50pcs.
384	eyebolt	eyebolt	50pcs.
385	eyebolt	eyebolt	50pcs.
386	eyebolt	eyebolt	50pcs.
387	eyebolt	eyebolt	50pcs.
388	cleat	wood 2mm	2pcs.
389	eyebolt	eyebolt	50pcs.
390	cleat	wood 2mm	2pcs.
391	eyebolt	eyebolt	50pcs.
392	cleat	wood 2mm	2pcs.
393	eyebolt	eyebolt	50pcs.
394	cleat	wood 2mm	1pc.
395	eyebolt	eyebolt	50pcs.
396	eyebolt	eyebolt	50pcs.
397	cleat	wood 2mm	1pc.
398	eyebolt	eyebolt	50pcs.
399	cleat	wood 2mm	1pc.
400	eyebolt	eyebolt	50pcs.
401	cleat	wood 2mm	1pc.
402	eyebolt	eyebolt	50pcs.
403	cleat	wood 2mm	2pcs.
404	eyebolt	eyebolt	50pcs.
405	cleat	wood 2mm	2pcs.
406	eyebolt	eyebolt	50pcs.
407	cleat	wood 2mm	1pc.
408	eyebolt	eyebolt	50pcs.
409	cleat	wood 2mm	1pc.
410	eyebolt	eyebolt	50pcs.
411	cleat	wood 2mm	1pc.
412	eyebolt	eyebolt	50pcs.
413	cleat	wood 2mm	1pc.
414	eyebolt	eyebolt	50pcs.
415	cleat	wood 2mm	1pc.
416	eyebolt	eyebolt	50pcs.

417	cleat	wood 2mm	1pc.
418	eyebolt	eyebolt	50pcs.
419	cleat	wood 2mm	1pc.
420	boat	plywood 1,5mm	1pc.
421	boat	plywood 1,5mm	2pcs.
422-443	boat	plywood 1,5mm	1pc.
444	boat	plywood 1,5mm	2pcs.
445	boat	plywood 1,5mm	1pc.
446-448	boat	veneer 0,6mm	1pc.
449	boat	veneer 0,6mm	1pc.
450a	boat	veneer 0,6mm	1pc.
450b	boat	veneer 0,6mm	2pcs.
451	boat	veneer 0,6mm	1pc.
452	boat	veneer 0,6mm	1pc.
453	boat	veneer 0,6mm	2pcs.
454	boat	veneer 0,6mm	1pc.
455	boat	strip 1x2mm	12pcs.
456	pins	dowel 1mm	1pc.
457a-h	boat	veneer 0,6mm	2pcs.
458	boat	veneer 0,6mm	2pcs.
459	eyebolt	eyebolt	50pcs.
460	oar	dowel 3mm	61pc.
461	oar	veneer 0,6mm	118pcs.
462	oar	veneer 0,6mm	59pcs.
463	rigging	rigging 0,25mm	20m
464	main mast	dowel 8mm	2pcs.
466	flag mast	dowel 2mm	1pc.
467	flag mast	dowel 3mm	61pc.
468	fore mast	dowel 6mm	4pcs.
470	flag mast	dowel 2mm	1pc.
471	flag mast	dowel 3mm	61pc.
472	yard	dowel 8mm	2pcs.
473	yard	dowel 6mm	4pcs.
474	yard	dowel 3mm	61pc.
475	yard	dowel 3mm	61pc.
476	rigging	rigging 0,75mm	20m
477	flag mast	dowel 2mm	1pc.
478	flag mast	dowel 3mm	61pc.
479	rigging	rigging 0,25mm	20m
480	yard	dowel 4mm	1pc.
481	yard	dowel 4mm	1pc.
482	rigging	rigging 0,75 mm	20m
483	flag mast	dowel 2mm	1pc.
484	flag mast	dowel 3mm	61pc.
485	rigging	rigging 0,25mm	20m
486	flag mast	dowel 3mm	61pc.
487	flag mast	dowel 4mm	1pc.
488	anchor	resin part	2pcs.
489	ring	ring 4mm	2pcs.
490	flag pole	dowel 2mm	1pc.
491	flag pole	dowel 3mm	61pc.
492	flag pole	dowel 2mm	1pc.
493	flag pole	dowel 3mm	61pc.
494	flag pole	dowel 2mm	1pc.
495	flag pole	dowel 3mm	61pc.
496	flag pole	dowel 2mm	1pc.
497	flag pole	dowel 3mm	61pc.
498	rigging	rigging 1,5mm	0,25m
499	rigging	rigging 0,5mm	20m
500	rigging	rigging 1mm	10m
501	rigging	rigging 0,5mm	20m
502	rigging	rigging 0,25mm	20m
503	block	block 7mm violin	18pcs.
504	block	block 5mm one hole	55pcs.
505	pin	dowel 1mm	1pc.

506	rigging	rigging 0,75mm	20m
507	rigging	rigging 0,5mm	20m
508	block	block 5mm two holes	16pcs.
509	rigging	rigging 0,75mm	20m
510	rigging	rigging 0,5mm	20m
511	block	block 5mm one hole	55pcs.
512	rigging	rigging 1mm	10m
513	rigging	rigging 0,5mm	20m
514	block	block 5mm tři díry	5pcs.
515	rigging	rigging 1mm	10m
516	rigging	rigging 0,5mm	20m
517	block	block 5mm tři díry	5pcs.
518	rigging	rigging 0,75mm	20m
519	rigging	rigging 0,5mm	20m
520	block	block 5mm two holes	16pcs.
521	block	block 5mm one hole	55pcs.
522	rigging	rigging 0,75mm	20m
523	rigging	rigging 0,5mm	20m
524	block	block 5mm two holes	16pcs.
525	rigging	rigging 1mm	10m
526	rigging	rigging 0,5mm	20m
527	block	block 7mm violin	18pcs.
528	block	block 5mm one hole	55pcs.
529	rigging	rigging 0,75mm	20m
530	rigging	rigging 0,5mm	20m
531	block	block 5mm one hole	5pcs.
532	rigging	rigging 0,5mm	20m
533	block	block 5mm one hole	55pcs.
534	rigging	rigging 1mm	10m
535	rigging	rigging 0,5mm	20m
536	block	block 5mm two holes	16pcs.
537	block	block 5mm one hole	55pcs.
538	rigging	rigging 0,5mm	20m
539	block	block 5mm one hole	55pcs.
540	rigging	rigging 0,5mm	20m
541	block	block 5mm two holes	16pcs.
542	rigging	rigging 0,5mm	20m
543	block	block 5mm one hole	55pcs.
544	rigging	rigging 0,5mm	20m
545	block	block 5mm one hole	55pcs.
546	rigging	rigging 0,5mm	20m
547	block	block 5mm one hole	55pcs.
548	rigging	rigging 1mm	10m
549	decoration	photoetched part	1pc.
550	rigging	rigging 0,75mm	20m
551	rigging	rigging 0,5mm	20m
552	block	block 5mm one hole	55pcs.
553	rigging	rigging 0,5mm	20m
554	block	block 5mm one hole	55pcs.
555	block	block 5mm two holes	16pcs.
556	rigging	rigging 0,5mm	20m
557	block	block 5mm one hole	55pcs.
558	rigging	rigging 0,5mm	20m
559	block	block 5mm one hole	55pcs.
560	rigging	rigging 0,5mm	20m
561	block	block 5mm one hole	55pcs.
562	rigging	rigging 0,5mm	20m
563	block	block 5mm one hole	55pcs.
564	rigging	rigging 0,5mm	20m
565	block	block 5mm one hole	55pcs.
566	fore sail	cloth	1pc.
567	main sail	cloth	1pc.
568	cord	cord 2mm	0,5m
569-577	flag	flag	1pc.
578	top	veneer 0,6mm	4pcs.



579	top	veneer 0,6mm	1pc.
580,581	top	photoetched part	1pc.
582	rollers	rollers	80pcs.
583	hinges	photoetched part	2pcs.
584	hinges	photoetched part	1pc.
585	hinges	photoetched part	1pc.
586	thin plate	veneer 0,6mm	1pc.
587	pins	wire 0,5mm	0,2m
588	rudder	photoetched part	2pcs.
589	rudder	photoetched part	1pc.
590	rudder	photoetched part	1pc.
591	oar	plywood 1,5mm	10pcs.
592	decoration	photoetched part	1pc.
593	decoration	veneer 0,6mm	1pc.
594	-----	-----	-----
595	decoration	veneer 0,6mm	1pc.
596,597	-----	-----	-----
598a	lantern small	resin part	2pcs.
598b,c	lantern small	veneer 0,6mm	4pcs.
598d	lantern small	veneer 0,6mm	2pcs.
598e,f	lantern small	veneer 0,6mm	12pcs.
598g	lantern small	resin part	2pcs.
599a	lantern large	resin part	1pc.
599b,c	lantern large	veneer 0,6mm	2pcs.
599d	lantern large	veneer 0,6mm	1pc.
599e,f	lantern large	veneer 0,6mm	6pcs.
599g	lantern large	resin part	1pc.
600-603	decoration	veneer 0,6mm	1pc.
604	wire	wire 0,5mm	0,2m
605	-----	-----	-----
606a	decoration	resin part	1pc.
606b	decoration	photoetched part	1pc.
607,608	decoration	resin part	2pcs.
609,610	stand	plywood 3mm	1pc.
611	stand	dowel 6mm	4pcs.
612	sail	rigging 1mm	10m
613	sail	rigging 0,25mm	20m