



Sailmaker's Palm

"Best" quality, a notch or two up from the most basic, but not the ultimate in professional gear.

Right Hand	RS-0193	Left Hand	RS-0193
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Sail needles

Pack of 5 assorted	RP-0191	Pack of 20 assorted	RP-0192
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Speedy Stitcher

The Speedy Stitcher is effectively a manual sewing machine, which forms a lock stitch as it goes. It is suitable for a variety of materials, including canvas, leather, sailcloth and webbing, and comes complete with two needles and a bobbin of waxed thread

Complete Stitcher - RP-0180

Straight Needle	RP-0181	Short Needle (finer gauge)	RP-0182
Curved Needle	RP-0183	Spare Thread - fine	RP-0184
Spare Thread - heavy	RP-0185	Spare Bobbin	RP-0186



Caulking Cotton & Tarred Marline

Cotton 0.5 kg ball The strands can be separated or combined to provide the right thickness for the job.	Marline Heavy 0.75 kg ball (approx 3 mm dia)	Marline medium 0.2 kg ball (approx 2 mm dia)	Marline fine 0.2 kg ball (approx 1 mm dia)
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RS-0160	RS-0161	RS-0162	RS-0163
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Oakum

2 kg pack	25 kg bale
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RS-0170	RS-0171
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Red Lead Powder

1 kg tin	PS-0080
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Mix with linseed oil putty - about 1:10 - for underwater caulking.

White Lead Paste

3 kg tin	PS-0081
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Mixed roughly equally with linseed oil putty for topsides caulking.

Whipping Twine

Whipping Twine - Standard - 50 m	Whipping Twine - Heavy - 25 m	Whipping Twine - Marline 302 - 20 m	Whipping Twine - Heavy - Buff - 40 m
RP-0095	RP-0096	RP-0097	RP-0098

Seizing Wire

Monel 10m	RG-0168
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Mars Oil Leather dressing - 100ml - PS-0160

An oil-based waterproof leather dressing. The top of the container contains a sponge for application.

Mars Leather dressing - 100ml - PS-0163

A water-based dressing which "penetrates and nourishes where most needed"! Applied with a brush inside the lid.

Stockholm Tar - 1 kg tin - PS-0100

Meant to be for preserving natural fibre rope; but usually bought for the smell!

Lanocote Anti-corrosion Compound - 500ml tin PS-0145

incorporates anhydrous lanolin for the protection of rigging and other metalwork in marine environment. Millions of sheep can't be wrong!

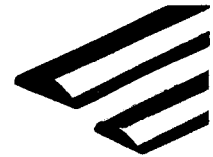


Materials

One of the more difficult things for those maintaining or building a traditional boat is obtaining suitable materials, in appropriate quantities, for the individual pieces of equipment which you always seem to need. We stock the following:

Convex Keelband/Rubbing Strip

Table with 6 columns: Width, Brass, and five size options (3/8", 1/2", 5/8", 3/4", 1").



Phosphor Bronze - PB102

For notes on the properties and compositions of the various bronzes, see the reference section of the website.

Table with 7 columns: Rod, Part No, Sheet, Part No, and five size options (1/4", 5/16", 3/8", 1/2", 5/8", 3/4").

Brass - CZ108

Used mostly for hatch runners and similar - where for some reason 1 1/4" x 1/8" seems to be favourite. If you are looking for protective strips either on the deck or keel, then keelband is a better bet.

Table with 7 columns: Strip, Part No, and six size options (3/4" x 1/8", 1" x 1/8", 1 1/4" x 1/8", 1 1/2" x 1/8", 2" x 1/8", 1 1/2" x 3/16").

Copper - C101

Table with 7 columns: Sheet, Rod, Part No, and five size options (0.4mm thick, 1/4", 5/16", 3/8", 1/2").

Rubber - black neoprene

This is stocked mainly for re-sealing portlights. What you do is get a length of the right section, stick the ends together to form a loop, and then, using just a few spots of glue, stick the loop into place. For older portholes, we have found that using round section is a good idea, even if the original was rectangular, because it compresses progressively, so absorbing the odd misalignments in an old porthole. Generally, it is not a good plan to use soft foam rubber, it only works for a short time.

Table with 7 columns: 5mm round, 6mm, 8mm, 5mm x 5mm, 6 x 6, 6 x 3, 5 x 3, and corresponding part numbers.

Leather - 2-2.5mm thick - natural colour - MA-0300

A note on units

Like many in their prime of life (?), I think in feet and work in metres, having lived through the conversion from "British" to S.I. units. For those of you not obliged to convert, a few words of explanation might be a good idea, using round number conversions. 1 kg(mass) = 2.2 lb(mass). Mass is the amount of matter in a thing, whose weight is determined by whatever the acceleration happens to be at the time. Stood still, on Earth, the prevailing acceleration is due to gravity which is about 10 metres per second per second. So the force - or weight - of that 1 kg (mass) is 10 Newtons (N), or 1 kgf. Now kilogram force (kgf) isn't these days a proper unit to use, but is more convenient to visualise than Newtons. So one refers to 1300kg breaking load, where one should properly say 1300kgf or 13000N. For those who can't stand kg or N, it so happens that 1 ton - the 2240 lb type - is as near as makes no odds 1 tonne - the 1000 kg type - and the force aspect of things is usually implicit in commonly expressed weights, loads etc. By a neat irony an apple weighs about 1 Newton! Pressures or stresses are forces applied over an area, such as tonf per square inch, Newtons per square metre (referred to as a Pascal(Pa)), or whatever. Because many of the things we are dealing with are millimetre sized - like wire and bolts and so on - N/mm² is the handiest even though it's not the pukka unit. It also happens to be the same numerically as megapascals - MPa - which is what most material properties are specified in. So 20 MPa = 20 N/mm². But use either, and you will need to divide by 10 to get to kgf, and a further 1000 to get to tonnes. The example here should confuse the issue suitably.

Comparison table between S.I., "handy", and "British" units for stress, plate size, area, and load.

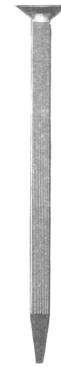


**Copper Boat Nails - Approx. No per Kilogram
(Part Numbers are FS-0092 to FS-0126)**

Roves

We are often asked for special tools for driving the rove down the nail. For most applications, anything that works will do - like a suitably sized socket spanner.

	1"	1 1/4"	1 1/2"	1 3/4"	2"	2 1/2"	3"	4"	5"	Size	No per Kilo
14g	1000	860	700	600	520					5/16"	2500
13g			500							3/8"	1460
12g	620	500	420	370	310	260	180			7/16"	940
11g					260	200	165			1/2"	680
10g			260		200	170	141	105		1/2"	680
9g						135	110			9/16"	500
8g							85	75	50	5/8"	400
6g								50	42	3/4"	240



Copper Boat Nail



Copper Rove

Brass Countersunk Woodscrews

2g x 3/8" to 12g x 3" FS-0260 to FS-0303 Larger sizes kept on irregular basis

Brass Round Head Woodscrews

4g x 1/2" to 8g x 1 1/2" FS-0321 to FS-0330 Larger sizes kept on irregular basis

Silicon Bronze Countersunk & Round Head Woodscrews

4g x 3/4" to 20g x 3" FS-1002 to FS-1118 Other sizes available

Silicon Bronze Bolts, Nuts & Studding

3/16" dia to 1" dia FS-1200 to FS-1378 Other sizes available

Nails, tacks & pins

Bronze Ringshank Nails "Gripfast" 14g x 3/4" to 8g x 3" FS-0153 to FS-0166

Brass Panel Pins 1/2" to 1" FS-0130 to FS-0133

Copper Tacks 1/2" to 1" FS-0135 to FS-0137

...and anything else you can think of!

A note on gauges etc.

There are moments when you wish Napoleon had been a bit luckier, and this is one of them.

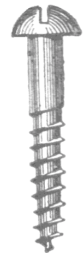
Woodscrews are gauged by **screw gauge** - listed opposite - where the bigger the number, the bigger the screw

Copper nails and **metal sheet** are dimensioned by **wire gauge**, where the bigger the number the thinner the nail or sheet. Wire gauges are:

16g	1.626mm	10g	3.251mm
14g	2.032mm	9g	3.658mm
13g	2.337mm	8g	4.064mm
12g	2.642mm	6g	4.877mm
11g	2.946mm	4g	5.893mm



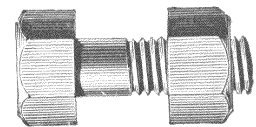
Countersunk Woodscrew



Roundhead Woodscrew



Coachscrew



Panel Pin



Tack





Wood Screw Data

Inch to Metric conversion

Gauge	Nominal Diameter		Clearance Hole	Pilot Hole			Inch	mm
	Decimal inch	mm		Hardwood	Softwood	Metal		
2	.082	2.08	3/32"	1/16"	-	-	1/16"	1.587
3	.094	2.39	3/32"	1/16"	-	-	5/64"	1.984
4	.108	2.74	7/64"	1/16"	-	5/64"	3/32"	2.381
5	.122	3.10	1/8"	5/64"	-	-	7/64"	2.778
6	.136	3.45	9/64"	3/32"	1/16"	3/32"	1/8"	3.175
7	.150	3.81	5/32"	3/32"	1/16"	-	9/64"	3.572
8	.164	4.17	11/64"	3/32"	5/64"	7/64" or 1/8"	5/32"	3.969
9	.178	4.52	3/16"	7/64"	5/64"	-	11/64"	4.366
10	.192	4.88	13/64"	7/64"	5/64"	9/64" or 5/32"	3/16"	4.763
12	.220	5.59	15/64"	1/8"	3/32"	11/64" or 3/16"	13/64"	5.159
14	.248	6.30	1/4"	9/64"	7/64"	13/64" or 7/32"	7/32"	5.556
16	.276	7.01	9/32"	5/32"	1/8"	-	15/64"	5.953
18	.304	7.72	5/16"	11/64"	1/8"	-	1/4"	6.35
20	.332	8.43	11/32"	3/16"	9/64"	-	9/32"	7.143

Pilot Holes

Gauge	Gripfast	Boat nails		Inch	mm
		Hardwood	Softwood		
14	1/16"	1/16"	3/64"	7/16"	11.113
13	-	5/64"	1/16"	1/2"	12.7
12	1/16"	5/64"	1/16"	9/16"	14.287
11	-	3/32"	5/64"	5/8"	15.875
10	5/64"	3/32"	5/64"	3/4"	19.05
9	-	3/32"	5/64"	1"	25.4
8	3/32"	7/64"	3/32"	1 1/4"	31.75
6	-	1/8"	7/64"	1 1/2"	38.1
				1 3/4"	44.45
				2"	50.8
				2 1/2"	63.5
				3"	76.2
				3 1/2"	88.9
				4"	101.6
				4 1/2"	114.3
				5"	127
				6"	152.4
				8"	203.2
				10"	254
				12"	304.8

Thread Comparisons

ISO metric	Metric		Imperial			Inch dia	mm	
	TPI	Pitch (mm)	UNC	Whit.	UNF			
M3 (0.118")	51	0.5	-	-	-	-	3 1/2"	88.9
M4 (0.158")	36.3	0.7	-	-	-	-	4"	101.6
M5 (0.197")	31.8	0.8	24	24	-	3/16" (0.187)	4 1/2"	114.3
M6 (0.236")	25.4	1.0	20	20	28	1/4" (0.250)	5"	127
M8 (0.315")	20.3	1.25	18	18	24	5/16" (0.312)	6"	152.4
M10 (0.394")	16.9	1.5	16	16	24	3/8" (0.375)	8"	203.2
M12 (0.472")	14.5	1.75	13	12	20	1/2" (0.500)	10"	254
M16 (0.630")	12.7	2.0	11	11	18	5/8" (0.625)	12"	304.8