

Mainsail: 7000402 Pier-1 Bavaria30 MainsailV2.des

Fareast/ Michael Job Number:

Design Info
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Design File:
\\NAS\Engineering files\Queenie-Customer Order\Fareast Sails\2023 Order\Need Confrim Order\7000402 Pier\7000402

Job No:
Initial Design Date: 13/4/2023
Boat:
Bavaria30
Client:
Fareast/ Michael

Comments:
Bavaria30, MH rig, 26.4m2.cross cut
P=11.3m, E=4.1m, tack angel =88.5degree,
loose foot.6.68oz challenge
#1reef @1.45m , #2 reef @ 2.9m

Radial patch, 4 full batten, #1bat=1.07m, #2bat=1.99m
#3bat=2.796m, #4bat=3.486m

luff curve=0mm

Design Data
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Main

Measurements

Luff geodesic: 11.200m
Leech geodesic: 11.811m
Foot geodesic: 4.050m
Head geodesic: 0.115m
Upper width (MUW): 0.723m
Three-quarter width (MTW): 1.325m
Half width (MHW): 2.399m
Quarter width (MQW): 3.290m
Foot median: 11.489m
ORC Mainsail area: 25.471m?
Surface area: 26.123m?
Clew height: 4.100m
Mast rake: 0.151m

Battens

Position	Length	Roach	Angle	Luff	Leech	Full
81.000%	1.090m	0.185m	71.762?	9.073m	9.533m	Full
61.000%	1.992m	0.245m	71.762?	6.837m	7.179m	Full
40.320%	2.796m	0.220m	71.762?	4.525m	4.745m	Full
19.311%	3.486m	0.127m	71.762?	2.176m	2.273m	Full

Reefing Points

1, Luff: 1.450m ; Leech: 1.511m ; Offset: 0.000m ; Number Eyelets: 2
2, Luff: 2.912m ; Leech: 3.033m ; Offset: 0.000m ; Number Eyelets: 2

Luff Slides

1, Position: 0.590m
2, Position: 1.318m
3, Position: 2.946m
4, Position: 3.730m
5, Position: 5.285m
6, Position: 6.057m
7, Position: 7.575m
8, Position: 8.321m
9, Position: 9.778m
10, Position: 10.489m

Luff Curve

		Fanned Luff (@ 5.00% [0.202m])	Before BSeam
11.200m,	0.000m	100% (11.200m) :	0.000m
10.069m,	0.000m	90% (10.080m) :	0.024m
8.960m,	0.000m	80% (8.960m) :	0.048m
7.829m,	0.000m	70% (7.840m) :	0.069m
6.720m,	0.000m	60% (6.720m) :	0.084m
5.062m,	0.000m	50% (5.600m) :	0.089m
3.360m,	0.000m	40% (4.480m) :	0.083m
1.779m,	0.000m	30% (3.360m) :	0.067m
0.000m,	0.000m	20% (2.240m) :	0.045m
		10% (1.120m) :	0.019m
		0% (0.000m) :	0.000m

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Seam Allowances			
Zone:	Split	Radial	Cross
1	0.025m	0.025m	0.025m

Edge Excesses			
Sail:	Luff	Leech	Foot
	0.000m	0.000m	0.000m

Total Seam Lengths (m)

Horizontal	22.58
Radial/Vertical	0.00
Bi-Radial Split	0.00

Materials

Material	Area (m ²)	Panels
Material 1	26.15	1,2,3,4,5 6,7,8,9,10

