

RIGGING SURVEY

W1X

Date of Measurement=22/8/99

Minimum Boat Weight = 14 Kg

Country	Place	Boat		
		Rig	Spread/	Span
		Manufact	Type	
BLR	1	Empacher	STD	160.5
GER	2	WM	STD	160
BUL	3	Empacher	STD	159.5
RUS	4	Empacher	STD	159.5
NZL	5	Hudson	STD	159
CAN	6	Hudson	Wing	160

Blade	Overall	Inboard	Overall	Handle	Scul	
					Manufact	Type
					Length	Length
Empacher	BB	290.5	89.5	43	CB	
Concept II	BB	289	89	43	CA	
Empacher	BB	290	88	43	WB	
Empacher	SM	287	87	43	CB	
Croker	SM	288.5	88.5	44	CB	
Concept II	BB	289	89	43	WB	

Age	Rower			Height (cm or in*)			Weight (kg or lbs*)		
	average	min	max	average	min	max	average	min	max
	27			185			85		
24			180			78			
26			179			75			
X									
26			5.1*			70			
X									

M1X

Date of Measurement=22/8/99

Minimum Boat Weight = 14 Kg.

Country	Place	Boat		
		Rigger	Spread/	Span
		Manufact	Type	
NZL	1	Ausitec	Wing	
SUI	2	WM	Wing	159.5
CAN	3	Empacher		160.5
CZE	4	Ausitec	Wing	160
BUL	5	Empacher		159
ITA	6	Filippi		160

Blade	Overall	Inboard	Overall	Handle	Scul	
					Manufact	Type
					Length	Length
Croker	SM			CA		
C II	BB	291	88.5	43	CB	
C II	BB	292	88.5	43	CA	
C II	SM	290.5	88.5	46	CA	
C II	BB	291.5	88	43	Alum	
C II	SM	288	89.5	46	CA	

Age	Rower			Height (cm or in*)			Weight (kg or lbs*)		
	average	min	max	average	min	max	average	min	max
	24			6.8*			100		
27			190			103			
31			6.5*			218*			
31			194			94			
23			190			95			
23			190			89			

W2X

Date of Measurement= 22/8/99

Minimum Boat Weight = 27 Kg.

Country	Place	Boat		
		Rigger	Spread/	Span
		Manufact	Type	
GER	1	BBG	STD	160
CHN	2	Empacher	STD	158
NED	3	Filippi	Wing	160
LTU	4	Empacher	STD	159.5
FRA	5	Empacher	STD	159.5
AUS	6	Sykes	Wing	158

Blade	Overall	Inboard	Overall	Handle	Scul	
					Manufact	Type
					Length	Length
C II	BB	288	88.5	43	CB	
Empacher	SM	289.5	88.5	43.2	CA	
C II	BB	291	90	43	CB	
Braca	BB	289	87.5	43	WB	
C II	BB	291	89	43	CB	
C II	BB	295	89	43	CA	

Age	Rower			Height (cm or in*)			Weight (kg or lbs*)		
	average	min	max	average	min	max	average	min	max
		29	29	184	185		72	77	
	23	23	177	180		67	76		
	21	30	178	186		73	75		
	27	30	185	187		75	80		
	20	23	182	183		75	77		
	27	29	180	180		73	73		

M2X

Date of Measurement= 22/8/99

Minimum Boat Weight = 27 Kg.

Country	Place	Boat		
		Rigger	Spread/	Span
		Manufact	Type	
SLO	1	Empacher	STD	159.5
GER	2	Empacher	STD	159
NOR	3	Empacher	STD	159
FRA	4	Empacher	STD	160
HUN	5	Empacher	STD	160
DEN	6	Empacher	STD	157

Blade	Overall	Inboard	Overall	Handle	Scul	
					Manufact	Type
					Length	Length
C II	SM	288	88.5	46	CA	
Empacher	BB	291	88.5	43	CA	
C II	BB	291	88	46	CA	
C II	BB	291	88.5	43	CB	
C II	SM	289	88.5	46	CB	
C II	SM	291.5	88	46	CA	

Age	Rower			Height (cm or in*)			Weight (kg or lbs*)		
	average	min	max	average	min	max	average	min	max
		20	27	190	195		87	90	
	22	26	192	192		88	90		
	23	24	183	193		86	96		
	21	28	188	201		86	97		
	19	23	191	193		89	97		
	25	26	188	189		85	87		

Oar/Scull = Big Blade (BB) / Smoothie (SM)

Scull Size = 43.5cm / Other (Specify)

Handle Type = Wood Bonded (WB) / Composite Bonded (CB) / Composite Adjustable (CA)/Aluminum (Alum)

Note: In some cases not all scullers in a 2X or 4X have the same spread. The listed spread is one measured seat.

Survey conducted by Hart & Gill Perry with the assistance of Bill Reed, Kim Bigger, Eva Kovach, Dick Dunham, William Reed, Andreas Csonka and Michael Guerrieri

RIGGING SURVEY

LW1X

Date of Measurement=22/8/99

Minimum Boat Weight = 14 Kg.

Country		Place	Boat		
Country		Place	Rigger Manufact	Spread/Type	Span
SUI	1		WM	Wing	160
USA	2		Hudson	STD	160
ARG	3		Empacher	STD	156
GER	4		Empacher	STD	160
ROM	5		Filippi	STD	161
CRO	6		Filippi	STD	160

Scul					
Blade Manufact	Overall Type	Inboard Length	Overall Length	Handle Blade Size	Type
C II	BB	286.5	88	43	CA
C II	BB	288	88	43	CA
C II	BB	288	86.5	43	CA
C II	BB	289	88.5	43	CA
C II	BB	290.5	90	43	WB
C II	BB	288.5	88.5	43	Alum.

Age			Height (cm or in*)			Weight (kg or lbs*)		
average	min	max	average	min	max	average	min	max
30			169			58.6		
34			5.6*			130*		
28			162			59		
23			175			57		
27			180			58		
25			168			58		

LM1X

Date of Measurement=22/8/99

Minimum Boat Weight = 14 Kg.

Country		Place	Boat		
Country		Place	Rigger Manufact	Spread/Type	Span
DEN	1		WM	Wing	160
CZE	2		WM	Wing	160
HUN	3		Schell		160
IRL	4		Stampfli	Wing	159
GER	5		Empacher	Wing	160
GBR	6		WM	Wing	158.5

Scul					
Blade Manufact	Overall Type	Inboard Length	Overall Length	Handle Blade Size	Type
C II	BB	291	89.5	44	CA
C II	SM	288.5	89	46	CA
C II	SM	288	89	46	CA
C II	BB	289.5	89	43	CA
C II	BB	289	89	43	CA
Croker	BB	289	88.5	44	CA

Age			Height (cm or in*)			Weight (kg or lbs*)		
average	min	max	average	min	max	average	min	max
25			183			72.5		
24			6.2*			158*		
24			180			75		
24			194			72.5		
23			189			72.3		
27			185			73		

LW2X

Date of Measurement=23/8/99

Minimum Boat Weight = 27 Kg.

Country		Place	Boat		
Country		Place	Rigger Manufact	Spread/Type	Span
ROM	1		Filippi	STD	160.5
USA	2		Empacher	STD	160.5
AUS	3		WM	STD	159
FRA	4		Empacher	STD	158
GER	5		Empacher	STD	160
NED	6		Empacher	STD	160

Scul					
Blade Manufact	Overall Type	Inboard Length	Overall Length	Handle Blade Size	Type
C II	SM	287.5	90.5	46	CA
C II	BB	289	88	43	Alum. Adj.
Empacher	BB	289	88	43	CA
C II	BB	289	88	43	CA
C II	BB	288	88	43	CB
C II	BB	288	88.8	43	CA

Age			Height (cm or in*)			Weight (kg or lbs*)		
average	min	max	average	min	max	average	min	max
	28	31		176	180		57	57
	28	29		5.7*	5.8*		126*	130*
	24	34		173	175		58	59
	25	28		168	172		57	59
	24	30		168	182		57	57
	23	38		174	174		57.5	59

LM2X

Date of Measurement=23/8/99

Minimum Boat Weight = 27 Kg.

Country		Place	Boat		
Country		Place	Rig Manufact	Spread/Type	Span
ITA	1		Filippi	Carbon F	158
AUS	2		Sykes	Alum. Wi	159
GER	3		Empacher	STD	159
SUI	4		Filippi	Carbon	159.5
FRA	5		Empacher	STD	159
USA	6		Filippi	STD	158.8

Scul					
Blade Manufact	Overall Type	Inboard Length	Overall Length	Handle Blade Size	Type
C II	SM	289	89	46	CA
C II	BB	289	89	43	CA
C II	SM	288	88.5	46	CA
C II	BB	290	87.5	43	CA
C II	BB	289	87.6	43	CB
C II	SM	289	88.5	46	CA

Age			Height (cm or in*)			Weight (kg or lbs*)		
average	min	max	average	min	max	average	min	max
	26	27		181	184		70	72
	23	36		183	184		70	70
	27	30		181	184		73	74
	29	32		180	183		72.5	75
	22	26		175	176		70	70
	26	30		5.8*	6.1*		152*	160*

Oar/Scull = Big Blade (BB) / Smoothie (SM)

Scull Size = 43.5cm / Other (Specify)

Handle Type = Wood Bonded (WB) / Composite Bonded (CB) / Composite Adjustable (CA)/Aluminum (Alum)

Note: In some cases not all scullers in a 2X or 4X have the same spread. The listed spread is one measured seat.

Survey conducted by Hart & Gill Perry with the assistance of Bill Reed, Kim Bigger, Eva Kovach, Dick Dunham, William Reed, Andreas Csonka and Michael Guerrieri

RIGGING SURVEY

W4X

Date of Measurement= 28/8/99

Minimum Boat Weight = 52 Kg..

Country	Place	Boat		
		Rig	Spread/	Span
		Manufact	Type	
GER	1	BBG	STD	159
UKR	2	Empacher	STD	159
RUS	3	Empacher	STD	159
USA	4	Empacher	STD	159
CHN	5	Empacher	STD	157
DEN	6	BBG	STD	160

Blade	Overall	Inboard	Overall	Handle	Scul	
					Manufact	Type
					Length	Length
C II	BB	290.5	89	43	CA	
UKR	BB	289.5	87.5	49	CB	
C II	BB	288.5	87.5	43	CB	
Dreher	BB	290	87.5	43	CB	
C II	SM	288.9	88.5	46	CA	
C II	BB	291	88	43		

Age	Height (cm or in*)			Weight (kg or lbs*)		
	average	min	max	average	min	max
		22	25	176	185	64
	X					
	21	28	176	189	76	78
	24	31	5.11*	6.2*	155*	160*
	23	23	181	183	75	76
	X		184	192	75	85

M4X

Date of Measurement= 23/8/99

Minimum Boat Weight = 52 Kg.

Country	Place	Boat		
		Rigger	Spread/	Span
		Manufact	Type	
GER	1	Empacher		158
UKR	2	Empacher		158.5
AUS	3	Filippi		158
NED	4	Filippi		158
AUT	5	Empacher		158
SUI	6	Filippi		158

Blade	Overall	Inboard	Overall	Handle	Scul	
					Manufact	Type
					Length	Length
Empacher	BB	293	88	43.5	WB	
Braca	BB	291	87.5	43	WB	
Croker	SM	292	88	44	CA	
C II	BB	291	88	43	CB	
C II	SM	291	87	46	CA	
C II	SM	291	87.5	46	CA	

Age	Height (cm or in*)			Weight (kg or lbs*)		
	average	min	max	average	min	max
		26	31	195	202	98
	25	32	193	203	86	105
	20	28	193	200	88	98
	21	32	190	198	87	91
	23	36	187	197	87	96
	21	29	181	195	83	95

LW4X

Date of Measurement= 29/8/99

Minimum Boat Weight = 52 Kg.

Country	Place	Boat		
		Rigger	Spread/	Span
		Manufact	Type	
USA	1	Pocock	Wing	160
GER	2	Empacher	STD	159
CAN	3	Hudson	Alum. Wi	158.25
ZIM	4	Stampfli	Carbon W	158.5

Blade	Overall	Inboard	Overall	Handle	Scul	
					Manufact	Type
					Length	Length
Dreher	BB	288	88.5	43	CA	
C II	BB	287	88.5	43	CA	
C II	BB	289.8	88.5	43	CA	
C II	BB	289	88.5	43	CA	

Age	Height (cm or in*)			Weight (kg or lbs*)		
	average	min	max	average	min	max
		25	31	5.7*	5.9*	128*
	19	26	168	178	56	57
	X					
	19	42	168	176	53	59

LM4X

Date of Measurement= 22/8/99

Minimum Boat Weight = 52 Kg.

Country	Place	Boat		
		Rigger	Spread/	Span
		Manufact	Type	
ITA	1	Filippi		160.5
GER	2	Empacher		159
IRL	3	Sims		157.5
ESP	4	Filippi		159
DEN	5	BBG		159
USA	6	Empacher		159.5

Blade	Overall	Inboard	Overall	Handle	Scul	
					Manufact	Type
					Length	Length
C II	SM	289	88.5	46	CB	
Empacher	BB	289	88	43	CA	
Dreher	BB	292.5	88.5	47.5	CA	
C II	SM	289	87	46	CB	
C II	SM	290	87.5	46	CA	
C II	SM	290	88	46	CA	

Age	Height (cm or in*)			Weight (kg or lbs*)		
	average	min	max	average	min	max
		19	25	177	181	69
	20	22	182	190	69	72
	22	28	181	184	69.5	70
	21	26	176	184	70	72.5
	19	28	174	191	69	71
	24	31	5.11*	6.2*	155*	160*

Oar/Scul = Big Blade (BB) / Smoothie (SM)

Scul Size = 43.5cm / Other (Specify)

Handle Type = Wood Bonded (WB) / Composite Bonded (CB) / Composite Adjustable (CA)/Aluminum (Alum)

Note: In some cases not all scullers in a 2X or 4X have the same spread. The listed spread is one measured seat.

Survey conducted by Hart & Gill Perry with the assistance of Bill Reed, Kim Bigger, Eva Kovach, Dick Dunham, William Reed, Andreas Csonka and Michael Guerrieri

1999 FISA WORLD ROWING CHAMPIONSHIPS, ST.CATHARINES, CANADA

BOATCLASS: SWEEP OAR

RIGGING SURVEY

W2-

Date of Measurement=22/8/99

Minimum Boat Weight = 27 Kg.

		Boat				
Country	Place	Rig	Rigger	Outbrd	Beam	Spread
		Manufact	Type			
CAN	1	Hudson		64.5	45.6	87.3
GER	2	Empacher		62.5	47.5	86.25
AUS	3	Sykes		62.5	49.5	87.25
RUS	4	Ayling	SS	65	42.3	86.15
GBR	5	Empacher				86
ROM	6	Empacher		62	49.5	86.75

						Oar	
Manufact	Type	Blade	Overall	Inboard	Overall	Handle	
		Type	Length	Length	Blade Size	Type	
C II	SM		376	117.5	55	WB	
C II	BB		373	117	52	WB	
C II	BB		373	117	55	WB	
C II	SM		373	116.5	54	CA	
C II	SM		373	116	54	CA	
C II	SM		374	116.5	54	CA	

			Rower				
Age	Height (cm or in*)		Weight (kg or lbs*)				
	average	min	max	average	min	max	
	27	32		5.11*	6*	155*	170*
	20	24		178	180	69.5	71
	23	27		178	180	72	74
	24	29		181	182	75	79
	27	32		180	184	75	80
	23	24		178	185	70	72

M2-

Date of Measurement=22/8/99

Minimum Boat Weight = 27 Kg.

		Boat				
Country	Place	Rig	Rigger	Outbrd	Beam	Spread
		Manufact	Type			
AUS	1	Ausitec		60	52	86
FRA	2	Empacher		62.5	47	86
CRO	3	Empacher				86.5
ITA	4	Filippi		63	48	87
GBR	5	Ayling		65.5	46	88.5
GER	6	Empacher		62	49	86.5

						Oar	
Manufact	Type	Blade	Overall	Inboard	Overall	Handle	
		Type	Length	Length	Blade Size	Type	
C II	BB		378	117	55	WB	
C II	BB		376	116	55	WB	
C II	SM		374	116.5	54	CA	
C II	SM		376	116.5	54	CA	
C II	BB		376	116	55	WB	
C II	BB		376	116	55	WB	

			Rower				
Age	Height (cm or in*)		Weight (kg or lbs*)				
	average	min	max	average	min	max	
	24	34		195	195	85	95
	31	32		190	192	90	95
	24	30		188	194	87	90
	20	27		186	188	91	91
	23	23		198	200	89	100
	21	32		198	208	100	105

M4-

Date of Measurement= 22/8/99

Minimum Boat Weight = 50 Kg.

		Boat				
Country	Place	Rig	Rigger	Outbrd	Beam	Spread
		Manufact	Type			
GBR	1	Ayling	PS Tandem	60.5	49	85
AUS	2	KIRS	PS			85
ITA	3	Empacher	SS Tandem	58	52.5	84.25
NZL	4	KIRS	SS			85
NOR	5	Empacher	PS	58.5	52.5	84.75
FRA	6	Empacher	PS Tandem	56.5	56	84.5

						Oar	
Manufact	Type	Blade	Overall	Inboard	Overall	Handle	
		Type	Length	Length	Blade Size	Type	
C II	BB		376.3	114.5	55	WB	
Croker	SM		378	115.5	55	CB	
C II	SM		376	115	54	WB	
C II	SM		377	115	54	CA	
C II	BB		375.8	114.7	55	WB	
C II	BB		376	115	55	WB	

			Rower				
Age	Height (cm or in*)		Weight (kg or lbs*)				
	average	min	max	average	min	max	
	24	37		192	195	89	105
	25	27		199	200	90	98
	23	33		186	192	88	93
	22	31		6.1*	6.3*	90	95
	20	29		187	201	88	96
	23	27		190	197	92	95

M2+

Date of Measurement=28/8/99

Minimum Boat Weight = 32 kg.

		Boat				
Country	Place	Rig	Rigger	Outbrd	Beam	Spread
		Manufact	Type			
USA	1	Empacher	PS			87
GER	2	Empacher	PS			87
ARG	3	Empacher		61.5	53	88
AUS	4	Empacher				86.5
ITA	5	Empacher	SS	61.7	52.2	87.8
RUS	6	Empacher		60.5	53.5	87.25

						Oar	
Manufact	Type	Blade	Overall	Inboard	Overall	Handle	
		Type	Length	Length	Blade Size	Type	
C II	BB		376	116	55	WB	
C II	BB		376	117	55	WB	
C II	BB		376	117	52	WB	
C II	BB		376	117	55	WB	
C II	SM		375.5	118.5	54.5	CA	
C II	BB		376	116.5	52	WB	

			Rower				
Age	Height (cm or in*)		Weight (kg or lbs*)				
	average	min	max	average	min	max	
	28	31		6.3*	6.4*	202*	210*
	22	24		195	196	90	97
	22	27		192	199	88	90
	X						
	23	25		187	192	86	92
	20	24		197	197	99	99

Rig = Standard (STD) / Other (Specify - such as SST 3-4 = Starboard Stroke, Tandem at seat 3-4)

Oar/Skull = Big Blade (BB) / Smoothie (SM)

Oar Size = 55cm / 52 cm / Other (Specify)

Handle Type = Wood Bonded (WB) / Composite Bonded (CB) / Composite Adjustable (CA)/Aluminum (Alum)

Survey conducted by Hart & Gill Perry with the assistance of Bill Reed, Kim Bigger, Eva Kovach, Dick Dunham, William Reed, Andreas Csonka and Michael Guerrieri

1999 FISA WORLD ROWING CHAMPIONSHIPS, ST.CATHARINES, CANADA

BOATCLASS: SWEEP OAR

RIGGING SURVEY

W4-

Date of Measurement= 28/8/99

Minimum Boat Weight = 50 Kg.

Boat

Country	Place	Boat					
		Manufact	Rig Type	Rigger Type	Outbrd	Beam	Spread
BLR	1	Empacher	SS		56.7	56.5	84.95
GER	2	BBG	PS				85.5
USA	3	Pocock	SS	Wing			86
GBR	4	Ayling	PST				85
CAN	5	Hudson	PS	Wing			85.5

Oar

Manufact	Blade Type	Overall Length	Inboard Length	Overall Blade Size	Handle Type
C II	SM	374	115.5	54	CA
C II	BB	376	116.5	52	WB
C II	BB	374	115	55	WB
C II	BB	376	116	55	WB

Rower

Age	Height (cm or in*)			Weight (kg or lbs*)					
	average	min	max	average	min	max			
		16	38		182	187		78	83
		23	32		178	185		73	78
		22	27		5.11*	6*		160*	180*
		22	24		175	183		70	73
		23	31		5.9*	5.11*		158*	162*

LM8+

Date of Measurement= 22/8/99

Minimum Boat Weight = 96 Kg.

Boat

Country	Place	Boat					
		Manufact	Rig Type	Rigger Type	Outbrd	Beam	Spread
USA	1	Vespoli	PS		58	54.5	85.25
GBR	2	Empacher	PS				84
ITA	3	Empacher	PS		54	59.9	83.95
CAN	4	Empacher	PS		60	54	87
NED	5	Empacher	PS		55.9	56	83.9
ESP	6	Empacher	PS		55.5	54	82.5

Oar

Manufact	Blade Type	Overall Length	Inboard Length	Overall Blade Size	Handle Type
C II	SM	375	114	54	CA
C II	SM	374	114	54	CA
C II	SM	374	114.9	54	WB/CA
C II	SM	374	114	54	WB
C II	SM	374	115.5	54	CA

Rower

Age	Height (cm or in*)			Weight (kg or lbs*)					
	average	min	max	average	min	max			
		21	31		5.11*	6.3*		155*	175*
		22	33		176	185		68	75
		19	27		180	189		70	72
		25	35		6*	6.3*		155*	170*
		21	29		177	187		67	82
		18	33		175	187		69	73

LM4-

Date of Measurement= 22/8/99

Minimum Boat Weight = 50 Kg.

Boat

Country	Place	Boat					
		Manufact	Rig Type	Rigger Type	Outbrd	Beam	Spread
DEN	1	Empacher					85.0
AUS	2	KIRS					85.0
FRA	3	Empacher	PS				85.0
ITA	4	Empacher			59.5	49.5	84.3
AUT	5	Empacher			57.5	56	85.5
CAN	6	Hudson		Wing			85.0

Oar

Manufact	Blade Type	Overall Length	Inboard Length	Overall Blade Size	Handle Type
Croker	SM	376	116	55	WB
C II	BB	374	115.5	55	CB
C II	SM	374	115	54	CA
C II	SM	375.5	115.7	54	CA
C II	SM	374	116	54	WB

Rower

Age	Height (cm or in*)			Weight (kg or lbs*)					
	average	min	max	average	min	max			
		27	31		178	189		68	72.5
		26	31		176	187		70	70
		22	31		178	190		69	71
		20	37		176	186		69	72.5
		23	28		176	191		67	72
		25	27		5.11*	6.2*		70	70

W8+

Date of Measurement= 21/8/99

Minimum Boat Weight = 96 Kg.

Boat

Country	Place	Boat					
		Manufact	Rig Type	Rigger Type	Outbrd	Beam	Spread
ROM	1	Empacher	PS				84
USA	2	Vespoli	PS				85
CAN	3	Empacher	PS				84
NED	4	Empacher	PS				84
AUS	5	Empacher	PS				84.5
GER	6	Empacher	PS				84

Oar

Manufact	Blade Type	Overall Length	Inboard Length	Overall Blade Size	Handle Type
C II	BB	376	115	52	WB
C II	SM	375	116	54	WB
C II	BB	374	114.5	52	WB
C II	BB	376	116	52	CA
Empacher	BB	373	114	52	WB

Rower

Age	Height (cm or in*)			Weight (kg or lbs*)					
	average	min	max	average	min	max			
		22	37		177	187		70	79
		24	33		5.9*	6.2*		160*	173*
		22	32		5.8*	6.5*		145*	170*
		21	29		177	187		67	82
		20	31		174	184		67.5	74
		23	27		191	200		85	100

Rig = Standard (STD) / Other (Specify - such as SST 3-4 = Starboard Stroke, Tandem at seat 3-4)

Oar/Scull = Big Blade (BB) / Smoothie (SM)

Oar Size = 55cm / 52 cm / Other (Specify)

Handle Type = Wood Bonded (WB) / Composite Bonded (CB) / Composite Adjustable (CA)/Aluminum (Alum)

Survey conducted by Hart & Gill Perry with the assistance of Bill Reed, Kim Bigger, Eva Kovach, Dick Dunham, William Reed, Andreas Csonka and Michael Guerrieri

1999 FISA WORLD ROWING CHAMPIONSHIPS, ST.CATHARINES, CANADA

BOATCLASS: SWEEP OAR

RIGGING SURVEY

M8+

Date of Measurement= 23/8/99

Minimum Boat Weight = 96 Kg.

Boat

Country	Place	Boat					
		Manufact	Rig Type	Rigger Type	Outbrd	Beam	Spread
USA	1	Vespoli				84	
GBR	2	Vespoli				83.5	
RUS	3	Empacher			53.5	60.2	83.6
ROM	4	Empacher			53.6	59.4	83.3
NED	5	Empacher	PST 4-5				83.5
ITA	6	Empacher					84

Oar

Manufact	Blade Type	Overall Length	Inboard Length	Overall Blade Size	Handle Type
Croker	SM	376	114		WB
C II	BB	377	114	55	WB
C II	BB	376	114	55	WB
C II	SM	376	113.5	54	CA
C II	BB	376	114	55	WB

Rower

Age	Height (cm or in*)			Weight (kg or lbs*)		
	average	min	max	average	min	max
	22	35		6.3*	6.7*	
	22	29		190	203	
	23	30		190	200	
	23	27		192	202	
	23	37		190	200	
	21	34		189	202	

LW2-

Date of Measurement= 29/8/99

Minimum Boat Weight = 27 kg.

Boat

Country	Place	Boat				
		Manufact	Rig Type	Rigger Type	Outbrd	Beam
USA	1	Vespoli	SS			87
GBR	2	Janousek				85.5
ZIM	3	Hudson				88
ARG	4					
MEX	5					

Oar

Manufact	Blade Type	Overall Length	Inboard Length	Overall Blade Size	Handle Type
C II	SM	369	115.5	55	CA
C II	BB	372	117	55	CA

Rower

Age	Height (cm or in*)			Weight (kg or lbs*)		
	average	min	max	average	min	max
	21	36		5.8*	5.8*	
	29	30		160	167	
	23	26		170	174	
	28	35		163	164	
	27	28		164	174	

LM2-

Date of Measurement= 22/8/99

Minimum Boat Weight = 27 Kg.

Boat

Country	Place	Boat					
		Manufact	Rig Type	Rigger Type	Spread/ Span	Beam	Spread
ITA	1	Filippi			62	49	86.5
CHI	2	Empacher			61	52	87
IRL	3	Stampfli					87
FRA	4	Empacher			61	51	86.5
DEN	5	Empacher			60.5	52	86.5
GER	6	Empacher					86.5

Oar

Manufact	Blade Type	Overall Length	Inboard Length	Overall Blade Size	Handle Type
C II	BB	375.5	115.9	52	CA
C II	SM	374	117	54	CA
C II	SM	373	116.5	54	CA
C II	SM	372.5	118	54	WB
C II	BB	375	116.5	55	WB

Rower

Age	Height (cm or in*)			Weight (kg or lbs*)		
	average	min	max	average	min	max
	22	31		174	187	
	X					
	29	30		188	190	
	19	25		180	186	
	25	26		183	184	
	31	33		179	186	

M4+

Date of Measurement= 29/8/99

Minimum Boat Weight = 51 kg.

Boat

Country	Place	Boat					
		Manufact	Rig Type	Rigger Type	Outbrd	Beam	Spread
USA	1	Vespoli				85	
GBR	2	Ayling	SS			85.5	
ROM	3						
ARG	4	Hudson	PS Alum Wing		60.5	51.2	86.1
ITA	5	Empacher	SS Tandem				85.5
GER	6	Empacher	SS		56.4	58.5	85.65

Oar

Manufact	Blade Type	Overall Length	Inboard Length	Overall Blade Size	Handle Type
C II	BB	377	115.5	55	WB
C II	BB	376	115.5	52	WB
C II	SM	376	115.5	54	CA
C II	BB	376	117	55	WB

Rower

Age	Height (cm or in*)			Weight (kg or lbs*)		
	average	min	max	average	min	max
	23	32		6.2*	6.4*	
	23	30		188	194	
	19	32		188	192	
	18	25		190	199	
	20	26		187	191	
	26	27		192	202	

Rig = Standard (STD) / Other (Specify - such as SST 3-4 = Starboard Stroke, Tandem at seat 3-4)

Oar/Scull = Big Blade (BB) / Smoothie (SM)

Oar Size = 55cm / 52 cm / Other (Specify)

Handle Type = Wood Bonded (WB) / Composite Bonded (CB) / Composite Adjustable (CA)/Aluminum (Alum)

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