Analysis of 2° semifinal of 100 breast at World Championship

Adam Peaty World Record

SwimLAB

Lane n° 1

Athlete	Baladin Dmitriy		
Result	00:59.03	27.66 (1° 50)	31.37 (2° 50)
Position	4°		

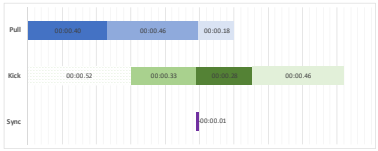
		2° 25	4° 25	Average
Speed	Meter/sec	1.63	1.54	1.58
10 meters Time	Time	00:06.13	00:06.50	00:06.32
Stroke Tempo	Time	00:01.19	00:01.16	00:01.17
Stroke Rate	Cycle/Min	50.4	51.95	51.18
Distance per stroke	Cm	194.1	177.69	185.91
Glide	Time	-00:00.00	-00:00.01	-00:00.01
Glide % in one cycle	%	#VALORE!	#VALORE!	#VALORE!

		2° 25	4° 25	Average
Propulsive Pull	% of Pull Time	36.13%	35.93%	36.03%
Recovery Pull	% of Pull Time	37.39%	39.83%	38.61%
Passive Pull	% of Pull Time	26.47%	24.24%	25.16%
Kick Delay	% of Pull Time	46.64%	44.59%	45.61%
Recovery Kick	% of Kick Time	26.94%	32.48%	29.71%
Propulsive Kick	% of Kick Time	28.16%	25.21%	26.69%
Passive Kick	% of Kick Time	44.90%	42.31%	43.60%

Lane n° 2

Athlete	Chupkov Anton		
Result	00:59.15	27.85 (1° 50)	31.30 (2° 50)
Position	5°		

		2° 25	4° 25	Average
Speed	Meter/sec	1.61	1.56	1.58
10 meters Time	Time	00:06.23	00:06.43	00:06.33
Stroke Tempo	Time	00:01.23	00:01.04	00:01.13
Stroke Rate	Cycle/Min	49.0	57.69	53.34
Distance per stroke	Cm	196.6	161.74	179.19
Glide	Time	00:00.10	-00:00.05	00:00.02
Glide % in one cycle	%	8.2%	#VALORE!	#VALORE!

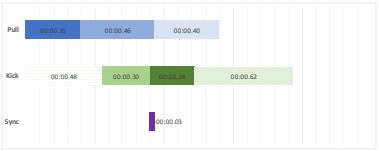


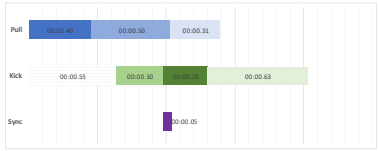
		2° 25	4° 25	Average
Propulsive Pull	% of Pull Time	33.88%	38.46%	36.17%
Recovery Pull	% of Pull Time	40.41%	44.23%	42.32%
Passive Pull	% of Pull Time	25.71%	17.31%	21.51%
Kick Delay	% of Pull Time	45.31%	50.00%	47.65%
Recovery Kick	% of Kick Time	27.06%	30.84%	28.95%
Propulsive Kick	% of Kick Time	21.96%	26.17%	24.06%
Passive Kick	% of Kick Time	50.98%	42.99%	46.99%

Lane n° 3

Athlete	Willy James		
Result	00:58.81	27.91 (1° 50)	30.92 (2° 50)
Position	2°		

		2° 25	4° 25	Average
Speed	Meter/sec	1.64	1.58	1.61
10 meters Time	Time	00:06.10	00:06.33	00:06.22
Stroke Tempo	Time	00:01.21	00:01.21	00:01.21
Stroke Rate	Cycle/Min	49.8	49.79	49.79
Distance per stroke	Cm	197.5	190.36	193.95
Glide	Time	00:00.14	00:00.08	00:00.11
Glide % in one cycle	%	11.6%	7.1%	9.34%



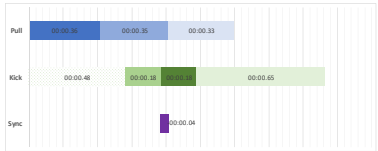


		2° 25	4° 25	Average
Propulsive Pull	% of Pull Time	28.63%	32.78%	30.71%
Recovery Pull	% of Pull Time	38.17%	41.49%	39.83%
Passive Pull	% of Pull Time	33.20%	25.73%	29.46%
Kick Delay	% of Pull Time	39.83%	45.64%	42.74%
Recovery Kick	% of Kick Time	24.79%	24.48%	24.64%
Propulsive Kick	% of Kick Time	23.53%	23.24%	23.38%
Passive Kick	% of Kick Time	51.68%	52.28%	51.98%

Lane n° 4

Athlete	Peaty Adam		
Result	00:56.88	26.63 (1° 50)	30.25 (2° 50)
Position	1°		

		2° 25	4° 25	Average
Speed	Meter/sec	1.69	1.62	1.66
10 meters Time	Time	00:05.90	00:06.17	00:06.04
Stroke Tempo	Time	00:01.13	00:01.04	00:01.08
Stroke Rate	Cycle/Min	53.33	57.97	55.65
Distance per stroke	Cm	190.68	167.75	179.21
Glide	Time	00:00.25	00:00.16	00:00.21
Glide % in one cycle	%	22.2%	15.9%	19.08%

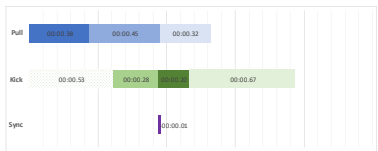


		2° 25	4° 25	Average
Propulsive Pull	% of Pull Time	33.78%	34.78%	34.28%
Recovery Pull	% of Pull Time	23.56%	33.33%	28.44%
Passive Pull	% of Pull Time	42.67%	31.88%	37.28%
Kick Delay	% of Pull Time	38.67%	46.86%	42.76%
Recovery Kick	% of Kick Time	21.80%	17.82%	19.81%
Propulsive Kick	% of Kick Time	13.74%	17.82%	15.78%
Passive Kick	% of Kick Time	64.45%	64.36%	64.41%

Lane n° 5

Athlete	Koseki Yasuhiro		
Result	00:58.93	27.78 (1° 50)	31.10 (2° 50)
Position	3°		

		2° 25	4° 25	Average
Speed	Meter/sec	1.61	1.54	1.58
10 meters Time	Time	00:06.20	00:06.50	00:06.35
Stroke Tempo	Time	00:01.32	00:01.14	00:01.23
Stroke Rate	Cycle/Min	45.45	52.63	49.04
Distance per stroke	Cm	212.90	175.38	194.14
Glide	Time	00:00.27	00:00.14	00:00.20
Glide % in one cycle	%	20.5%	11.8%	16.15%

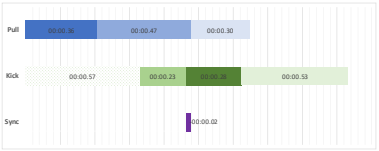


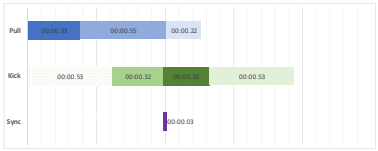
		2° 25	4° 25	Average
Propulsive Pull	% of Pull Time	27.27%	33.33%	30.30%
Recovery Pull	% of Pull Time	32.58%	39.04%	35.81%
Passive Pull	% of Pull Time	40.15%	27.63%	33.89%
Kick Delay	% of Pull Time	48.11%	46.49%	47.30%
Recovery Kick	% of Kick Time	13.24%	24.45%	18.84%
Propulsive Kick	% of Kick Time	20.59%	17.47%	19.03%
Passive Kick	% of Kick Time	66.18%	58.08%	62.13%

Lane n° 6

Athlete	Gomes Junior Joao		
Result	00:59.32	27.63 (1° 50)	31.69 (2° 50)
Position	7°		

		2° 25	4° 25	Average
Speed	Meter/sec	1.68	1.50	1.59
10 meters Time	Time	00:05.97	00:06.67	00:06.32
Stroke Tempo	Time	00:01.12	00:01.09	00:01.11
Stroke Rate	Cycle/Min	53.57	55.05	54.31
Distance per stroke	Cm	187.60	163.42	175.51
Glide	Time	-00:00.03	-00:00.01	-00:00.02
Glide % in one cycle	%	#VALORE!	#VALORE!	#VALORE!



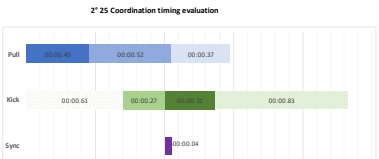


		2° 25	4° 25	Average
Propulsive Pull	% of Pull Time	32.14%	30.28%	31.21%
Recovery Pull	% of Pull Time	41.52%	50.00%	45.76%
Passive Pull	% of Pull Time	26.34%	19.72%	23.03%
Kick Delay	% of Pull Time	50.89%	49.08%	49.99%
Recovery Kick	% of Kick Time	22.12%	27.63%	24.87%
Propulsive Kick	% of Kick Time	26.92%	25.88%	26.40%
Passive Kick	% of Kick Time	50.96%	46.49%	48.73%

Lane n° 7

Athlete	Kamminga Arno		
Result	00:59.49	28.21 (1° 50)	31.28 (2° 50)
Position	8°		

		2° 25	4° 25	Average
Speed	Meter/sec	1.61	1.54	1.58
10 meters Time	Time	00:06.20	00:06.50	00:06.35
Stroke Tempo	Time	00:01.28	00:01.13	00:01.20
Stroke Rate	Cycle/Min	47.06	53.33	50.20
Distance per stroke	Cm	205.65	173.08	189.36
Glide	Time	00:00.23	00:00.08	00:00.16
Glide % in one cycle	%	18.0%	7.1%	12.58%

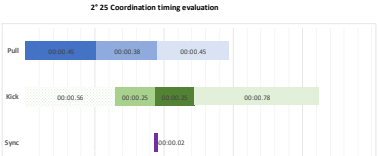


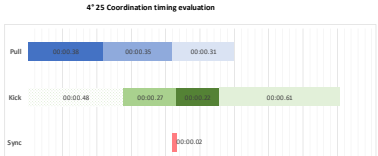
		2° 25	4° 25	Average
Propulsive Pull	% of Pull Time	30.98%	35.11%	33.05%
Recovery Pull	% of Pull Time	40.39%	36.89%	38.64%
Passive Pull	% of Pull Time	28.63%	28.00%	28.31%
Kick Delay	% of Pull Time	47.45%	43.11%	45.28%
Recovery Kick	% of Kick Time	18.86%	25.86%	22.36%
Propulsive Kick	% of Kick Time	22.06%	25.86%	23.96%
Passive Kick	% of Kick Time	59.07%	48.28%	53.68%

Lane n° 8

Athlete	Scozzoli Fabio		
Result	00:59.22	27.42 (1° 50)	31.80 (2° 50)
Position	6°		

		2° 25	4° 25	Average
Speed	Meter/sec	1.57	1.50	1.53
10 meters Time	Time	00:06.37	00:06.67	00:06.52
Stroke Tempo	Time	00:01.27	00:01.04	00:01.15
Stroke Rate	Cycle/Min	47.24	57.97	52.61
Distance per stroke	Cm	199.37	155.17	177.27
Glide	Time	00:00.22	00:00.13	00:00.18
Glide % in one cycle	%	17.3%	12.6%	14.94%





		2° 25	4° 25	Average
Propulsive Pull	% of Pull Time	35.04%	36.71%	35.88%
Recovery Pull	% of Pull Time	29.92%	33.33%	31.63%
Passive Pull	% of Pull Time	35.04%	29.95%	32.50%
Kick Delay	% of Pull Time	44.09%	46.38%	45.24%
Recovery Kick	% of Kick Time	19.22%	24.31%	21.76%
Propulsive Kick	% of Kick Time	19.61%	19.72%	19.67%
Passive Kick	% of Kick Time	61.18%	55.96%	58.57%

Glide - Time between the end of the kick and the beginning of the pull

Propulsive Pull - from the catch of the water to the beginning of the recovery

Recovery Pull - From the beginning of the recovery to the end of the extention of the arms

Passive Pull - From the end of the recovery to the catch of the water

Sync
Gap between the end of the recovery pull and the beginning of the propulsive kick
Positive Gap - the propulsive kick is done after the end of the recovery pull
Negative Gap - the propulsive kick is done before the end of the recovery pull

Kick delay - Time from the beginnign of the pull to the start of recovery kick

Recovery kick - from the flexion of the knees to the propulsive kick

Propulsive kick - From the end of the recovery kick to the extention of the legs

Passive kick - From the end of the propulsive kick to the beginning of the recovery kick

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