Race Analysis

World Championship 2019



| Swimming para | meters | analysis | ; | from 15n | to 45m | | | | |
|----------------------------|-----------|----------|----------|----------|----------|----------|----------|----------------|--------------|
| Florian Wellbrock Korea | | 1° 300 | 2° 300 | 3° 300 | 4° 300 | 5* 300 | Total | First 1400m | Last 100m |
| Total time | Time | | | | | | | 08:32.36 | |
| Av Time | Time | 00:18.04 | 00:18.31 | 00:18.45 | | | 00:18.23 | 00:18.30 | |
| Speed | Metre/Sec | 1.66 | 1.64 | 1.63 | 1.63 | 1.67 | 1.65 | 1.64 | 1.74 |
| Stroke Rate | Cycle/Min | 33.3 | 32.3 | 32.7 | 32.8 | 35.5 | 33.3 | 32.9 | 39.7 |
| Stroke Tempo | Time | 00:01.80 | 00:01.86 | 00:01.83 | 00:01.83 | 00:01.70 | 00:01.80 | 00:01.83 | 00:01.51 |
| DPS | Cm | 299.2 | 304.5 | 298.1 | 298.4 | 284.3 | 296.9 | 299.3 | 262.7 |
| Stroke Index | IPS*Speed | 4.98 | 4.99 | 4.85 | 4.86 | 4.75 | 4.89 | 4.91 | 4.57 |

| Turn p | aramet | ers analy | rsis | from 5m b | efore the w | all to 15m aft | er the wa | II | | | | | | | | | | | | | |
|----------|-----------|------------|-----------|------------|-------------|----------------|-----------|-----------|-----------|------------|-----------|-----------|-------------|------------|------------|-----------|------------|-----------|-----------|-------------|------------|
| | | Turn | | | | | | | | Turn | | | | | | | Turn | | | | |
| | | total time | From 5m | From 5m | | From 5m | | | | total time | From 5m | From 5m | | From 5m | | | total time | From 5m | From 5m | | From 5m |
| otal | | from -5 to | before to | before to | From the | to 15m | | First | | from -5 to | before to | before to | From the | to 15m | Last | | from -5 to | before to | before to | From the | to 15m |
| 500m | | +15m | 5m after | the wall | wall to 5 m | after wall | | 1400m | | +15m | 5m after | the wall | wall to 5 m | after wall | 100m | | +15m | 5m after | the wall | wall to 5 m | after wall |
| otal tim | € Time | 05:20.80 | 02:24.22 | 2 01:30.02 | 00:54.20 | 02:56.58 | | Total tim | € Time | 04:59.35 | 02:14.30 | 01:23.84 | 00:50.46 | 02:45.05 | Total time | Time | 00:21.45 | 00:09.92 | 00:06.18 | 00:03.74 | 00:11.5 |
| lv Time | Time | 00:11.00 | 00:04.97 | 7 00:03.10 | 00:01.87 | 00:06.09 | | Av Time | Time | 00:10.32 | 00:04.97 | 00:03.11 | . 00:01.87 | 00:06.11 | Av Time | Time | 00:10.72 | 00:04.96 | 00:03.09 | 00:01.87 | 00:05.7 |
| peed | Metre/Sec | 1.83 | 2.01 | 1 1.61 | 2.68 | 1.64 | | Speed | Metre/Sec | 1.94 | 2.01 | 1.61 | 2.68 | 1.64 | Speed | Metre/Sec | 1.86 | 2.02 | 1.62 | 2.67 | 1.7 |
| | | | | | | | | | | | | | | | | | | | | | |



| Swimming parameter | ers analysis | ; | from 15m to 45m | | | | | | | | | | | |
|--------------------|--------------|----------|-----------------|----------|----------|----------|----------|----------|--|--|--|--|--|--|
| | | | | | | | | | | | | | | |
| Mykhailo Romanchuk | | | | | | | First | Last | | | | | | |
| Korea | 1° 300 | 1° 300 | 1° 300 | 1° 300 | 1° 300 | Total | 1400m | 100m | | | | | | |
| Total time | 01:48.75 | 01:49.84 | 01:50.16 | 01:49.87 | 01:47.43 | 09:06.05 | 08:31.30 | 00:34.75 | | | | | | |
| Av Time | 00:18.12 | 00:18.31 | 00:18.36 | 00:18.31 | 00:17.91 | 00:18.20 | 00:18.26 | 00:17.37 | | | | | | |
| Speed | 1.66 | 1.64 | 1.63 | 1.64 | 1.68 | 1.65 | 1.64 | 1.73 | | | | | | |
| Stroke Rate | 32.7 | 31.9 | 31.9 | 32.4 | 34.6 | 32.7 | 32.3 | 38.2 | | | | | | |
| Stroke Tempo | 00:01.83 | 00:01.88 | 00:01.88 | 00:01.85 | 00:01.75 | 00:01.84 | 00:01.86 | 00:01.58 | | | | | | |
| DPS | 303.5 | 308.4 | 307.8 | 303.8 | 292.3 | 303.2 | 305.4 | 271.9 | | | | | | |
| Stroke Index | 5.03 | 5.05 | 5.03 | 4.98 | 4.90 | 5.00 | 5.02 | 4.69 | | | | | | |

| Turn p | aramete | ers analy | /sis | from 5m b | efore the w | all to 15m af | er the wa | II | | | | | | | | | | | | | |
|------------|-----------|------------|------------|-----------|-------------|---------------|-----------|------------|-----------|------------|-----------|-----------|-------------|------------|------------|-----------|------------|-----------|-----------|-------------|--------|
| | | Turn | | | | | | | | Turn | | | | | | | Turn | | | | |
| | | total time | From 5m | From 5m | | From 5m | | | | total time | From 5m | From 5m | | From 5m | | | total time | From 5m | From 5m | | From |
| Total | | from -5 to | before to | before to | From the | to 15m | | First | | from -5 to | before to | before to | From the | to 15m | Last | | from -5 to | before to | before to | From the | to 15r |
| 1500m | | +15m | 5m after | the wall | wall to 5 n | n after wall | | 1400m | | +15m | 5m after | the wall | wall to 5 m | after wall | 100m | | +15m | 5m after | the wall | wall to 5 m | after |
| Total time | € Time | 05:22.23 | 3 02:23.00 | 01:33.43 | 00:49.5 | 7 02:59.23 | | Total time | € Time | 05:00.43 | 02:13.03 | 01:27.02 | 00:46.01 | 02:47.40 | Total time | Time | 00:21.80 | 00:09.97 | 00:06.41 | 00:03.56 | 00: |
| Av Time | Time | 00:11.11 | 1 00:04.93 | 00:03.22 | 00:01.7 | 1 00:06.18 | | Av Time | Time | 00:10.36 | 00:04.93 | 00:03.22 | 00:01.70 | 00:06.20 | Av Time | Time | 00:10.90 | 00:04.99 | 00:03.21 | 00:01.78 | 00: |
| Speed | Metre/Sec | 1.80 | 2.03 | 1.55 | 5 2.9 | 3 1.62 | | Speed | Metre/Sec | 1.93 | 2.03 | 1.55 | 2.93 | 1.61 | Speed | Metre/Sec | 1.83 | 2.01 | 1.56 | 2.81 | |
| | | | | | | | | | | | | | | | | | | | | | |

| Swimming parame | ters analysis | | from 15m | 1 to 45m | | | | |
|----------------------|---------------|----------|----------|----------|----------|----------|----------|----------|
| | | | | | | | | |
| Gregorio Paltrinieri | | | | | | | First | Last |
| Korea | 1° 300 | 1° 300 | 1° 300 | 1° 300 | 1° 300 | Total | 1400m | 100m |
| Total time | 01:47.65 | 01:49.55 | 01:49.70 | 01:49.73 | 01:48.46 | 09:05.09 | 08:29.47 | 00:35.62 |
| Av Time | 00:17.94 | 00:18.26 | 00:18.28 | 00:18.29 | 00:18.08 | 00:18.17 | 00:18.20 | 00:17.81 |
| Speed | 1.67 | 1.64 | 1.64 | 1.64 | 1.66 | 1.65 | 1.65 | 1.68 |
| Stroke Rate | 44.1 | 43.7 | 43.7 | 43.5 | 43.7 | 43.8 | 43.7 | 44.2 |
| Stroke Tempo | 00:01.36 | 00:01.37 | 00:01.37 | 00:01.38 | 00:01.37 | 00:01.37 | 00:01.37 | 00:01.36 |
| DPS | 227.5 | 225.9 | 225.2 | 226.0 | 227.8 | 226.5 | 226.3 | 228.8 |
| Stroke Index | 3.81 | 3.71 | 3.70 | 3.71 | 3.78 | 3.74 | 3.73 | 3.86 |

| Turn pa | aramete | ers analy | sis | from 5m be | efore the wa | all to 15m aft | er the wall | | | | | | | | | | | | | | |
|------------|-----------|------------|-----------|------------|--------------|----------------|-------------|-----------|-----------|------------|-----------|-----------|-------------|--------------|------------|-----------|------------|-----------|-----------|-------------|-----------|
| | | Turn | | | | | | | | Turn | | | | | | | Turn | | | | |
| | | total time | From 5m | From 5m | | From 5m | | | | total time | From 5m | From 5m | | From 5m | | | total time | From 5m | From 5m | | From 5m |
| Total | | from -5 to | before to | before to | From the | to 15m | Fi | irst | | from -5 to | before to | before to | From the | to 15m | Last | | from -5 to | before to | before to | From the | to 15m |
| 1500m | | +15m | 5m after | the wall | wall to 5 m | after wall | 14 | 400m | | +15m | 5m after | the wall | wall to 5 m | n after wall | 100m | | +15m | 5m after | the wall | wall to 5 m | after wal |
| Total time | Time | 05:24.16 | 02:27.92 | 01:32.27 | 00:55.65 | 02:56.24 | To | otal time | Time | 05:02.04 | 02:17.71 | 01:25.96 | 00:51.75 | 02:44.33 | Total time | € Time | 00:22.12 | 00:10.21 | 00:06.31 | 00:03.90 | 00:11. |
| Av Time | Time | 00:11.18 | 00:05.10 | 00:03.18 | 00:01.92 | 00:06.07 | A | v Time | Time | 00:10.42 | 00:05.10 | 00:03.18 | 00:01.92 | 00:06.09 | Av Time | Time | 00:11.06 | 00:05.11 | 00:03.16 | 00:01.95 | 00:05. |
| Speed | Metre/Sec | 1.79 | 1.96 | 1.57 | 2.61 | 1.65 | Sp | peed | Metre/Sec | 1.92 | 1.96 | 1.57 | 2.61 | 1 1.64 | Speed | Metre/Sec | 1.81 | 1.96 | 1.58 | 2.56 | 1. |



| Swimming parameters | s analysis | 5 | from 15n | n to 45m | | | | |
|---------------------------------|------------|----------|----------|----------|----------|----------|----------------|--------------|
| Gregorio Paltrinieri 7 Colli | 1° 300 | 1° 300 | 1° 300 | 1° 300 | 1* 300 | Total | First 1400m | Last 100m |
| Total time | 01:47.22 | 01:47.62 | 01:47.30 | 01:47.78 | 01:47.02 | 08:56.94 | 08:21.84 | 00:35.10 |
| Av Time | 00:17.87 | 00:17.94 | 00:17.88 | 00:17.96 | 00:17.84 | 00:17.90 | 00:17.92 | 00:17.55 |
| Speed | 1.68 | 1.67 | 1.68 | 1.67 | 1.68 | 1.68 | 1.67 | 1.71 |
| Stroke Rate | 44.29 | 45.12 | 45.19 | 45.19 | 44.90 | 44.94 | 44.92 | 45.15 |
| Stroke Tempo | 00:01.36 | 00:01.33 | 00:01.33 | 00:01.33 | 00:01.34 | 00:01.34 | 00:01.34 | 00:01.33 |
| DPS | 227.6 | 222.5 | 222.7 | 221.7 | 224.8 | 223.9 | 223.6 | 227.3 |
| Stroke Index | 3.83 | 3.72 | 3.74 | 3.70 | 3.78 | 3.75 | 3.74 | 3.89 |

| Turn p | aramet | ers analy | /sis | from 5m be | efore the wa | II to 15m aft | er the wa | II | | | | | | | | | | | | | |
|-----------|----------|------------|------------|------------|--------------|---------------|-----------|-----------|-----------|------------|-----------|------------|-------------|------------|------------|-----------|------------|-----------|-----------|-------------|------------|
| | | Turn | | | | | | | | Turn | | | | | | | Turn | | | | |
| | | total time | From 5m | From 5m | | From 5m | | | | total time | From 5m | From 5m | | From 5m | | | total time | From 5m | From 5m | | From 5m |
| Total | | from -5 to | before to | before to | From the | to 15m | | First | | from -5 to | before to | before to | From the | to 15m | Last | | from -5 to | before to | before to | From the | to 15m |
| 1500m | | +15m | 5m after | the wall | wall to 5 m | after wall | | 1400m | | +15m | 5m after | the wall | wall to 5 m | after wall | 100m | | +15m | 5m after | the wall | wall to 5 m | after wall |
| Total tim | € Tim | e 05:26.7. | 2 02:32.44 | 4 01:34.96 | 00:57.48 | 02:54.28 | | Total tim | € Time | 05:04.6 | 02:22.12 | 2 01:28.68 | 00:53.44 | 02:42.50 | Total time | Time | 00:22.10 | 00:10.32 | 00:06.28 | 00:04.04 | 00:11.78 |
| Av Time | Tim | e 00:11.2 | 7 00:05.25 | 5 00:03.27 | 00:01.98 | 00:06.01 | | Av Time | Time | 00:10.50 | 00:05.26 | 5 00:03.28 | 00:01.98 | 00:06.02 | Av Time | Time | 00:11.05 | 00:05.16 | 00:03.14 | 00:02.02 | 00:05.89 |
| Speed | Metre/Se | c 1.7 | 8 1.90 | 1.53 | 2.53 | 1.66 | | Speed | Metre/Sec | 1.9 | 1.90 | 1.52 | 2.53 | 1.66 | Speed | Metre/Sec | 1.81 | 1.94 | 1.59 | 2.48 | 1.70 |
| | | | | | | | | | | | | | | | | | | | | | |

by Stefano Nurra stefano.nurra@swim-lab.net