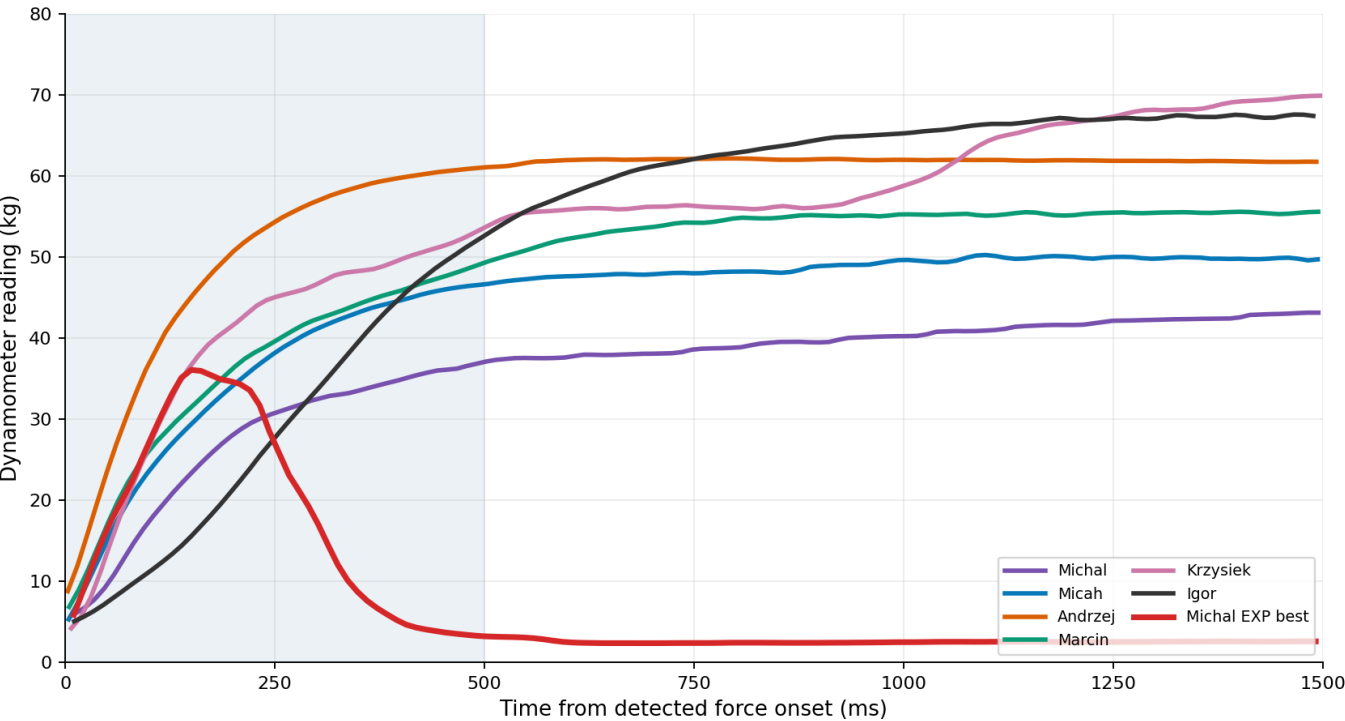


Isometric Wrist Curl

Right-hand comparison | every curve regenerated from raw CSV samples

01 Force curves aligned to movement onset



Raw-source rebuild: no curve was digitized from a previous graph. Lines use the recorded samples shifted by detected onset; shading marks 0-500 ms.

Max strength and explosive-rep peak - right hand

Athlete / condition	Peak
Michal - isometric max	47.4 kg
Michal EXP best*	36.1 kg
Micah	50.2 kg
Andrzej	62.2 kg
Marcin	55.7 kg
Krzysiek	71.9 kg
Igor	67.6 kg

*EXP best = 27 Aug 19:25:50, rep 5; selected by highest exported RFD20-80 (234.3). All six ISO selections reproduce the original 100-500 ms table to the displayed precision.

100-500 ms After Onset

Right hand only. All values below are recalculated directly from the selected raw trials. Fixed-time checkpoints use linear interpolation only between adjacent recorded samples.

02 Absolute dynamometer reading

Athlete / condition	100 ms	200 ms	300 ms	400 ms	500 ms
Michał	17.4 kg	28.1 kg	32.5 kg	34.9 kg	37.1 kg
Michał EXP best	27.2 kg	34.6 kg	17.3 kg	5.0 kg	3.2 kg
Micah	23.6 kg	34.2 kg	41.1 kg	44.7 kg	46.6 kg
Andrzej	36.9 kg	50.7 kg	56.9 kg	59.8 kg	61.1 kg
Marcin	26.1 kg	36.3 kg	42.3 kg	45.8 kg	49.3 kg
Krzysiek	26.7 kg	41.6 kg	46.7 kg	49.7 kg	53.6 kg
Igor	11.2 kg	21.3 kg	33.6 kg	45.0 kg	52.6 kg

03 Force gained since onset

Athlete / condition	100 ms	200 ms	300 ms	400 ms	500 ms
Michał	11.9 kg	22.6 kg	27.0 kg	29.4 kg	31.6 kg
Michał EXP best	23.2 kg	30.6 kg	13.4 kg	1.0 kg	-0.7 kg
Micah	18.8 kg	29.3 kg	36.3 kg	39.8 kg	41.8 kg
Andrzej	28.5 kg	42.3 kg	48.5 kg	51.4 kg	52.7 kg
Marcin	19.9 kg	30.0 kg	36.1 kg	39.6 kg	43.0 kg
Krzysiek	23.0 kg	37.9 kg	42.9 kg	46.0 kg	49.9 kg
Igor	6.5 kg	16.7 kg	29.0 kg	40.4 kg	48.0 kg

04 Average RFD from onset (N/s)

Athlete / condition	100 ms	200 ms	300 ms	400 ms	500 ms
Michał	1170.5	1108.2	882.4	720.9	619.6
Michał EXP best	2277.0	1501.5	437.2	25.1	-14.6
Micah	1843.3	1437.2	1186.6	976.1	819.7
Andrzej	2797.3	2072.5	1586.0	1259.9	1033.0
Marcin	1948.6	1471.4	1179.1	970.5	844.1
Krzysiek	2252.0	1856.2	1403.1	1126.7	978.5
Igor	642.0	819.9	946.8	990.5	941.6

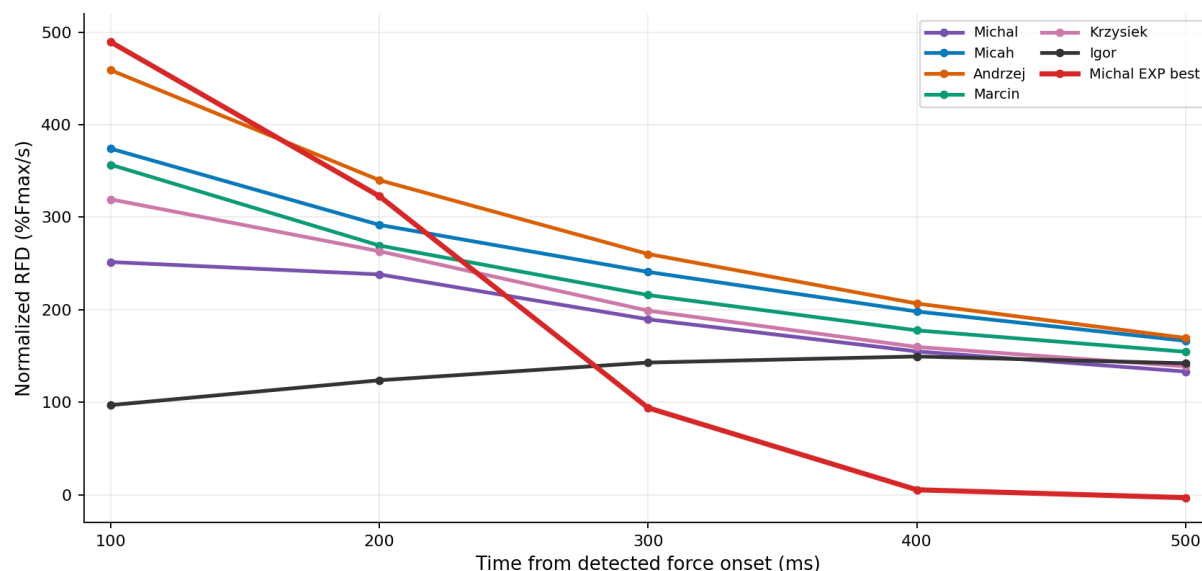
Calculation: Gain = $F(t) - F(0)$; RFD(0-t) = Gain x 9.80665 / t.

The explosive repetition is a short pulse: after its early peak, force falls rapidly, so later cumulative gain/RFD can approach or cross zero.

Relative RFD

Right-hand RFD normalized to each athlete's raw peak force (Fmax). Michal EXP uses Michal's isometric Fmax.

05 Normalized RFD (%Fmax/s)



Athlete / condition	100 ms	200 ms	300 ms	400 ms	500 ms
Michal	251.5	238.2	189.6	154.9	133.2
Michal EXP best	489.3	322.7	93.9	5.4	-3.1
Micah	374.1	291.7	240.8	198.1	166.4
Andrzej	458.9	340.0	260.2	206.7	169.5
Marcin	356.7	269.4	215.8	177.7	154.5
Krzysiek	319.3	263.2	199.0	159.8	138.8
Igor	96.9	123.7	142.9	149.5	142.1

Normalization: $nRFD(0-t) = RFD(0-t) / (F_{max} \times 9.80665) \times 100$, reported as %Fmax/s. Using Fmax removes much of the automatic advantage from simply being stronger.

Raw-data check: Micah/R is smooth in the early phase: 41.1 kg at 300 ms, 44.7 kg at 400 ms, 46.6 kg at 500 ms. The large hump seen in the prior rebuilt graph was not present in his raw trace.