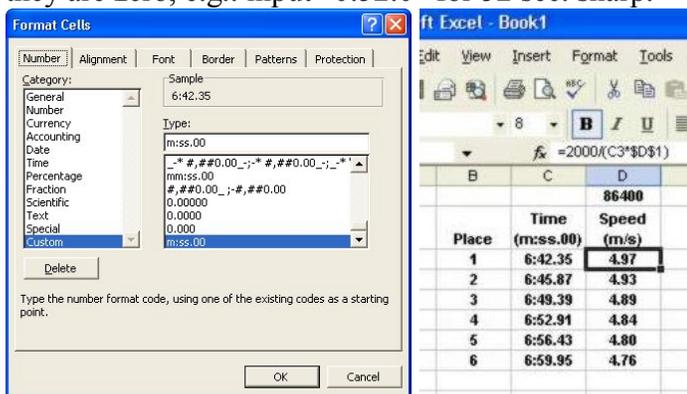




## Tip of the Day

MS Excel® spreadsheets are widely used for performance analysis in rowing. Many coaches experience problems when they work with time values in Excel. Here is a simple method of data input in normal time format (minutes:seconds.decimals) and converting the values to the numerical format for boat speed calculation:

Select a range of cells where you want to input a time. Then right click mouse on them and select “Format Cell” from a local menu. In the dialog go to “Number”->“Category:”->“Custom” and input “m:ss.00” in the “Type” input box. Click “OK”. Now you can input time data in the cells. You have to input at least one digit for minutes and decimals, even if they are zero, e.g.: input “0:52.0” for 52 sec. sharp.



To convert the time value into seconds, multiply it by 86400 (number of seconds in 24 hours) and format a result cell as a normal number with desired decimals precision (“Category:”->“Number”). You can go directly to boat speed (V) if you input this simple formula in the cell:

$$V = \text{Dist.} / (\text{Time} * 86400)$$

,where “Dist”. is the distance length and “Time” is the reference to the time formatted cell.

## Facts. Did You Know That...

✓ ...maximal speed of body segments is highly correlated with performance in rowing. Many elite rowers have “High” and “Very High” (1.5-1.6 m/s) values of max. legs and trunk speed.

Here are the tables for segments speed evaluation:

Legs Max. Speed (m/s)	20	24	28	32	36	40
Very Low	0.59	0.70	0.80	0.88	0.95	1.01
Low	0.76	0.86	0.96	1.04	1.11	1.18
Average	0.92	1.02	1.12	1.20	1.28	1.34
High	1.08	1.18	1.28	1.36	1.44	1.50
Very High	1.24	1.35	1.44	1.53	1.60	1.66

Trunk Max. Speed (m/s)	20	24	28	32	36	40
Very Low	0.59	0.67	0.75	0.82	0.87	0.92
Low	0.78	0.87	0.95	1.01	1.07	1.11
Average	0.98	1.06	1.14	1.21	1.26	1.31
High	1.17	1.26	1.34	1.40	1.46	1.50
Very High	1.37	1.45	1.53	1.60	1.65	1.70

Arms Max. Speed (m/s)	20	24	28	32	36	40
Very Low	0.97	1.08	1.17	1.24	1.28	1.31
Low	1.14	1.25	1.34	1.41	1.46	1.48
Average	1.31	1.42	1.51	1.58	1.63	1.65
High	1.48	1.59	1.68	1.75	1.80	1.83
Very High	1.66	1.77	1.85	1.92	1.97	2.00

## Ideas. What if...

? ...you are considering arms position at catch in sculling. In the figure below you can see that the hands are more than one meter apart and the arms are nearly perpendicular each to other.



The idea is the following: maybe the use of a wide grip during weight and ergo training can improve arm and shoulder coordination in sculling? Why do scullers always pull with parallel arms in a gym and on an ergo, when they have to do it differently on the water? Use the snatch grip and a wide handle on the ergo or weight machine for a trunk pull. For the arms pull, use a shoulder-width grip, which is close to the handles position at the end of the drive

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