

Doing the Maximal Force test you get the following information:

Concentric versus Eccentric:

The concentric movement is important, it shows you how much weight the test person could move with what speed.

The eccentric movement is not so important. Gravity is helping the weight coming down and the eccentric muscle force is always higher than concentric so gives no extra information.

Non-involved=Green versus Involved=Red

The numbers of the involved side compared to the non-involved side and the deficit between them.

In our example:

- Weight** : The (maximal) weight you used in step 5 to do the one repetition max force test
- Peak Force** : The combination of the weight and speed makes the curve; the highest point in the curve is the Peak Force.
- Total Work** : The amount of Work delivered. The total volume under the torque curve
- Average Power** : This is the Total Work divided by the time it takes to perform the work
- Maximal Speed** : The maximal speed performed during the one repetition

Deficit:

The value of the Non-Involved side is the number we work with, i.e. 100

	Inv	- Non involved
If there is no deficit the value is 0%	100	- 100
If the Involved is weaker it say's -10%	90	- 100
If the involved is stronger (not expected) is say's 10%	110	- 100

Normally you expect to see a -x% if the involved side is weak.

**How to look at the numbers:**

**The weight:** because only the weight is less than the combination of weight and speed you get more information in the peak torque. Especially when the weight during the test is the same at the involved and non-involved side.

**Peak force:** this will tell you the combination of weight and speed. A higher speed with the same weight makes the peak force higher. The weight at involved and non-involved can be the same but because of a different speed you still can find a deficit.

**Total Work:** this has to do with the weight, the speed, the range of motion. It shows you the total capacity within the range of motion.

**Average power:** because the speed is related to the time, you already see this in total work

**Maximal speed:** you always see a higher peak torque if there is a higher maximal speed (if the same weight is used)

In healthy persons left - right deficit should be within about 10%