

### **Hypothetical 1RM leg press test**

*Contraindications- musculoskeletal injuries that may be exacerbated, osteoporosis, skeletal metastases in the spine or lower body*

- Adjust seat position so that knees are as close to 90° as possible.
- Feet are positioned on plate hip-wide apart with toes at the top of the plate.
- Instruct the patient to hold hand grips.
- Instruct patient to push the platform away from body by straightening legs (without completely straightening knees) and bring back to 90° position in a controlled manner.
- Instruct patient to exhale when anticipating effort, avoiding breath holding on exertion.
- Ensure full control of machine during both phases.
- Begin a warm-up consisting of 6 repetitions at low intensities with 2 minutes rest afterwards
- To determine the patient's hypothetical maximum strength, a load is chosen which can be lifted clearly a maximum of 12 times (12RM test trials). With that approach, the maximum weight and number of repetitions will be used to estimate the 1RM (according to Landers (1985)).
- Maximum of 4 trials to determine 12RM. To avoid unnecessary fatigue, aim to determine 12RM in 3 trials. All attempts should be recorded on the testing sheet.
- Rest period of 1 minute between each trial. Keep the patient motivated during the task through constant encouraging
- Extrapolating the estimated 1RM will be done using the table provided from Landers 1985. Using the excel sheet *1RM\_max\_calculator*, enter the highest weight that was successfully performed for 12 repetitions (only enter the highest weight from a completed 12 repetition set, no less). The value is automatically calculated in the column "1 RM".