

Seated Leg Extension

Bilateral seated selectorized-machine technique

Key positions



1. Start: align knee and pivot
Pad just above ankles



2. Extend with control
Keep thighs and hips steady



3. Top: comfortable extension
No forceful lockout

Muscles worked

Main muscles

- Quadriceps (rectus femoris, vastus lateralis, vastus medialis and vastus intermedius): extend the knee.

Supporting muscles

- Abdominal and back muscles help stabilize seated posture and pelvis alongside the backrest's support.
- Forearm muscles hold the handles. Supporting roles mainly involve posture and grip stability.

What makes it useful

A supported single-joint machine exercise targeting knee extension. Fit the pivot, backrest, roller and range to your body rather than forcing a universal position.

Movement & technique

Seated Leg Extension | Keep hips steady. Move lower legs and lever together.

Before you start

Follow the machine's instructions and choose a light load. Adjust only while the lever and stack are still; secure the selector pin and adjustment locks.

1 Align knee and pivot

Sit fully supported with back and pelvis steady. Adjust the seat/backrest to approximately align the side-view knee rotation center with the machine pivot. Support thighs without excessive pressure behind knees.

2 Set roller and start angle

Place the roller on the front lower shins just above the ankles, not on feet or knees. Choose a comfortable bent-knee start, relax ankles, grip handles and keep hips down.

3 Extend evenly

Exhale and slowly raise the roller by straightening both knees within a comfortable range. Keep thighs and pelvis steady; avoid snapping into lockout or hyperextension.

4 Return smoothly

Inhale and bend knees back to the same start. Keep back and buttocks supported while legs and roller move together. Do not drop or slam the stack.

Form reminders

- Maintain knee/pivot alignment and lower-shin contact.
- Avoid torso swinging or lifting hips to move the weight.
- Keep ankles comfortable without forced toe rotation.
- Use a controllable pain-free range and load, not fixed universal angles.

Finish safely

- Return the load and let the mechanism stop before exiting. Keep hands clear of moving levers and weights.
- Stop for knee pain or dizziness. Follow qualified advice for an appropriate range and load when knee symptoms or postoperative restrictions apply.

References

1. Intenza - EL09 Leg Extension Owner's Manual (www.intenzafitness.com)
2. Technogym - Selection Pro Leg Extension User Manual (www.insportline.eu)
3. NSCA - Seated Leg Extension: Function and Risk (www.nscs.com)
4. Jeff Nippard - Leg Extension Technique (movement reference) (www.youtube.com)