BIOSTRENGTH

EDUCATIONAL

STOP GUESSING,
START *PRECISION TRAINING*

Most of the people don't know how to train strength properly. Common strength training mistakes could delay your progress and set you up for injury.

COMMON STRENGTH TRAINING MISTAKES:

WRONG REPS

WRONG WORKLOAD

WRONG REST TIME

WRONG TEMPO

WRONG RANGE OF MOTION

BIODRIVE™: A BREAKTHROUGH INNOVATION

PATENTED

The patented Biodrive system uses revolutionary aerospace technology, powered by AI, to ensure maximum neuromuscular activation as well as correct exercise setting and execution. This way you can be confident to get more results in the same amount of time.

ENGAGEMENT AND MOTIVATION
Biofeedback and AI for real time guidance

NEUROMUSCULAR ACTIVATION
Increased neuromuscolar activation

BIODRIVE SYSTEM

PERSONALIZED R.O.M.
Rigth ROM and speed

OPTIMAL WORKLOAD
Maximal muscle contraction

CORRECT POSTURE
Automatic posture set up

Biodrive
A breakthrough innovation

PATENTED

The patented Biodrive system uses revolutionary aerospace **technology**, powered by **A.I**, to ensure maximum **neuromuscular activation** as well as correct exercise setting and execution. This way you can be confident to get more results in the same amount of time

6 RESISTANCE TYPES:

- VISCOUS
- REDUCTION
- OVERLOAD
- ISOTONIC
- NO INERTIA
- ELASTIC

BIODRIVE

6 resistance types

With the flexibility to choose the resistance that adapts to your goals, Biostrength™ propels your strength to new heights.

ELASTIC

Improve speed with resistance that progressively adjusts through the full range of motion.

VISCOUS

Maximize muscle engagement with resistance that gets more challenging the harder a user pushes.

ISOTONIC

Increase muscle mass gradually with constant tension through the full range of movement.

ECCENTRIC REDUCTION

Prevent muscle soreness by incrementally reducing load (10-50%) during the eccentric phase of movements.

NO INERTIA

Protect joints by reducing load at the start of movements and lowering speed at the end
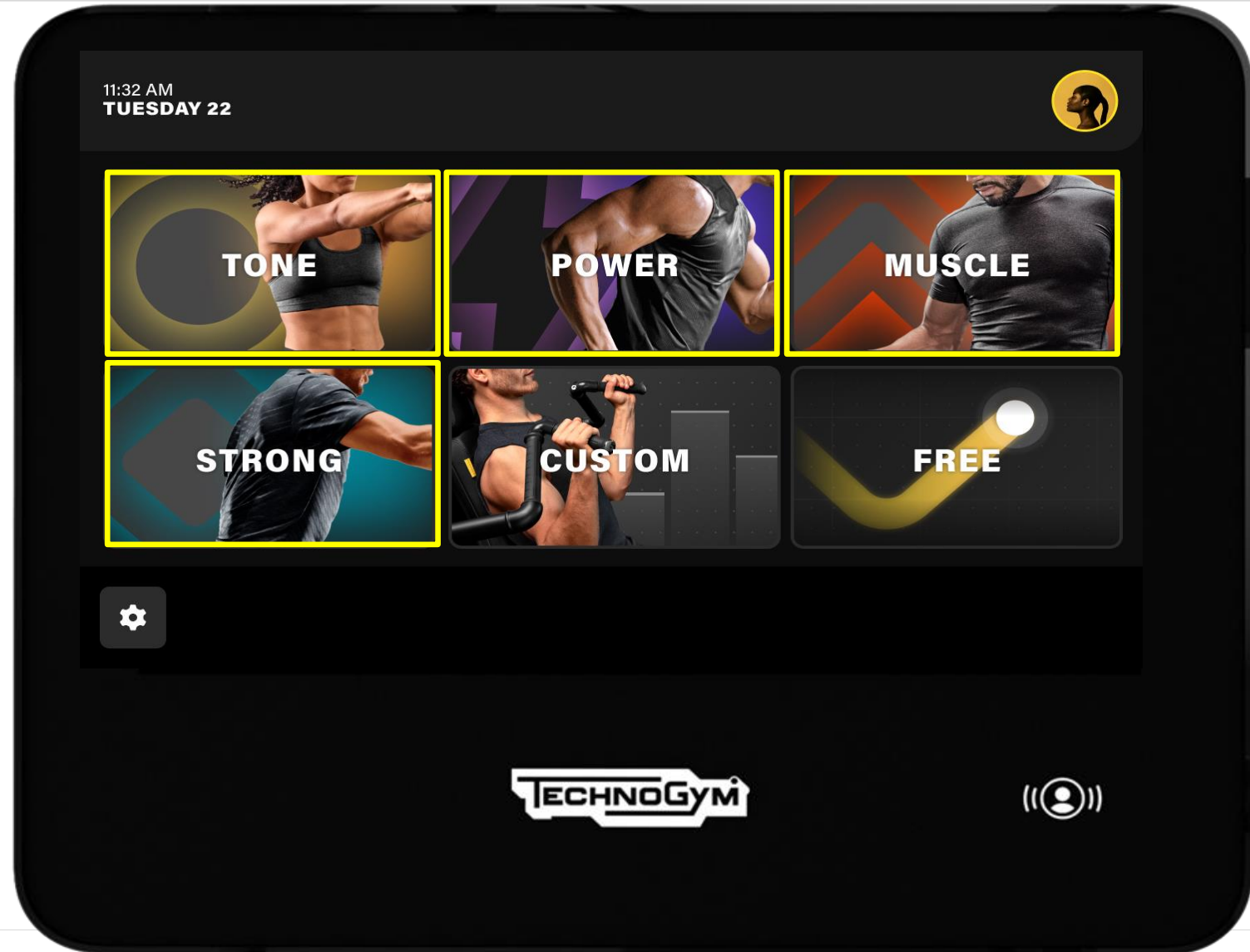
ECCENTRIC OVERLOAD

Speed up muscle development by incrementally adding load (10-50%) during the eccentric phase of movements.

GOAL PROGRAMS

GOAL DRIVEN PROGRAM

With no need for supervision, this strength training programs offers personalized workout evolving by the **embedded A.I**. to reach your goals more efficiently.

PERSONALIZE YOUR TRAINING

CUSTOM TRAINING

Expert users get the freedom to use every equipment as a standalone piece and fine-tune its parameters individually for a tailored workout.
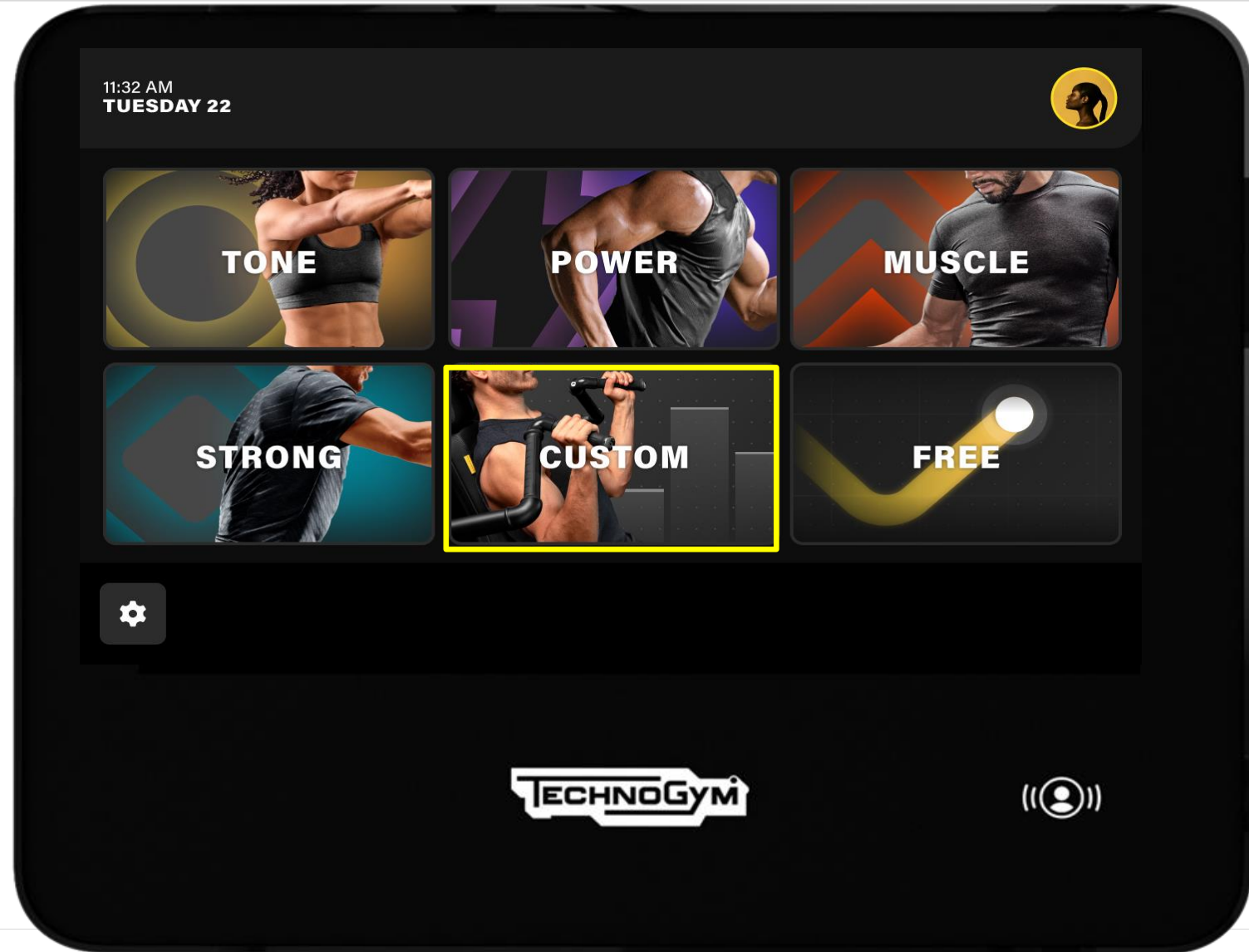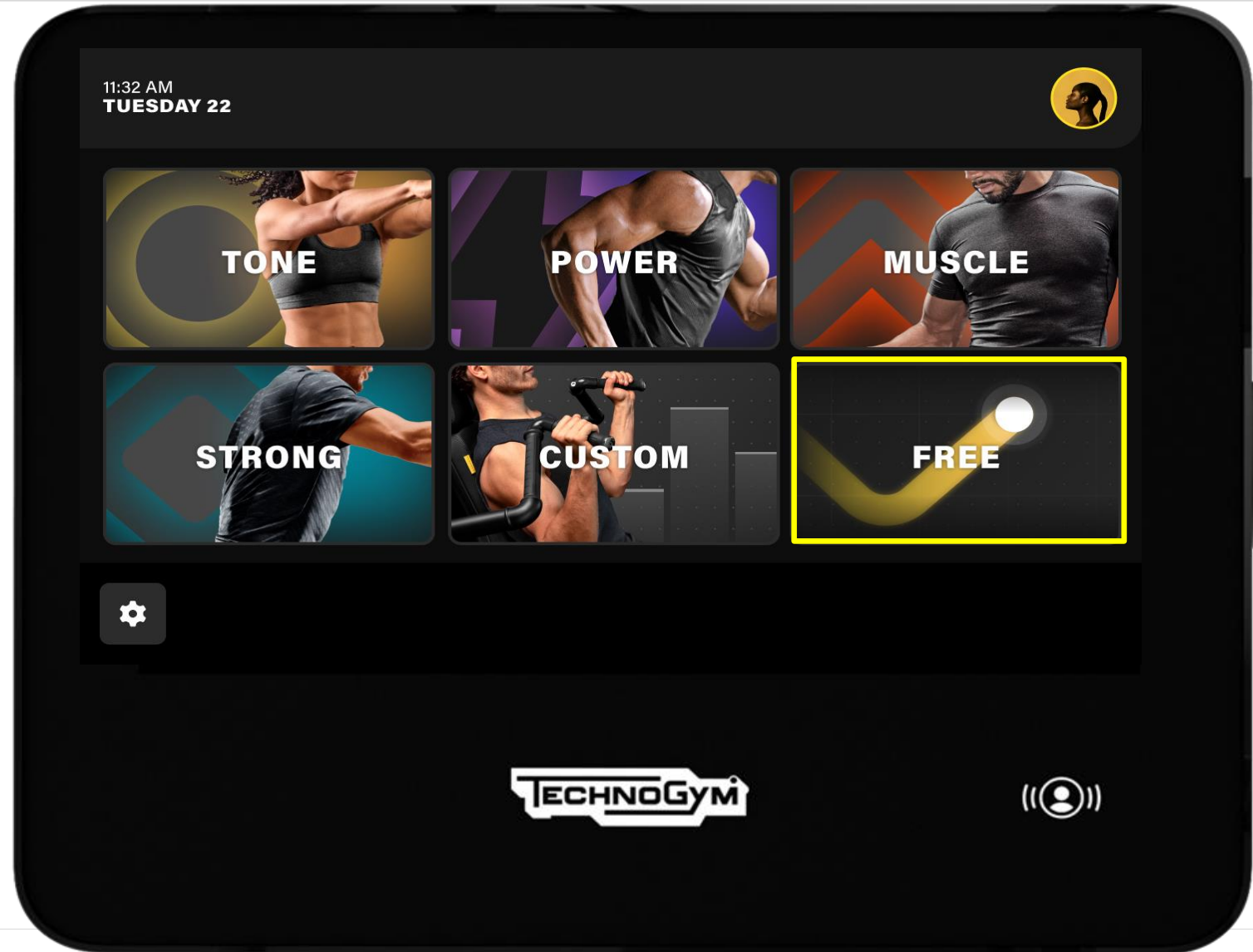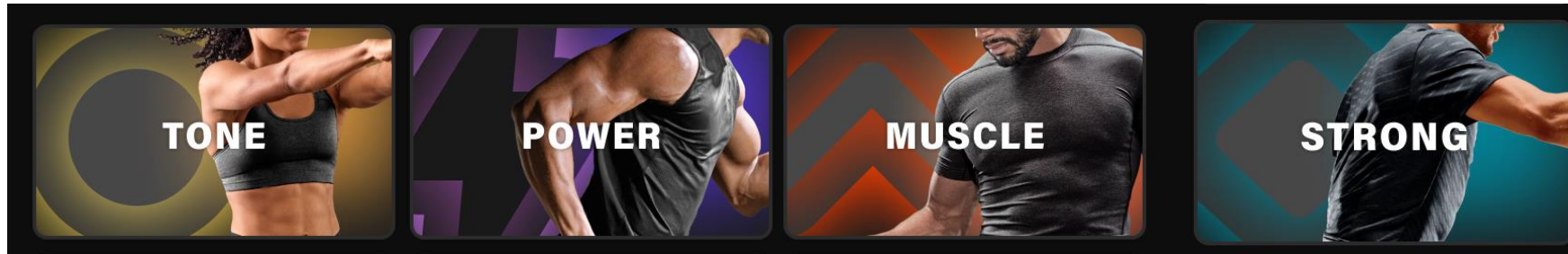
GET ON AND GO

FREE MODE

Adjust your seat, select your weight and just push with **NO NEED TO LOG IN**

GOAL DRIVEN PROGRAM: REACH YOUR RESULTS FASTER

The Goal Mode is the training experience for those beginners and unsupervised **users that need the guidance** for reaching their training objective. Like having a trainer always at your side.

TONE: Designed to Improve your basic conditioning and tone up your muscles
This is your go-to program to start your training journey

POWER: An innovative program to boost your ability to be explosive like an athlete.

**MUSCLE:** Specifically create to build muscle mass and sculpt your body.

STRONG: Become stronger. The harder you push the stronger you get

Once a Goal has been selected, all training parameters will be automatically preset by the artificial intelligence and automatically ADAPT to your strength level
Biostrength understands when the user is ready for a program progression. Progressions are provided according to training frequency and compliance

TONE

TECHNICAL FEATURES

|	
Resistance mode	**Elastic**
Suggested pace	Free
Training load	40% 1RM (at MAX elastic length)
Smart Spotter	Off
Sets	3
Repetitions	10
Suggested recovery	60 s
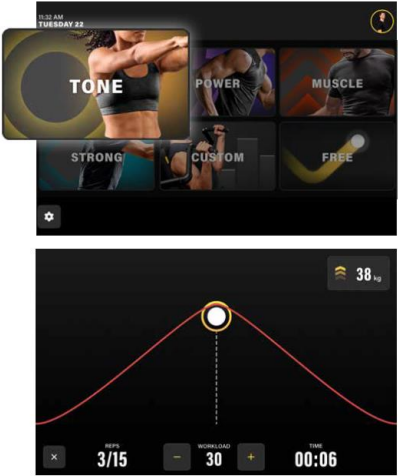
TONE YOUR **ENTIRE BODY**

Get more muscle tone with less strain. The Tone program uses elastic resistance with a gradual workload increase to improve muscle tone throughout the entire range of movement.

POWER

| Resistance mode	**No inertia**
Pace ratio (con:ecc)	MAX concentric
Smart Spotter	Off
Default load	~40% 1RM
Sets	3
Repetitions	User dependent
Suggested recovery	90 s
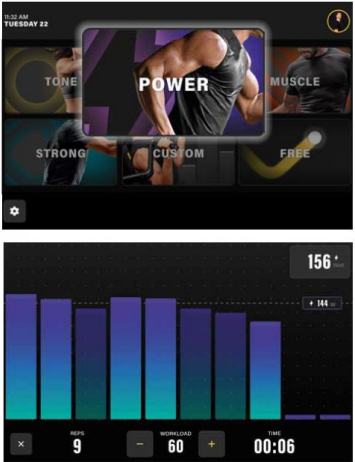
BOOST YOUR
EXPLOSIVE
POWER

Train like an elite athlete. Using resistance with no inertia creates explosiveness by allowing users to exert maximum force with total control and safety.
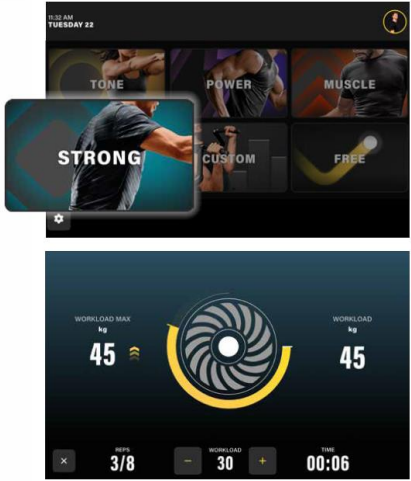
MUSCLE

GOAL PROGRAMS
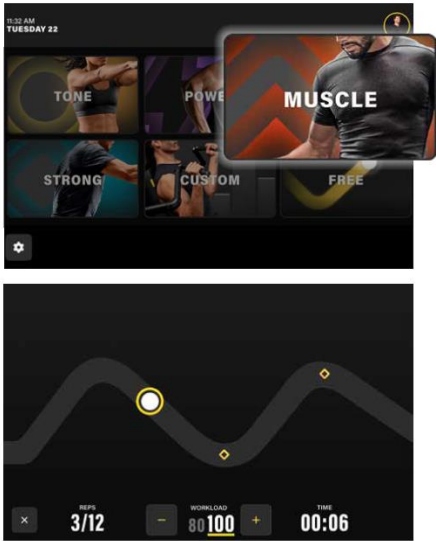
BUILD *YOUR* **MUSCLES**

Add muscle mass while sculpting your body. This program adds extra load to the eccentric phase of movements, when muscles are lengthening, to promote the breakdown of muscle fibers for added mass.

TECHNICAL FEATURES

Resistance mode	**Eccentric overload**
Pace ratio (con:ecc)	1:1
Smart Spotter	On
Default load	~50% 1RM
Sets	3
Repetitions	10
Suggested recovery	60 s

STRONG

GOAL PROGRAMS

BECOME STRONGER

Push your muscles to the max. With this program's use of viscous resistance, the faster you push, the more challenging the resistance becomes.

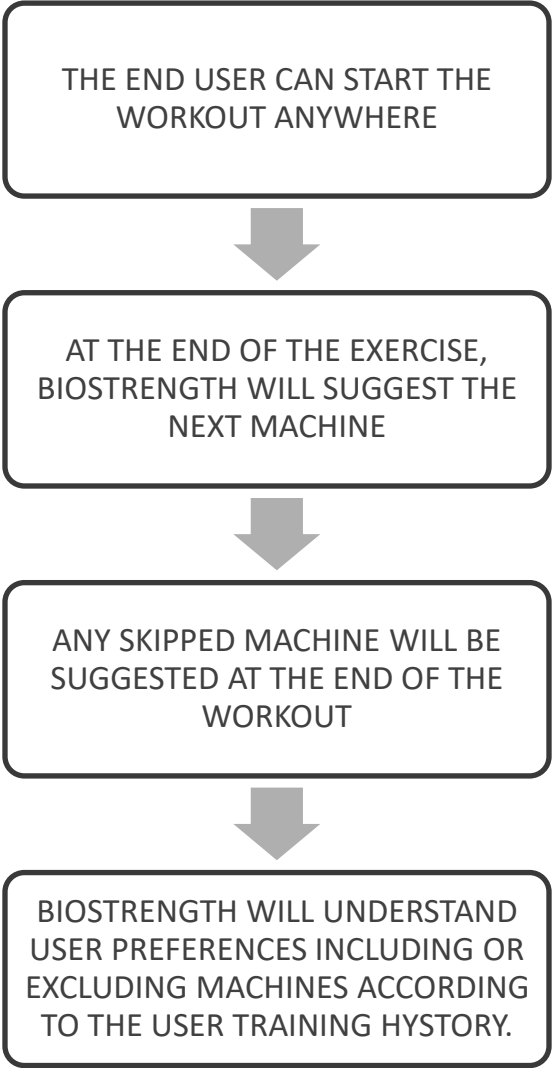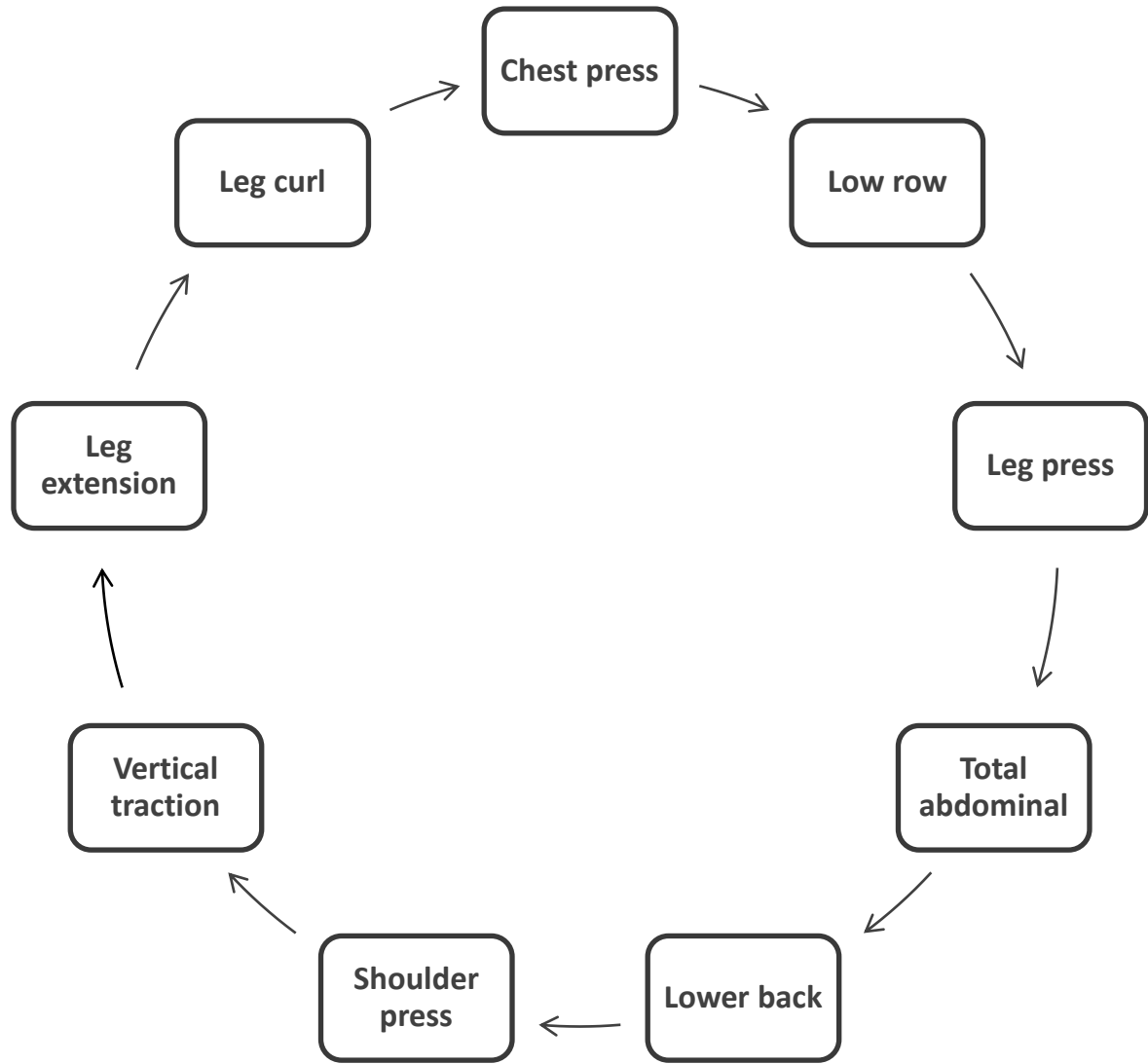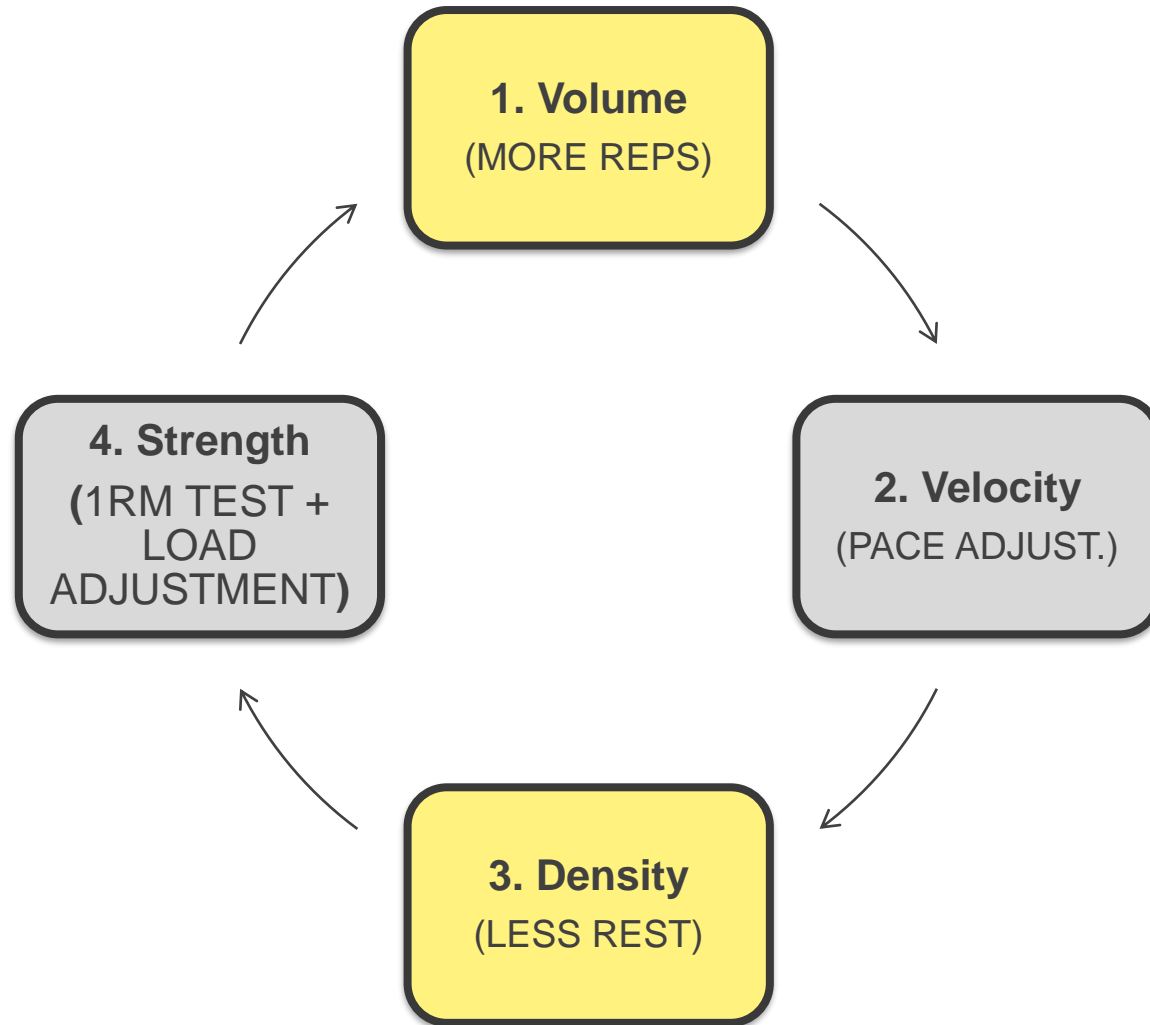| TECHNICAL FEATURES	
Resistance mode	**Viscous**
Suggested pace	MAX con. speed
Starting/Minimum load	20% 1RM
Smart Spotter	Off
Sets	3
Repetitions	8
Suggested recovery	90 s

ARTIFICIAL INTELLIGENCE

An Advanced learning algorithm that help the user achieve their goals

SUGGESTED NEXT EXERCISE

```
                    ┌──────────────┐
              ┌────▶│ Chest press  │────┐
              │     └──────────────┘    │
       ┌──────────┐              ┌─────────────┐
       │ Leg curl │              │   Low row   │
       └──────────┘              └─────────────┘
          ▲                              │
   ┌────────────┐                        ▼
   │    Leg     │                ┌─────────────┐
   │ extension  │                │  Leg press  │
   └────────────┘                └─────────────┘
          ▲                              │
   ┌────────────┐                        ▼
   │  Vertical  │                ┌─────────────┐
   │  traction  │                │    Total    │
   └────────────┘                │  abdominal  │
          ▲                      └─────────────┘
   ┌────────────┐   ┌────────────┐      │
   │  Shoulder  │◀──│ Lower back │◀─────┘
   │   press    │   └────────────┘
   └────────────┘
```

┌──────────────────────────────────┐
│ THE END USER CAN START THE   │
│ WORKOUT ANYWHERE   │
└──────────────────────────────────┘
              ▼
┌──────────────────────────────────┐
│ AT THE END OF THE EXERCISE,   │
│ BIOSTRENGTH WILL SUGGEST THE   │
│ NEXT MACHINE   │
└──────────────────────────────────┘
              ▼
┌──────────────────────────────────┐
│ ANY SKIPPED MACHINE WILL BE   │
│ SUGGESTED AT THE END OF THE   │
│ WORKOUT   │
└──────────────────────────────────┘
              ▼
┌──────────────────────────────────┐
│ BIOSTRENGTH WILL UNDERSTAND   │
│ USER PREFERENCES INCLUDING OR   │
│ EXCLUDING MACHINES ACCORDING   │
│ TO THE USER TRAINING HYSTORY.   │
└──────────────────────────────────┘

TECHNOGYM

SMART PROGRESSIONS

1. Volume
(MORE REPS)

2. Velocity
(PACE ADJUST.)

3. Density
(LESS REST)

4. Strength
(1RM TEST + LOAD ADJUSTMENT**)**

A.I. UNDERSTANDS WHEN THE USER IS READY FOR A PROGRAM PROGRESSION.

PROGRESSIONS ARE PROVIDED ACCORDING TO TRAINING **FREQUENCY AND COMPLIANCE**

PROGRESSIONS ARE DESIGNED TO ADJUST THE EXERCISE COMPONENTS ACCORDING TO THE TARGET OF THE PROGRAM.

TECHNOGYM®

FIRST EXPERIENCE

FIRST TIME SET UP

1. SEAT ADJUSTMENT
2. ROM DETECTION
3. 1RM TEST

PERSONALIZE YOUR TRAINING

CUSTOM TRAINING

Expert users get the freedom to use every equipment as a standalone piece and fine-tune its parameters individually for a tailored workout.
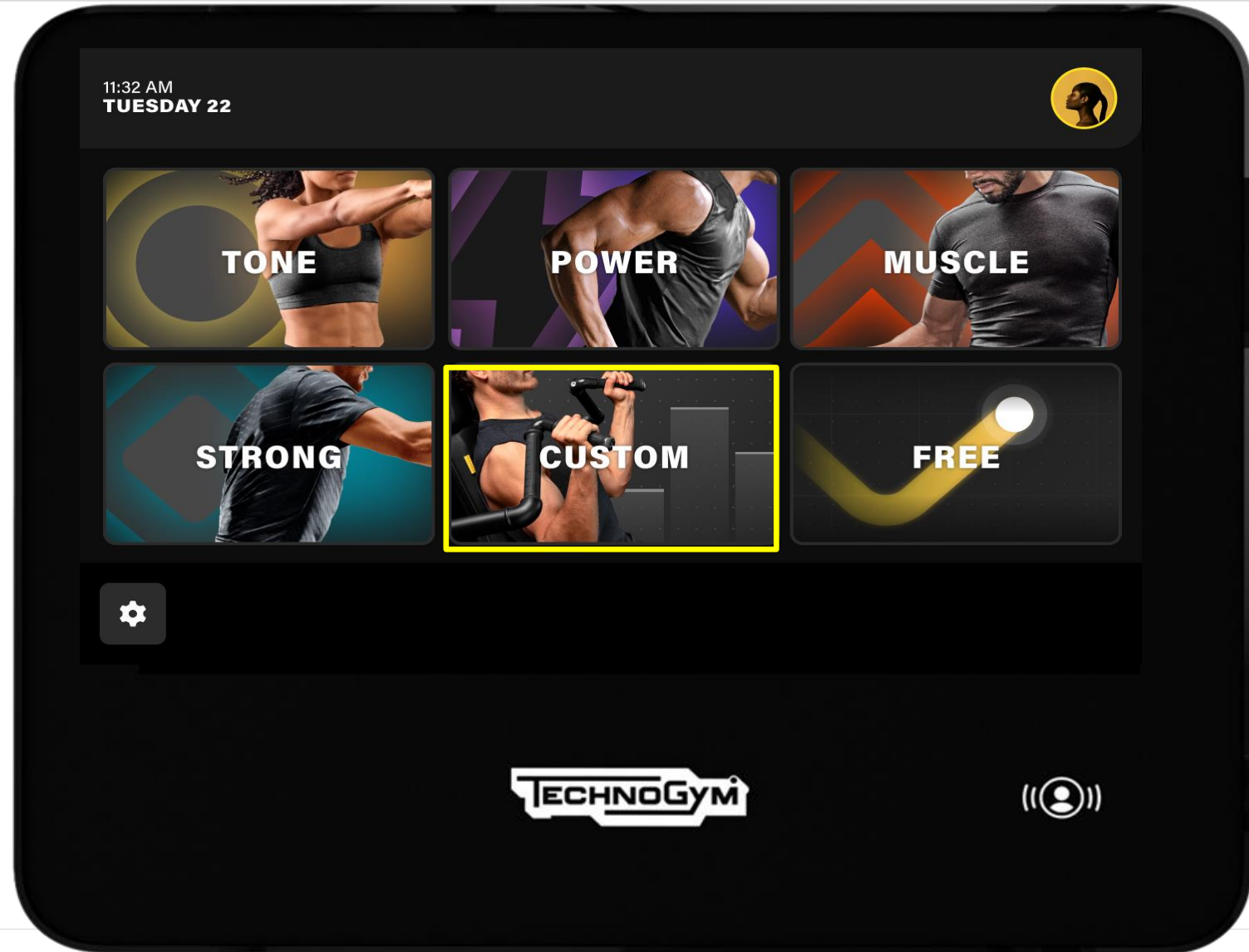
PERSONALIZE YOUR TRAINING

CUSTOM TRAINING

Expert users get the freedom to use every equipment as a standalone piece and fine-tune its parameters individually for a tailored workout.
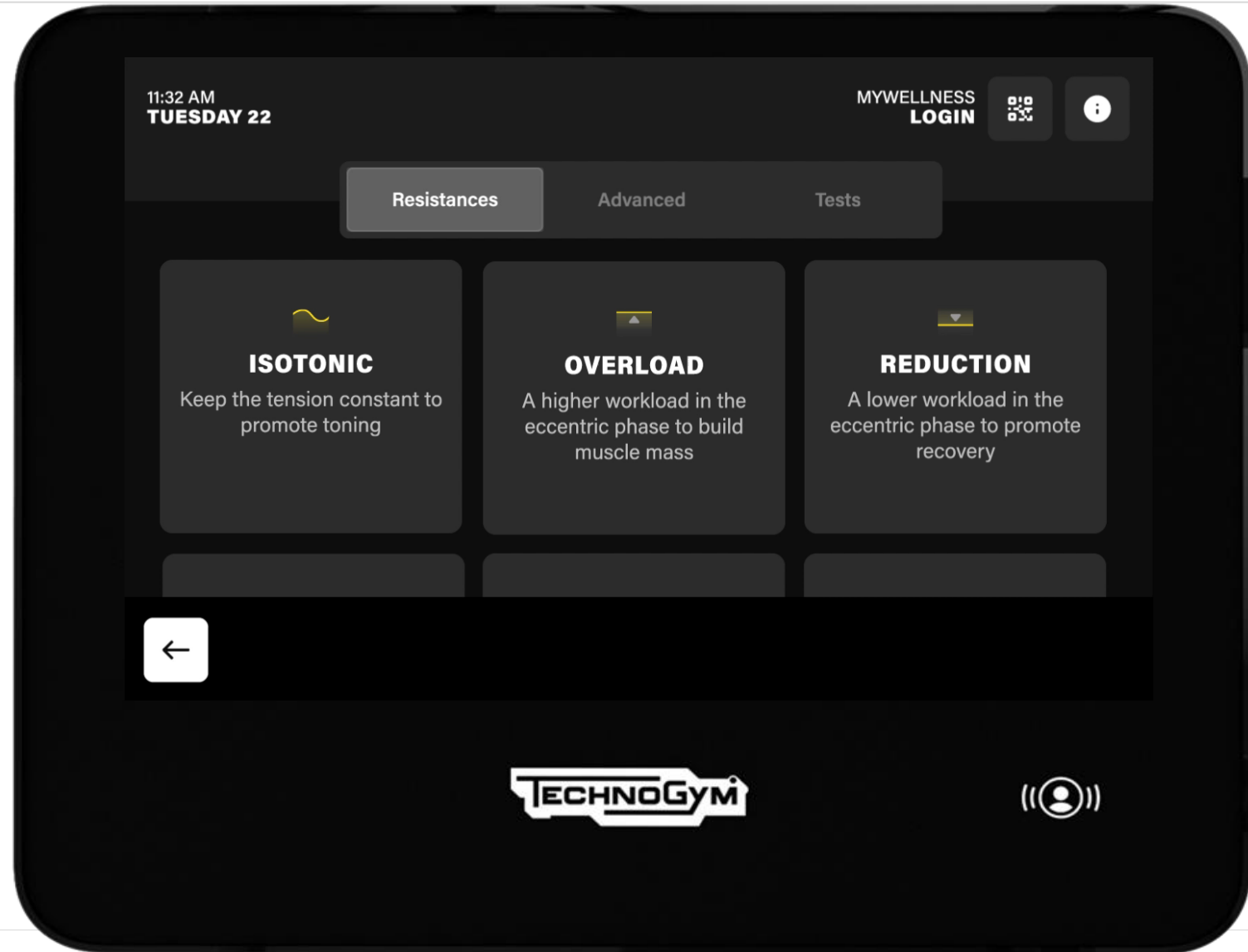
CUSTOM – ADVANCED EXERCISE

CUSTOM EXERCISES

Advanced techniques made easy

PATENT PENDING
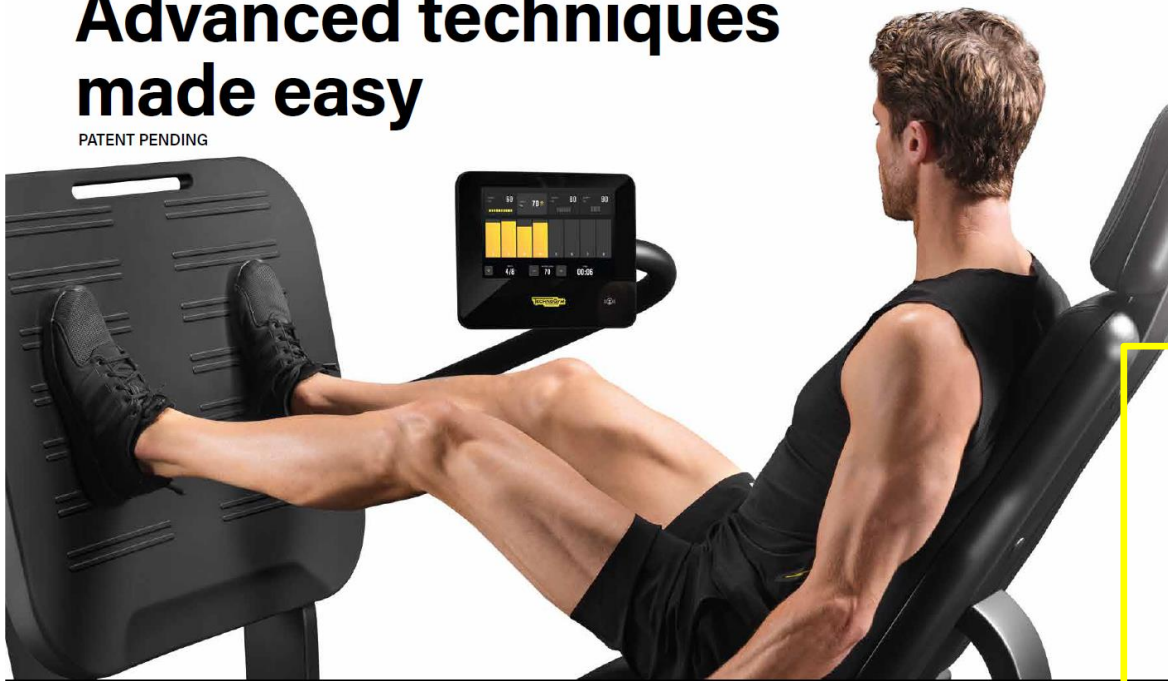
PYRAMID

The amount of reps and load automatically varies with each set to boost strength and muscle mass.
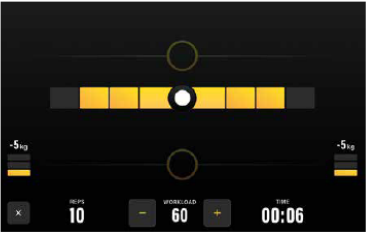
DROP SET

After reaching the maximum reps, the load decreases allowing users to push muscles to exhaustion.
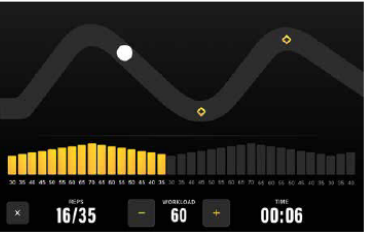
TONE EXPRESS

In a single set, loads vary with each rep to increase muscle tone and mass, while saving time.
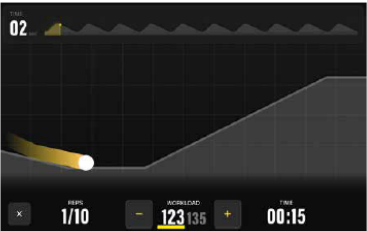
SUPER-SLOW

Slowing the movement increases the time under tension of muscles for more effective training.
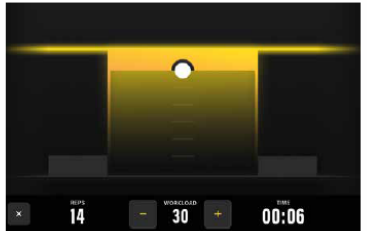
CONTRAST

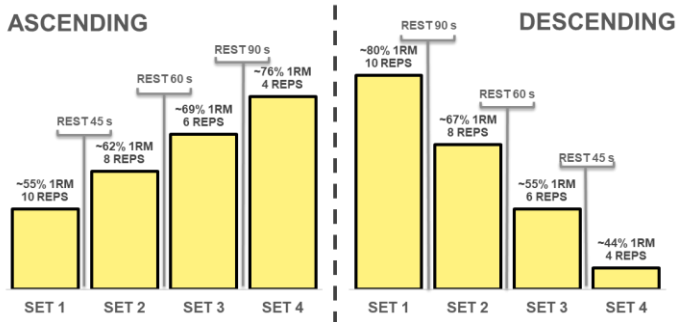Alternating heavy weights with high-speed movements improves both strength and power.
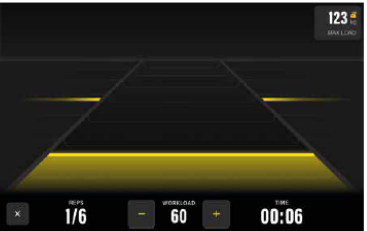
REST-PAUSE

Max reps are followed by short recovery periods for high-intensity workouts that increase muscle mass.
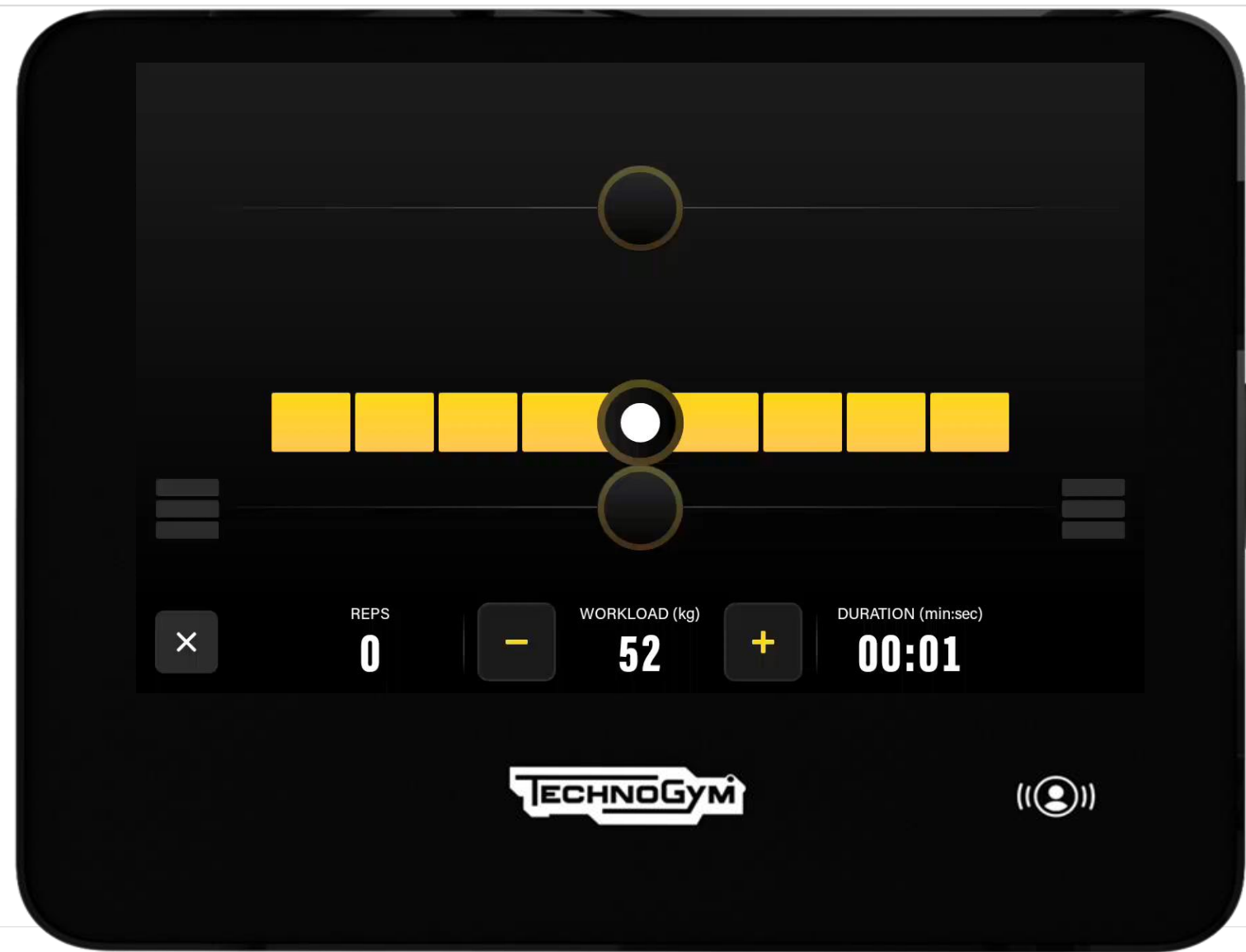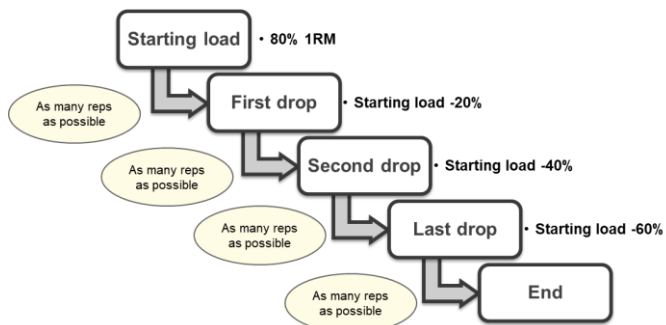
PYRAMID

TECHNICAL FEATURES

Resistance mode	Isotonic
Pace ratio (con:ecc)	Free
Smart Spotter	On
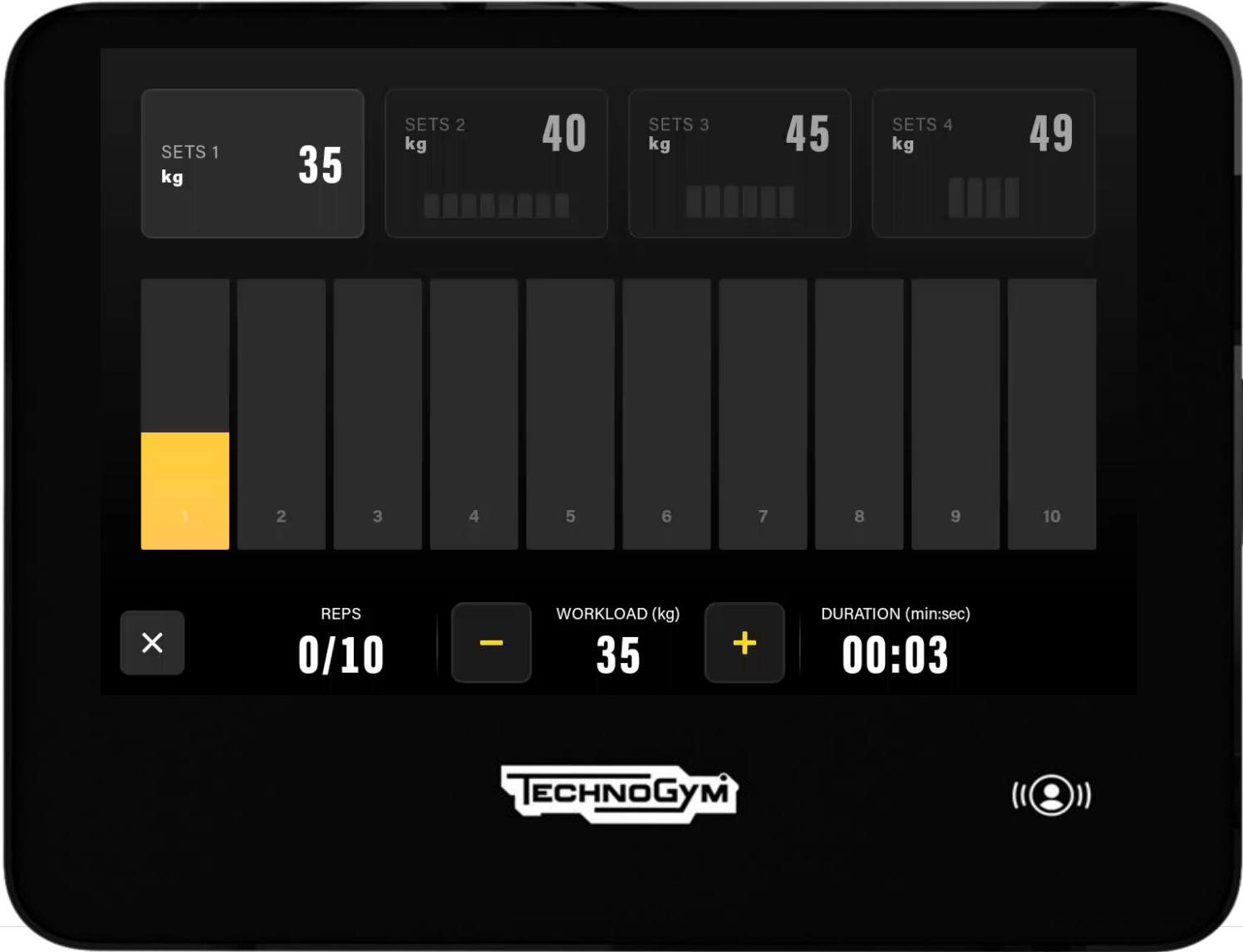
DROP SET

Resistance mode	Isotonic
Pace ratio (con:ecc)	Free
Repetitions	Free
Sets	2
Drops number	3
Drop load %	20
Smart spotter	Off

TONE EXPRESS

Resistance mode	Isotonic
Pace ratio (con:ecc)	1.7 s : 1.7 s
Repetitions	35
Sets	1
Smart spotter	On

Load range:
~25-73% 1RM (Total abdominal, Leg press)
~14-40% 1RM (Others)

Repetitions

REPS
0/35

WORKLOAD (kg)
− 9 +

DURATION (min:sec)
00:02

TECHNOGYM
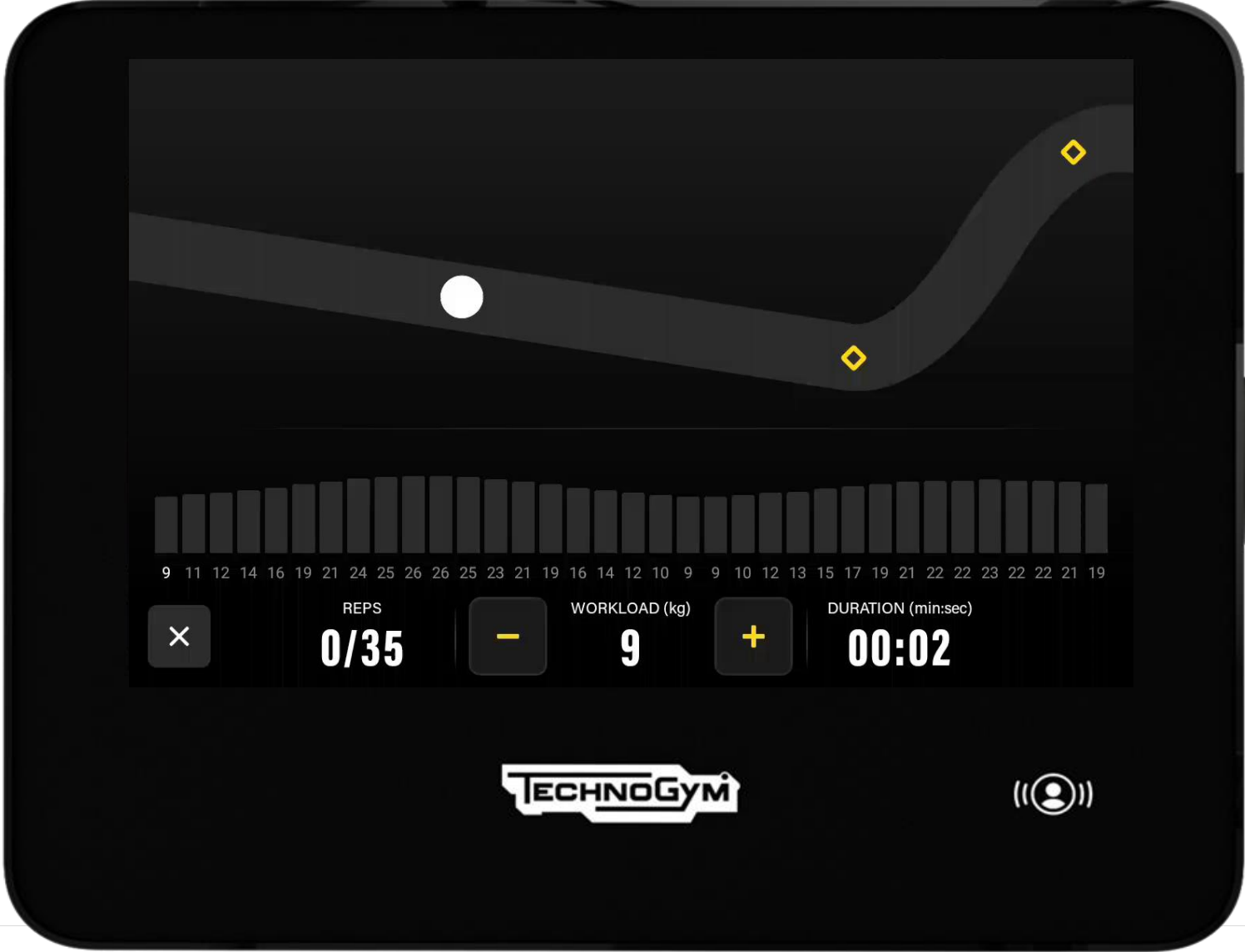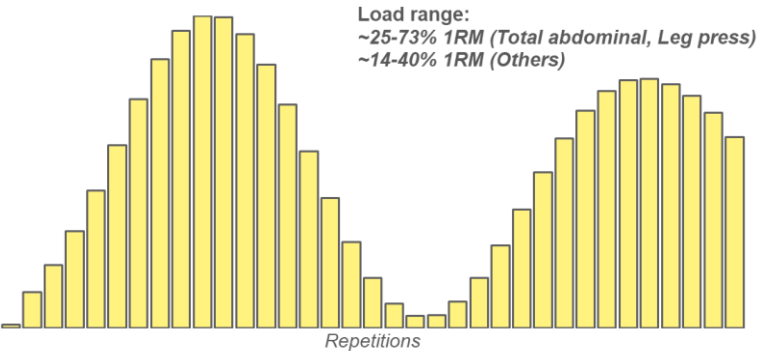
SUPER SLOW

TECHNICAL FEATURES

Resistance mode	Eccentric overload (+40%)
Pace Level	3 (1 con: 2 ecc)
Pace Perc	33%
Smart Spotter	Off
Default load	~30% 1RM
Sets	3
Repetitions	10
Suggested recovery	60 s

CONCENTRIC — Pace: 5.0 s — Load: ~30% 1RM

ECCENTRIC — Pace: 10.0 s — Load: CON plus 20%
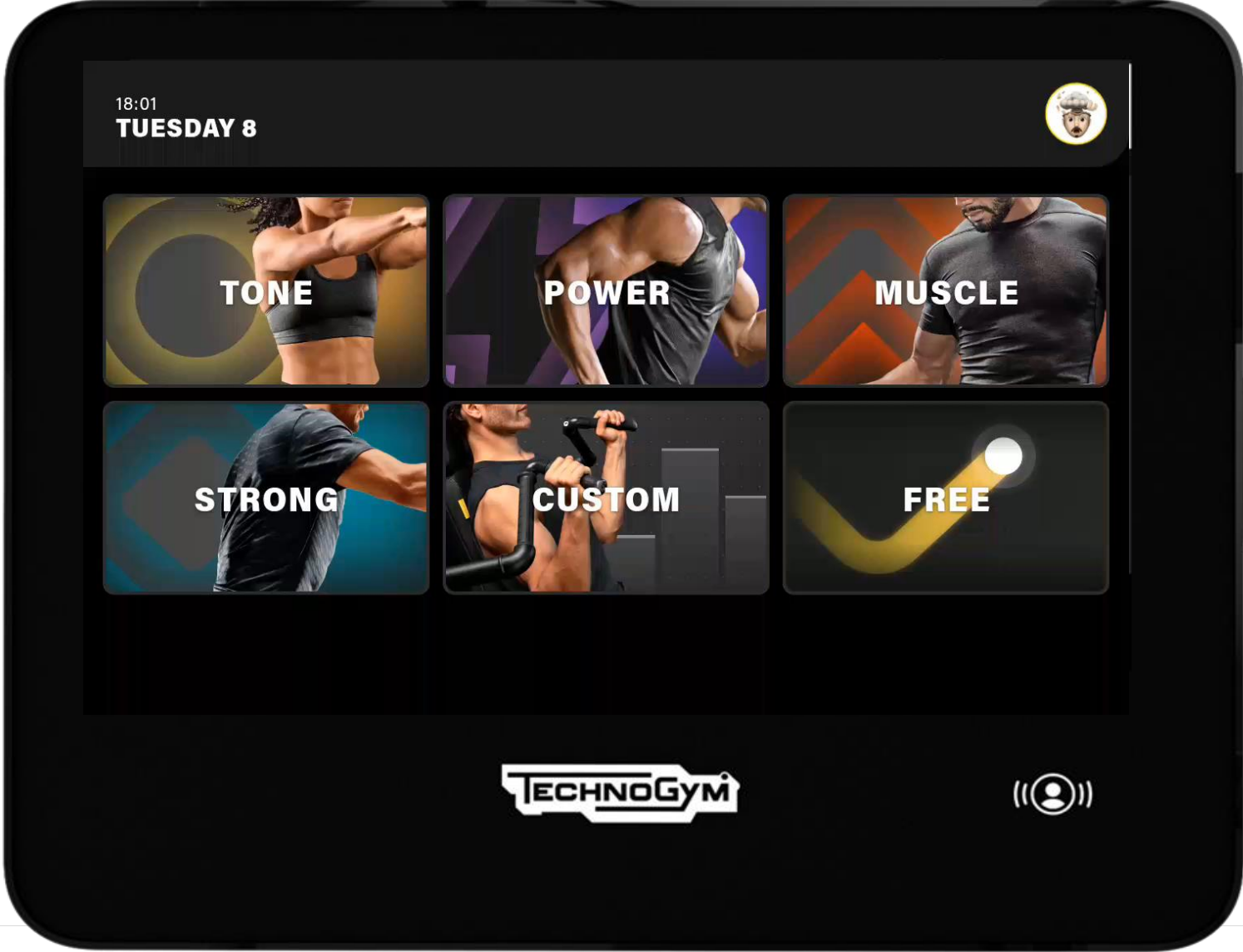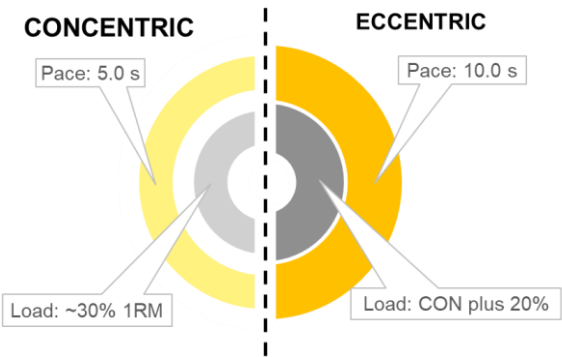
REST-PAUSE

ADAPTIVE REST PAUSE

Resistance mode	**Viscous**
Default load	**MAX at each repetition.**
Pace	FREE
Repetitions	**6 + 6 + 6 + 6**
Sets	2
Pauses	3 x 20''
Rest between sets	120 sec
Smart spotter	Off

20% 1RM + Viscous Resistance 6 reps → 20% 1RM + Viscous Resistance 6 reps → 20% 1RM + Viscous Resistance 6 reps → 20% 1RM + Viscous Resistance 6 reps → End

18:05
TUESDAY 8

TONE POWER MUSCLE

STRONG CUSTOM FREE

TECHNOGYM
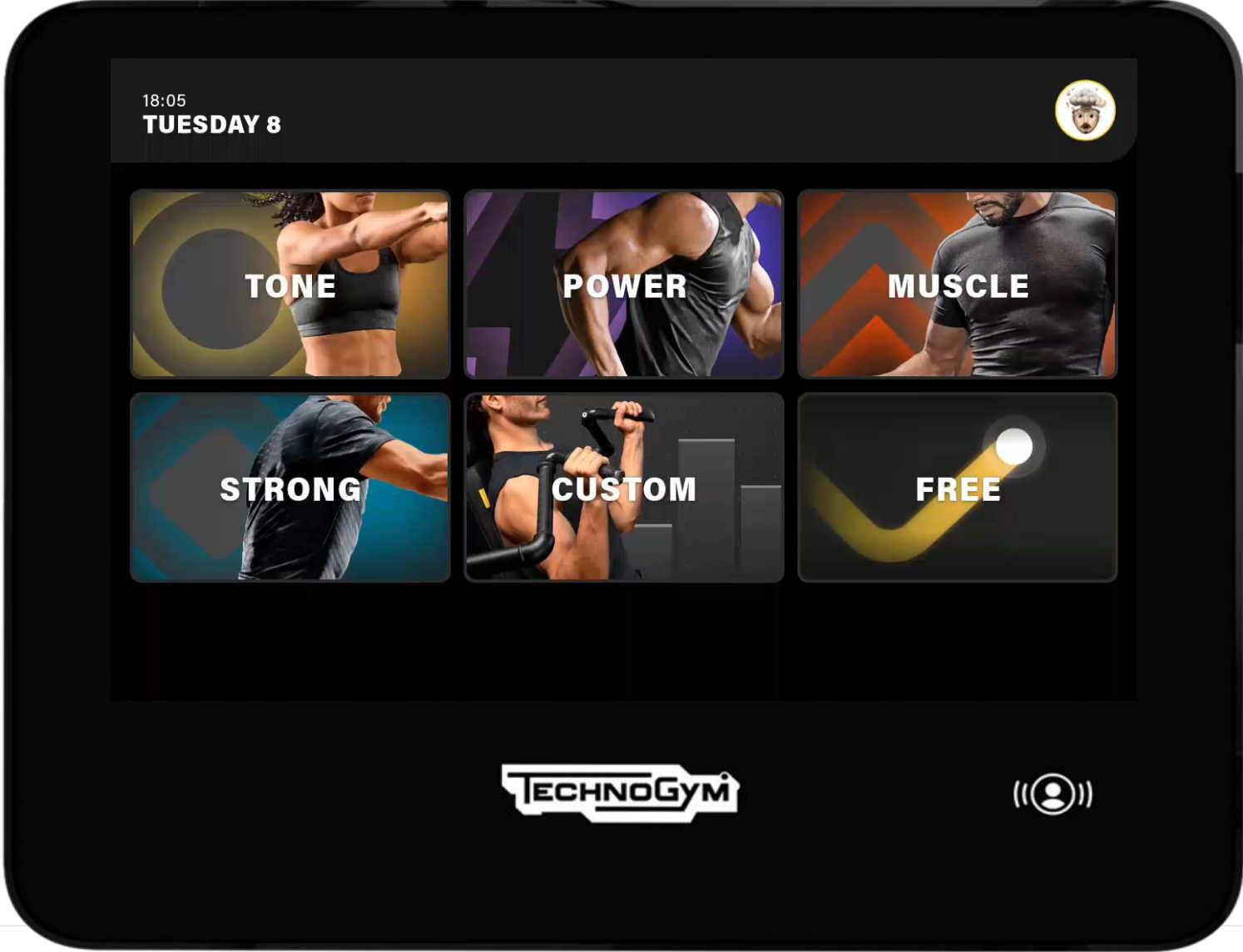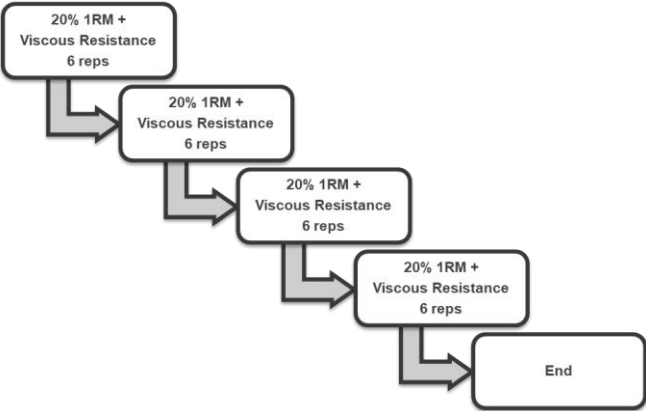
CONTRAST

TECHNICAL FEATURES

Resistance mode	Isotonic (High load phase)
	Elastic (High speed phase)
Pace ratio (con:ecc)	Free
Sets	3
Repetitions	10 + MAX
Smart Spotter	Off

HIGH LOAD
~ 50% 1RM
ISOTONIC

HIGH SPEED
~ 25% 1RM
ELASTIC

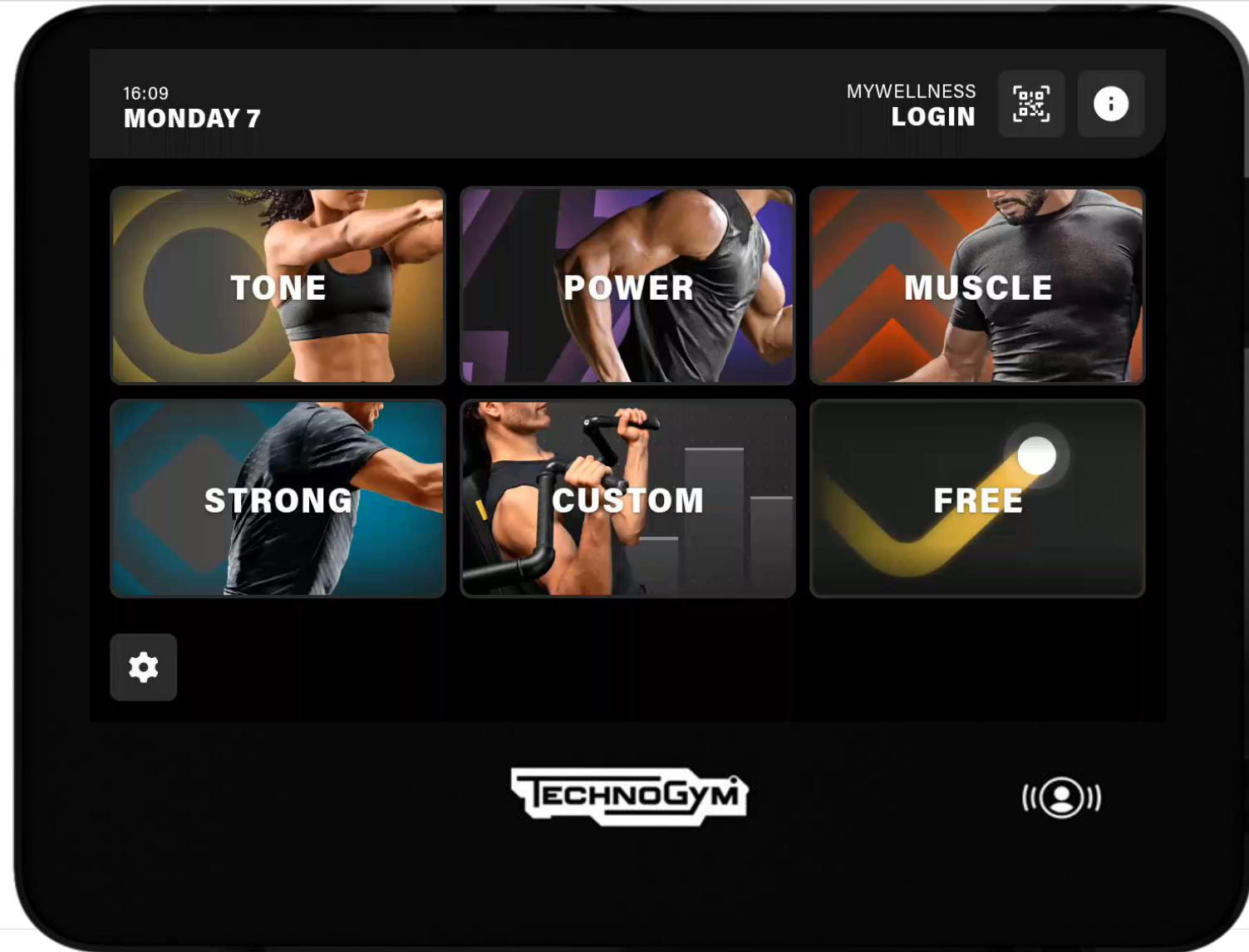| REP 1 | REP 2 | REP 3 | REP 4 | REP 5 | REP 6 | REP 7 | REP 8 | REP 9 | REP 10 | REP 11 | REP 12 | REP 13 | REP 14 |
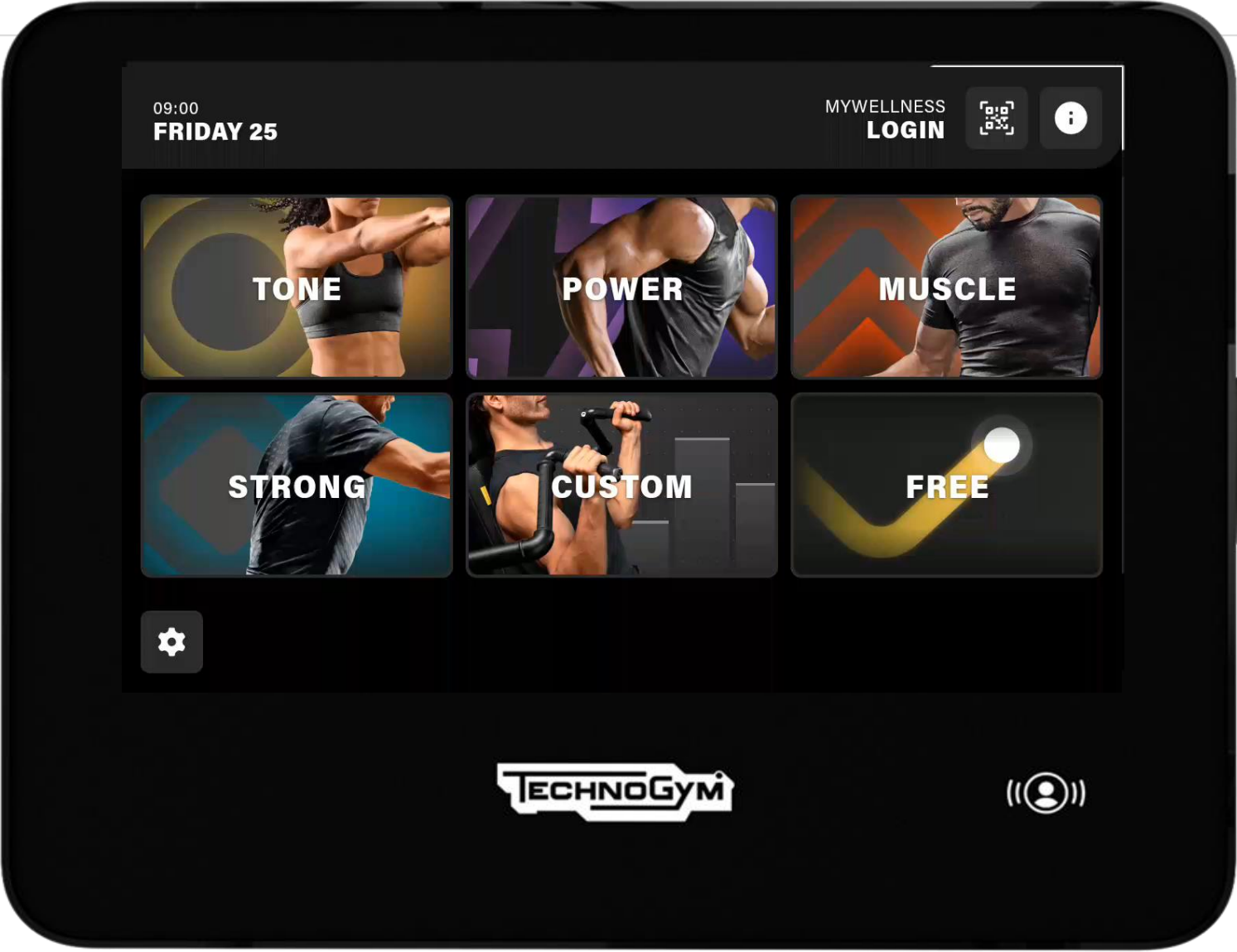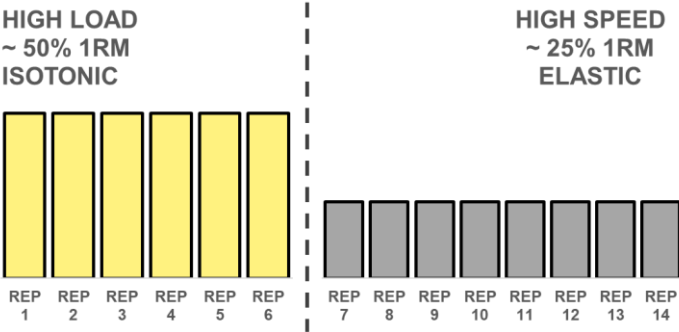
FREE MODE

FREE MODE – QUICK START

FREE MODE

Adjust your seat, select your weight and just push with **NO NEED TO LOG IN**

WEIGHT AND SEATS ARE REQUESTED *EVERYTIME*

ROM IS ACQUIRED DURING THE **FIRST 2 REPS**

PRESCRIBED MODE

The best prescription tool for professionals

Trainers and physical therapists can ensure optimal results for their supervised clients leveraging Biostrength's training modes.

They can create and assign totally personalized programs using the Mywellness pro® app and measure progress thanks to the Mywellness cloud.

- Isotonic
- Isotonic with eccentric overload
- Isotonic with reduced eccentric
- Isotonic with no inertia
- Viscous
- Elastic

ADVANCED EXERCISE

- Ascending Pyramid
- Descending Pyramid

PRESCRIBE - ISOTONIC

To develop your muscle mass gradually. The tension on the muscles will be constant throughout the full arc of the movement.

Advanced prescription : Pace

- **Need:**
  - **Users need to make slow movements to do rehabilitation therefore physiotherapist** need to reduce the pace
  - **Users need to make fast movement to develop speed and strength therefore** they need to increase the pace
- **Trainer** will be able to set the 3 level of pace
  - **Comfortable** (default)
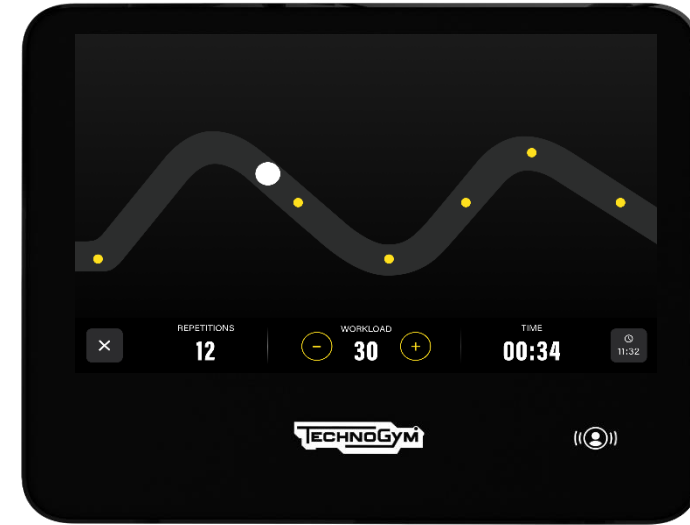 - **Slow**
  - **Fast**

Pace = **Comfortable**
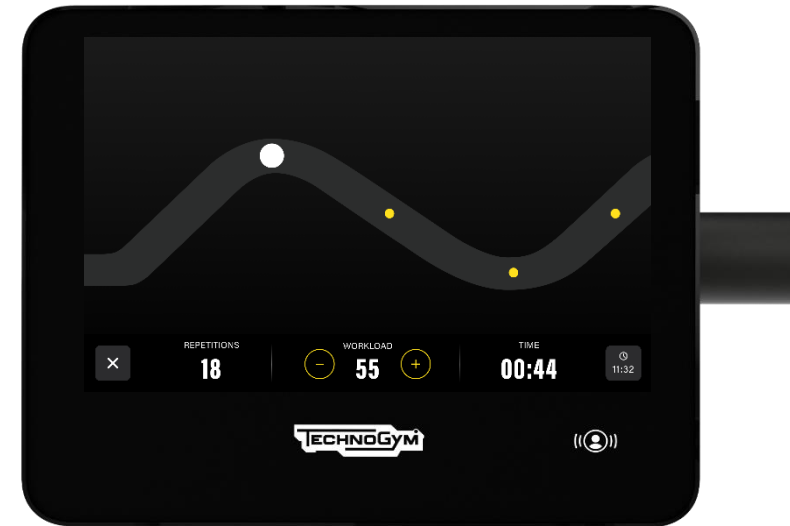
Pace = **Slow**
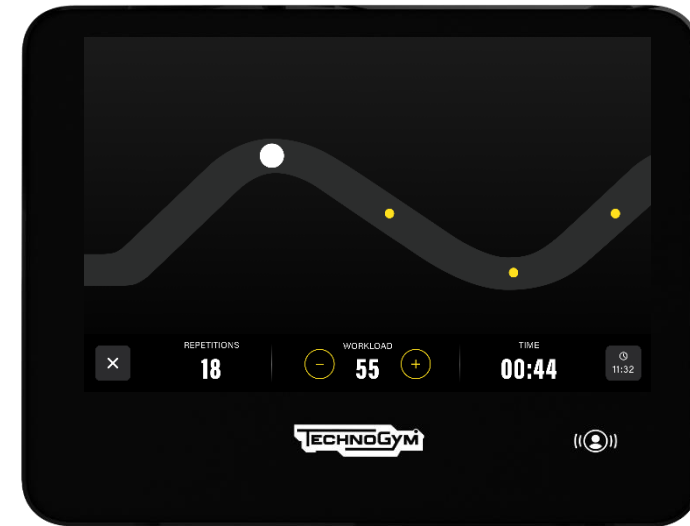
PRESCRIBE – ISOTONIC NO INERTIA

The absence of inertia allows to reduce the joint load at the beginning of the movement and the speed at the end. For safe and low joint impact workouts.

Advanced prescription : Pace

- **Need:**
  - **Users need to make slow movements to do rehabilitation therefore physiotherapist** need to reduce the pace
  - **Users need to make fast movement to develop speed and strength therefore** they need to increase the pace
- **Trainer** will be able to set the 3 level of pace
  - **Comfortable** (default)
  - **Slow**
  - **Fast**

Pace =
Comfortable

Pace =
Slow

PRESCRIBE – ISOTONIC WITH ECCENTRIC OVERLOAD

To tone. During the eccentric phase, the return of the workload will increase by a percentage that you can select.

Advanced prescription : Eccentric overload

- **Need:**
  - To **maximize muscle work and fibers recruitment** the <u>advanced trainer</u> need to **modify the % of the eccentric load**:
    - High % of eccentric load if low workload,
    - Low % of eccentric load if high workload.
- **Trainer** will be able to set 5 level of **eccentric overload**
  - **+10%, +20%, +30%, +40%, +50%**

PRESCRIBE – ISOTONIC WITH REDUCED ECCENTRIC LOAD

For post-training aches and pains. During the eccentric phase, the return of the workload will decrease by a percentage that you can select.

Advanced prescription : Reduced eccentric

- **Need:**
  - Beginners who wish to avoid excessive DOMS (Delayed Onset Muscle Soreness)
  - Users willing to achieve high number of repetitions
- **Trainer** will be able to set 5 level of **reduced eccentric**
  - **-10%, -20%, -30%, -40%, -50%**

PRESCRIBE - VISCOUS

To engage your muscles to the maximum. The level chosen is associated with a fluid density. The resistance varies in accordance with the movement in the fluid.

Advanced prescription : Viscous level

- **Need:**
  - Users need to change the Viscosity % **to shift the focus of the exercise on strength or speed development**:
    - High viscosity for strength development
    - Low viscosity for higher speed production
- **Trainer** will be able to set 6 levels of **viscous**
  - **1 (Low) ,2,3,4,5,6 (High)**

PRESCRIBE - ELASTIC

For speed exercises. Resistance increases during the arc of the movement in accordance with the level of elasticity associated with a colour.

Advanced prescription : Elastic level

- **Goal:**
  - Users need to change the elastic coefficients to **adapt the load to their individual needs either for rehabilitation or performance training.**
- **Trainer** will be able to set 6 levels with color of **elastic**
  - **Red (Light), Yellow, Grey, Black, Green, Blue (Stiff)**