Helping high performance sport and tactical professionals to get the right information, for the right decision, at the right time.
VALD’s clients

Trusted by over 850 of the world’s most elite sporting teams, universities and defence departments

Our experience in onboarding and supporting our clients extends from small gyms to governing bodies and Olympic teams.

Unparalleled insight into performance, injury risk and rehabilitation

Driven by a multidisciplinary team of sports scientists, researchers, clinicians, designers, developers, and engineers, VALD products enable you to adopt a truly athlete-centric approach when it comes to understanding human movement, performance, injury risk and rehabilitation.

Our products can be used across various disciplines from strength and conditioning to medical and rehabilitation, offering unparalleled insight into musculoskeletal and neural performance.
Comprehensive onboarding
Our team of experts work with you to onboard staff and ensure products are properly implemented across your whole organisation.

Dedicated support
Talk to real experts, in real-time or access a dedicated support portal with comprehensive product tutorials and instructions.

Ongoing education
Leverage the expertise of VALD’s team of clinicians, researchers and sports scientists to improve product education and application throughout your organisation.

AMS integration
Automatically integrate data from VALD products with your athlete management systems, including Kitman Labs, Fusion Sport, Edge10, Kinduct and more, combining your data with other third-party metrics to better inform your decision making.
Force plates that finally break free of the lab

Measure, train and monitor strength with ForceDecks; the world’s fastest, easiest and most powerful dual plate system for analysing neuromuscular strength and imbalance.

Skip the time-consuming and complex process of analysing raw force plate data, and get auto-analysed results in real-time.
ForceDecks automatically detect and analyse 15+ common force plate tests

Traditionally, force plate software was only capable of collecting and displaying raw data, along with a few simple summary metrics, meaning any further analysis had to be done slowly and manually. With ForceDecks, all that heavy lifting is done for you - from detection to analysis and reporting.

**Jumps**
- Countermovement jump*
- Loaded countermovement jump*
- Squat jump*
- Loaded squat jump*
- Drop jump*
- Single-leg drop jump*
- Single-leg jump*
- Land-and-hold*
- Repeated hop test*
- Hop-and-return*
- Single-leg-land-and-hold*
- Abalakov jump

**Isometrics**
- Shoulder I-Y-T
- Custom isometric test
- Isometric mid-thigh pull (IMTP)
- Isometric squat
- Posterior Chain Isometric Assessments
- Supine 90/90, Supine 0/30, Standing 70/30

**Squats**
- Never before possible, ForceDecks can analyse weighted or unweighted squats and provide rep-by-rep, real-time results.

*Automatic detection... and more
HARDWARE

ForceDecks have been designed to endure even the heaviest and strongest of athletes, while maintaining pinpoint accuracy, reliability and affordability. ForceDecks hardware is available in three models: FDMax, FDLite and FDMini.

**FDMax**
Our flagship force plates

- **Surface area per plate**: 35 x 70 cm (14 x 28 in)
- **Capacity per plate**: 2,000 kg (4,400 lb)
- **Weight per plate**: 20 kg (45 lb)
- **Sampling rate**: 1,000 Hz
# FD Lite

**The best of both worlds**

<table>
<thead>
<tr>
<th>Specification</th>
<th>FD Lite</th>
<th>FD Mini</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Surface area per plate</strong></td>
<td>30 x 48.5 cm (12 x 19 in)</td>
<td>22.5 x 40 cm (9 x 16 in)</td>
</tr>
<tr>
<td><strong>Capacity per plate</strong></td>
<td>2,000 kg (4,400 lb)</td>
<td>1,000 kg (2,200 lb)</td>
</tr>
<tr>
<td><strong>Weight per plate</strong></td>
<td>9 kg (20 lb)</td>
<td>5 kg (11 lb)</td>
</tr>
<tr>
<td><strong>Sampling rate</strong></td>
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<td>1,000 Hz</td>
</tr>
<tr>
<td><strong>Surround</strong></td>
<td>High-density foam</td>
<td>High-density foam</td>
</tr>
<tr>
<td><strong>Optional accessory</strong></td>
<td>Hard travel case</td>
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</tr>
</tbody>
</table>

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# FD Mini

**Affordable, portable and compact**

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Monitor athletes over time

Track trends in athlete health and performance with ForceDecks’ longitudinal reporting. Visualise multiple tests for individual athletes or your whole squad, leveraging insights from the historical data to make more informed decisions for the future.

One-click analysis

With one click, ForceDecks software analyses your data, instantly displaying chosen key metrics for performance and symmetry. ForceDecks also analyses results step-by-step for real-time feedback.
Real-time, rep-by-rep results

Test an entire squad in under 30 minutes

ForceDecks Jump software is designed to collect data on multiple athletes back-to-back, speeding up the testing process. Simply pre-load athlete data and let the software do the work.

Third-party uniaxial and triaxial plate support

ForceDecks software is also compatible with a range of third-party uniaxial and triaxial force plates including hardware from Pasco, Kistler, AMTI, FitTech and Bertec.
The strongest choice for strength testing and training

Combining advanced sensors with real-time results and analytics, the ForceFrame (patent pending) is the most versatile and portable system for testing muscle strength and imbalance, as well as for prescribing and performing isometric training.

High-performance teams use and trust the ForceFrame for evaluating and monitoring their athletes, as well as for managing load, modulating pain and objectively quantifying rehabilitation progress.
With its modular frame system, and fully rotational crossbar, the ForceFrame can be quickly and easily adjusted to test isometric strength in upper and lower body - including hip, knee, shoulder, ankle and neck muscle groups, as well as custom tests if you feel like getting creative.

**Test isometric strength in 35+ positions.**

**Train isometric strength in 130+ exercises.**

- **Hip**
  - Adduction
  - Abduction
  - Flexion
  - Extension
  - Internal rotation
  - External rotation

- **Knee**
  - Flexion
  - Extension

- **Neck**
  - Lateral flexion
  - Flexion
  - Extension

- **Ankle**
  - Inversion
  - Eversion

- **Shoulder**
  - Adduction
  - Abduction
  - Flexion
  - Extension
  - Internal rotation
  - External rotation

... and more
Adjustable outer sensors

The outer sensors laterally adjust to a variety of widths and can be rotated to 90° to support further positions.

Detachable head unit

When you’re constantly on the move, your equipment needs to be able to travel with you. Featuring a portable head unit which unclips and fits in a backpack, the ForceFrame allows quick, easy and comparable testing, regardless of whether you’re playing at home or on the road.
Adjust height accurately

The crossbar height can be quickly and easily adjusted to suit the test or exercise.

Fully rotational crossbar

The ForceFrame’s crossbar can be rotated and locked in 15° increments for quick, accurate transitions between protocols.
Real-time biofeedback

The ForceFrame app makes data collection easy. Connect the ForceFrame to your PC with USB or iOS device via Bluetooth to see results in real-time so you can provide immediate feedback to athletes, as well as longitudinal comparisons.

Review max and average strength and compare strength ratios and imbalances in real-time.

Centralised, secure cloud storage platform

Once a test or training session is complete, results are uploaded to VALD Hub. Review individual tests, compare results over time or assess across cohorts.
ForceFrame app for iOS. Connect wirelessly via Bluetooth.

ForceFrame app for Windows. Connect via USB.

Prescribe isometric training programs

Harness your testing baselines to build and prescribe isometric training programs from VALD Hub.

Use a comprehensive training library of over 130 isometric exercises to build personalised programs. Once the program is complete, it is pushed to the ForceFrame apps immediately and accessible for athletes to use in self-guided training.

Train athletes independently

The ForceFrame app is easy and simple for athletes to use, without the need of practitioner supervision. Athletes receive a step-by-step video guide on how to complete training exercises and are shown clear strength targets that are based on a % goal of their previous voluntary max contraction.
The NordBord (patented) is a fast, easy, accurate and reliable system for monitoring hamstring strength and imbalance.

Combining advanced sensors, real-time data visualisation and cloud analytics, the NordBord is a comprehensive system for accurately quantifying and monitoring an athlete’s hamstring strength and imbalance.

The king of hamstring testing
With its simple, easy-to-use design, the NordBord can be used to quickly measure hamstring strength and imbalance in a range of positions and exercises.

**Eccentric**
- Nordic
- Razor

**Isometric**
- Prone
- 60° hip flexion
- 90° hip flexion
**HARDWARE**

Quick, repeatable setup
Record your athletes’ knee position in the NordBord app to speed up setup for future tests, and to enable calculation of torque and force.

Integrated wheels
Built-in wheels and handle make moving the NordBord easy, meaning you’re no longer confined to only testing in the gym.

Built for comfort
The NordBord knee pad is constructed with soft and durable foam, ensuring comfort for your athletes.

Foldaway universal joint
Allows quick attachment and detachment, while protecting sensors from damage.

Pivoting 360° joint
Ensures hooks remain perpendicular with the lower leg, improving sensor accuracy.

Pivoting 360° joint
Ensures hooks remain perpendicular with the lower leg, improving sensor accuracy.
SOFTWARE

Real-time biofeedback

The NordBord app makes data collection easy. See results in real-time so you can provide immediate feedback to athletes, as well as comparisons with past sessions.

The live force trace shows hamstring strength in newtons for left and right leg, and the maximum strength for each repetition. Average strength across all repetitions is also highlighted for quick review.

Centralised, secure cloud storage platform

Once a test or training session is complete, full test results are uploaded to VALD Hub. Review individual tests, compare results over time, or assess across cohorts.
Use objective data to help your athletes move better, perform better and return to play faster with the HumanTrak Movement Analysis System. Taking the guesswork out of common movement assessments, HumanTrak allows you to see what the eye can’t, so you can focus on improving what’s most important.
Assess movement quality, range of motion and stability in over 20 common tests and exercises

- **Lower-body dynamic**
  - Single-leg squat
  - Squat
  - Drop jump
  - Overhead squat

- **Cervical spine**
  - Lateral flexion ROM
  - Flexion/extension ROM

- **Shoulder**
  - Abduction/adduction ROM
  - Flexion/extension ROM
  - Internal/external rotation ROM

- **Stability**
  - Single-leg posture
  - Tandem stand
  - Single-leg stand
  - Standing posture
  - Semi-tandem stand
  - 30-second sit-to-stand

- **Auto-trainer**
  - Build and run interactive training programs

... and more
HARDWARE

The Kit

- 3D infrared camera
- Camera tripod
- Custom laptop

Movement analysis, now made practical

Unlike other movement analysis systems that fill an entire room or require complex setup and lengthy data processing, HumanTrak fits in a suitcase and can be unpacked, set up and ready to test in less than five minutes.

Once set up, this world-first technology allows you to select from a range of pre-programmed tests so the athlete can immediately begin their assessment and view their performance in real-time.
SOFTWARE

Instant reporting
Once an assessment is complete, a comprehensive report automatically generates photo snapshots of key points and test results.

Real-time overlay
Both practitioner and athlete can see the joint range of motion metrics overlaid in real-time.

AutoTrainer
Build a tailored training program with AutoTrainer, complete with reps, sets and rest. AutoTrainer guides athletes through each exercise in the program, without the intervention of coaches.

SwayTrak
SwayTrak reports Centre of Mass movement in the anteroposterior and mediolateral directions during balance assessments. Overall sway is quantified with a balance algorithm, which can be used for baseline testing and tracking changes over time.

Instant reporting
Once an assessment is complete, a comprehensive report automatically generates photo snapshots of key points and test results.
AirBands (patent pending) are the world’s first wireless, automated training cuffs. AirBands leverage the benefits of blood flow restriction (BFR), a safe and effective method to reduce the time and intensity required to build muscle and increase strength.

As the world’s first Bluetooth-controlled, wireless BFR cuffs, AirBands can help accelerate training results, manage loads and streamline rehabilitation.

When combined with evidence-led training programs, AirBands provide a multitude of ground-breaking physiological benefits, including:

- Increased muscular adaptions.
- Advances in aerobic capacity.
- Rehabilitation support.
The AirBands cuff

AirBands cuff features a velcro loop system, for superior comfort and durability. Built from sweat-resistant fabric cloth, lined over a custom-built, medical-grade air bladder.

Arm cuff: 25cm – 45cm/ 10” – 18”. Leg cuff: 45cm – 65cm / 18”–26”.

The AirBands module

AirBands feature a rechargeable battery, sensor, valve, pneumatic pump air bladder and a Bluetooth module that connects to your smart device.

SOFTWARE

The AirBands app

- Wireless pairing.
- Automatic inflation/deflation.
- Individualised pressure calibration.

iOS Devices
Available from the App Store

Android Devices
Available on Google Play
Managing athletes’ exercise programs and completion rates remotely can be challenging. With TeleHab, you can assign athletes exercise programs, monitor their completion rates and review video-recorded exercises.

Get TeleHab for free at https://app.telehab.io/sign-up
Guide your athletes, step-up by step-up

Fast, intuitive and easy-to-use, the TeleHab app walks your athletes through their exercises, giving them refreshers and allowing them to upload videos for your review.

How TeleHab works

1. Build an exercise program from drag-and-drop video library and assign to the athlete
2. Athlete follows exercise program at-home and records their session for review
3. Review uploaded session and follow-up with teleconferencing consult

Library of 4,500 + exercises (and counting)
Something missing? Let us know and we’ll film it and add it for you.

Simple drag-and-drop program builder
No more slow, clunky exercise libraries to struggle through.

Powerful, flexible program scheduling
Decide whether you want your athlete to complete their program on specific days, at certain times of the day, or whenever they can.

Assign programs instantly
Assign an exercise program to your athlete and it appears in their TeleHab app immediately.

Easy-to-use interface
The TeleHab app is designed for a broad range of athletes, allowing them to quickly and easily pick it up and start exercising.

Video recording and uploading
Choose whether your athletes should record their sessions. If they do, you’ll see videos of each of their exercises uploaded and waiting for you after the session is complete.
If you can’t measure it, you can’t improve it

For further information, contact VALD via email

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