

AIRCHECK

Fit for tomorrow?

**The answer is
in a breath**



The fitness market is changing. Health awareness and customer demands are growing. Only those who can offer top level health services are able to hold their position in this evolving market.

Keeping pace with trends

Competent metabolic exercise testing for health, sports and athletic clubs

The fitness market is reporting a boom in professional testing and consultation all around physical performance. With a quality offer, you can position yourself as a competent health services provider and can develop new lucrative target groups.

The success of exercising outcome must be measurable – this applies to competitive sports as well as to the fitness market. You generate exercise schedules, coach and motivate your clients, and evaluate their exercising outcome. But are you able to provide detailed evidence of the entire progress? Can you document your clients' long-term achievements and convincingly justify changes of their exercise schedule?

Modern methods of metabolic exercise testing must fulfill four basic requirements:

- **Simple, comfortable application for all test persons**
- **Objective, reproducible results including goal-orientated evaluation capabilities**
- **High cost-efficiency coupled with dependable technology**
- **Low operating costs**



Now there is a unique, straightforward product available, allowing you to analyze the most important parameters of physical performance and to control physical training accordingly – not only for competitive sports, but also in the field of health, fitness and rehabilitation.

The air that you breathe

Metabolic exercise testing – the precise way to measure physical performance

Metabolic exercise testing analyzes gas exchange under physical exertion. The chemical composition of respired gas, combined with other easily measurable cardiac and pulmonary parameters, provide significant information to other aspects of maximum physical performance, fat burning, anaerobic threshold and resting metabolic rate.

The test procedure is simple and takes less than 20 minutes (incl. preparation) on a bicycle ergometer or a treadmill. In the process, the composition of respired gas and all cardiac and respiratory parameters are recorded. The uniqueness: energy metabolism is not only calculated, but measured precisely and absolutely individually. This even convinces the most discerning clients.

The world leader in mobile metabolic exercise testing can now offer a technique that you can utilize in your health, fitness or athletic club without requiring any special medical education. At the same time it is satisfying the demands your clients have on advanced exercise testing equipment.

Metabolic exercise testing – sounds complicated

The AIRCHECK is simple

Our complete system for gas exchange analysis allows you to perform metabolic exercise tests requiring minimum floor space and a low investment. The superior technology of the AIRCHECK has its roots from the field of medicine and competitive sports. It was specifically adapted to meet the requirements for application in health, fitness and athletic clubs.

We have simply consolidated many years of experience in gas exchange analysis from the field of sports medicine and designed a compact and simple high-performance system. The result is:

The **AIRCHECK system** consisting of

- **AIRCHECK device**, our handy metabolic exercise testing device.
- **AIRCHECK software** for the comprehensive evaluation and management of all data.





The success of exercising outcome must be measurable. This is the only way to convince your clients of your competence while offering exercising individuals new, long-term perspectives in their health, fitness and sport activities.

Are YOU fit for tomorrow? Because your clients want more

With AIRCHECK, you are investing into the future; competent analysis is the key to an improved exercising outcome and efficient customer retention.

- **YOU** secure a distinctive position as a modern health care provider.
- **YOU** prove quality and competence while boosting your image.
- **YOU** address your services to a wide range of audience: obese individuals, health-conscious persons, middle aged persons (50+), top athletes and many others.
- **YOU** create new sources of income.

- **In your facility** you utilize our portable system in a versatile, individual and cost-effective way.
- **As a physiotherapist** you use the AIRCHECK predominantly for training therapy.
- **As a personal trainer** you simply pack the AIRCHECK into its case and take it along to your clients.

Use the AIRCHECK for initial metabolic assessments as well as for continuous exercise quality checkups. You can provide your clients with perfect evidence on their current physical condition, their desired exercising outcome and ideal exercising schedules in only four steps:

The AIRCHECK

Metabolic exercise testing on par with the pros



Step 1 | Select Test Person

Before beginning a test, you enter the test person's data or you select an already existing test person from the database.



Step 2 | Prepare Measurement

The software automatically proposes the most suitable workload profile for this test person. Of course you can manually make adaptations to this profile.



Step 3 | Perform Measurement

For monitoring purposes, all parameters including predicted values are displayed during the course of the test.



Step 4 | Evaluate Results

Depending on the test performed, the software delivers you results, explanations and recommendations as well as exercise schedules accordingly.





Thanks to many years of experience in metabolic exercise testing in the field of sports medicine, we can now offer you practical, innovative solutions for a diversity of applications in the health and fitness sector.

Precise testing for discerning clients

The AIRCHECK makes it easy for you

Maximum exercise testing for the energetic

With a maximum exercise test you will be able to approach top-performance-oriented and health-conscious clients. The AIRCHECK software allows you to exactly determine the personalized heart rate zones for optimal exercising. The foundation for this approach is the analysis of the exercise-dependent oxygen consumption and the determination of the anaerobic threshold. Top-performance-oriented and health-oriented exercise schedules can then be developed on the basis of these results.

Fat burning testing for beginners and for weight reduction

An effective, personalized fat burning exercise schedule simplifies the monitoring of weight reduction and is based on the metabolism of fats and carbohydrates under progressive increasing physical exercise. The heart rate zone for optimum fat burning is determined individually. Two target groups can be approached with this test: the beginner that wants to specifically exercise in the basic zone and the obese individual that wants to reduce weight by specifically exercising in the efficient fat burning zone.

Resting metabolic rate testing using indirect calorimetry

The resting metabolic rate provides information on the energy balance of your client. For this, energy metabolism at rest is measured as the basis for a controlled calorie intake regime. This allows you to establish a nutrition plan for your client to achieve a continuous optimal weight.



Parameters alone are of little value. Only the AIRCHECK with its high-performing and easy-to-use software provides you real added value.

It could not be any simpler

AIRCHECK software

The AIRCHECK software is the link between the AIRCHECK device and your competence in exercise supervision and client counseling. The most striking features of the three available test modules are their ease-of-operation, high reliability and convincing data presentation.

AIRCHECK – the user-friendly software

Module AIRCHECK Maximum Exercise Test

Determination of maximum oxygen consumption, anaerobic threshold and heart rate training zones

Part no. 720-09-023

Module AIRCHECK Fat Burning Test

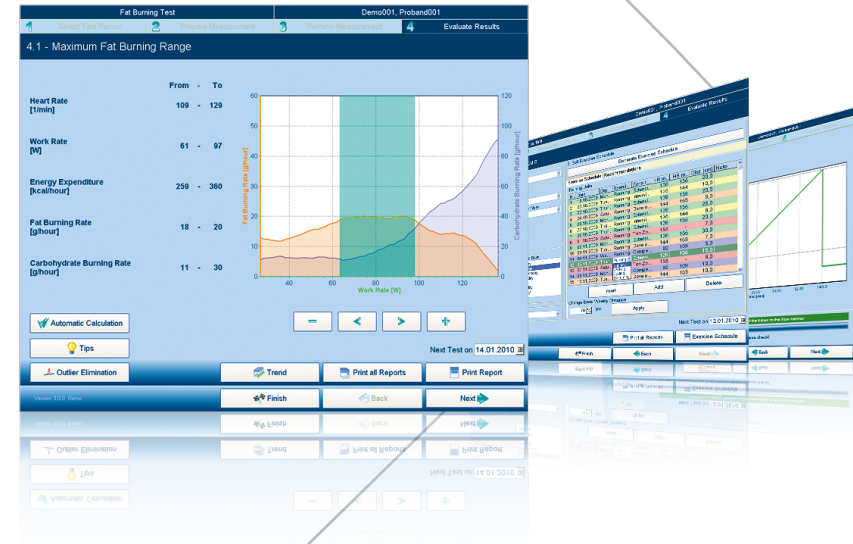
Determination of exercise-dependent fat and carbohydrate metabolism, optimal fat burning heart rate zone; monitoring of weight reduction

Part no. 720-09-024

Module AIRCHECK Resting Metabolic Rate Test

Determination of the individual resting metabolism and comparison with normal values; basis for nutritional counseling

Part no. 720-09-025



Software options

- AIRCHECK Exercise Scheduler
- AIRCHECK Test-Trend-Presentation
- AIRCHECK Export/Import
- AIRCHECK System-Statistic
- AIRCHECK THEDEX-Interface

Part no. 720-09-021

Part no. 720-09-030

Part no. 720-09-028

Part no. 720-09-029

Part no. 720-09-033

THE GOLD STANDARD
FROM PROFESSIONAL SPORT



A metabolic exercise testing system doesn't really need to be large in size. The AIRCHECK comprises perfect analysis technology, straightforward software and comfortable servicing. We make it easy for you: install it, get started and secure your success.

Small but powerful **AIRCHECK**

Easy to calibrate metabolic exercise testing system

The AIRCHECK device is the core sensory element of the AIRCHECK system. It is the component that eases testing for you and your client: Your client can nearly move around freely during testing and you can profit from its compact size, easy handling and high cost-efficiency.

- O₂ and CO₂ analysis for the utmost accurate determination of the anaerobic threshold and fat metabolism
- High-precision analysis
- Easy handling and high hygienic standard through CORTEX disposable volume sensor and personal-use mask
- Garmin belt for heart rate determination

The AIRCHECK is either available as a basic set including one software test module of your choice and for the use with an existing bicycle ergometer or treadmill and computer, or as a complete set including a bicycle ergometer, a notebook, a color printer and a CORTEX fitness system cart.

AIRCHECK system

Part no. 250-01-007

»Install and get started« is what we expect of a customer-friendly system. We are your single-source provider for all AIRCHECK components and services.

You want more? Options

Treadmill or Ergometer

Dependable metabolic exercise testing relies on an optimal workload control in a sport-discipline-specific way. That is why we control the workload device via our AIRCHECK software: either according to the pre-determined workload profile or based on the profile you have specifically generated for your client. This assures reproducible results while helping you monitor the success of your client's exercise outcome. For the AIRCHECK, we can offer you state-of-the-art and recognized

- Treadmills or
- Bicycle ergometers

from well-known manufacturers. Please ask us and we will gladly forward you more information.

Notebook and color printer

Our AIRCHECK software operates with

Microsoft Windows 7, Windows XP and Vista. If you wish, we can offer you a notebook including a compatible operating system and color printer.

CORTEX fitness system cart

To give you more flexibility while performing an AIRCHECK, we can integrate upon request all components into our attractive system cart. This convenient, self-contained working station will allow you to move easily between the room for metabolic exercise testing and the separate room for resting metabolic rate testing.

Part no. 821-00-020

Calibration Kit

Complete calibration equipment supply kit, including all accessories needed to perform routine calibration procedures, ensuring a long-time maximum performance of CORTEX metabolic exercise testing systems.



We want you to be successful. To simplify your work with the AIRCHECK and to secure your return on investment, we can provide you various additional services.

Value-added services and more

For you

We offer:

- comprehensive marketing material
- attractive financing
- extensive onsite product training
- software updates
- onsite installation
- onsite and hotline service support
- seminars

Sales and technical service are provided by competent, authorized CORTEX sales partners located near you. For us, competence in metabolic exercise testing does not only stand for technical innovations, but it also stands for intensive partnership – you can depend on us.

Innovative solutions for metabolic exercise testing

That's what CORTEX stands for

With our two main product lines, METALYZER® and METAMAX® and its respective software, we focus on mobile and portable metabolic exercise testing for the field of medicine and sports science.

Worldwide, our solutions for metabolic exercise testing are applied for a wide range of applications: from basic research to competitive sports. Physicians, therapists and coaches successfully use our systems in the fields of sports medicine, cardiology, pulmonology, occupational and rehabilitation medicine as well as in exercise and sports science. Our participation in the science-based Mount Everest expedition, the »Xtreme Everest« project (2007), and our involvement in Olympic training

centers, shows our competences in metabolic exercise testing, even in extreme situations and high-level requirements.

Development, production and administration are located at our head office in Leipzig, Germany. From there we distribute our solutions for cardiopulmonary diagnostics to all continents via a worldwide network of local sales and service partners.

As our customers confirm, it takes future-orientated innovations and cooperative thinking to become a market leader. It would be our pleasure to send you references upon request.

Please feel free to contact us.



Your local CORTEX partner

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