


Electrical drive technology - newly defined

Electrical drive technology from ARADEX for tasks that were unsolvable until now



Twenty years ago ARADEX was already rethinking the principles of motion via electrical energy. The result was the VECTODRIVE® technology and was first applied in 1990 to a laser cutting machine from ELCEDE GmbH, Kirchheim/Teck. Productivity was increased by 56 % due to the VECTODRIVE® drive amplifiers.

ARADEX has consequently extended this technological lead. Today, together with our clients from industries such as machine and plant construction, test plants, automotive engineering, tool construction as well as the recreational segment, we realize tasks with electrical drive technology that often are considered unsolvable.

Successful solutions are also possible in your market. How? Find out on the following pages...

The next step to your solution



Sound the borders of technical feasibility with us. ARADEX offers you a reliable and practical multidisciplinary team with visionary thinking.

Using our high-performance VECTODRIVE® technology we create long-lasting successful solutions within short time frames.

So-lu-tion, [the art of creation]

From today's solution to tomorrow's innovation

Do you expect more from your electrical drives? The key processes are missing the required performance?

With VECTODRIVE® you are able to combine opposite attributes:

- Highest performance and long lasting availability
- Extremely dynamical power steering and sensitively controlled low in harmonic power current profiles
- High-resolution compilation of drive parameters with no additional sensors required
- Furthermore, with our services you determine the feasibility and efficiency of a project dependably and exactly.

The result: a client specific solution that works.

You have a technical vision, but with current electrical drive technology the realization is unimaginable? Together with you we realize even those assignments.

We implement your vision with ideas and know-how. Powerful simulation tools deliver fast and dependable information for checking your application under economical and technical terms. Subsequently, our professional project management enables fast and perfect implementation of your vision into new processes and unique products.

With ARADEX you create real and lasting innovations that change markets.



“As early as 1990 we achieved an increase in productivity of over 50 % in laser cutting by implementing VECTOCUT® drives. Since then, we have worked with ARADEX to secure continuous improvement. With the introduction of the new Linux-based drive generation VECTONUM® in 2008, we have set milestones in our market.”

Marc Butenuth, General Manager, ELCEDE, special-purpose machines, Germany



“The idea of a solely electromechanical tool clamping system was perceived as being impossible. With ARADEX, MAPAL transformed this idea into an industrial product: Clamp-by-Wire.”

Dr. Jochen Kress, member of the Board, MAPAL, precision tools, Germany

Per-for-mance, [real efficiency]

Performance perfectly tailored to suit you

Benefit from our know-how and combine these with the VECTODRIVE® technology for successful solutions.

The VECTODRIVE® servo amplifiers show their benefit even in borderline technological areas. They offer many advantages, from maximum precision to process force monitoring. The spectrum ranges from 10 W to 5 MW.

Over 2000 installations with ten thousands of drives are already working dependably – worldwide.

With our engineering services we accompany you during the complete process: starting with the development onto the initiation of your application and up to training your team.

In workshops we compile first approaches. The project team then delivers precise information on feasibility. We offer detailed dimensioning so you can make plans. Test assemblies give usable results fast.

With our professional project management complex individual solutions as well as cost-optimized products for volume applications with quantities in hundreds of thousands are possible.



“What impressed us when working together with ARADEx, was the fast project handling, the short training time required for the software system and the considerably higher performance of VECTODRIVE® technology. The combination of these factors enabled us to produce a solution that immediately won over our customer.”

Karl Gerblich, General Manager, Genotec, engine testing bench construction, Germany



“In 1993 we purchased our first laser cutting system which was controlled by a VECTONUM® controller. We made this decision based on the tremendous difference in performance and competitive advantage this machine gave us over any other that was available. This advantage is still realised when compared to new machines twelve years later.”

Richard Morrison, General Manager, Synergy, printing and packaging technology, USA

Val-ue, [long term benefit]

Protect your investments and your know-how

We assume responsibility. As an owner-managed company our decisions and our action are focused on long term success. Success for our clients, our team and thus for our company.

ARADEx is financially sound so we will be there for you even in the future. An equity-to-assets ratio of over 70 % ensures certainty and gives perspective.

You receive the solutions that function as required. In the 20 years of our company's existence we have kept all our commitments – for over 2000 delivered installations worldwide.

Protect your innovations against reproduction and imitation with ARADEx technology:

- You can encapsulate your technological functions with the help of software and thus protect it from access by third-parties
- Unauthorized duplication of your application is not possible. You decide which customer uses which technology function.
- As ARADEx serves a wide spectrum of industries, every solution can be used exclusively
- Our products are only distributed to contractual partners



“The open and effective structure of ARADEx arrangements allows us to implement our own complex control strategies without requiring knowledge transfer of our core know-how to ARADEx. This greatly maintains our independence, at the same time enabling us to completely focus on our actual tasks and thus secure our competitive edge.”

Christof Klesen, General Manager, Mecatronix, magnetic bearings, Germany



“ARADEx offers us specially modified VECTODRIVE® drives that are integrated in the existing drive system optically and technically. The VECTODRIVE® high performance and efficient reproduction protection has guaranteed us a technological and economical headstart for over 10 years.”

Dr. Klaus Peiffer, CTO, Reishauer, gearwheel grinding, Switzerland

Com-mu-ni-ca-tion, [the interchanging of ideas]

Creating success together

As our client you are the center of our thinking and action. Together we solve challenges fast and effectively. Right from the start you are involved in finding the solution. After all there isn't anyone who knows your application like you do. Thus you make sure that your requirements, your ideas and your knowledge are ideally incorporated.

We do not like empty promises. For this reason we built the ARADEX center for client communication and user training. Here you have the room you need for your ideas and for communicating with our specialists.



“By communicating with ARADEX we continuously improved the quality standards and flexibility of our production machines. The knowledge about our application combined with ARADEX’s know-how on drive technology – this way our clients receive Kocher+Beck punching tools of the highest quality.”

Peer Beck, General Manager, Kocher+Beck, punching dies, Germany

Communication is essential in developing successful products and solutions.

We assign reliable and competent contact persons who accompany you long-term. Their motivation and expertise ensures a successful project progress. Direct communication and prompt decisions lead you to your goal quickly and safely.



“Together with ARADEX a battery simulation for hybrid and electro vehicles was developed in just five months – from placement of order up to installation at the end customer. The result: Battsim, the highest performing system on the market.”

Dr. Wilfried Rossegger, General Manager, Kristl, Seibt & Co, test plant construction, Austria

Your success – thanks to the technological advantage



Your possibilities with ARADEX:

- Creative workshops
- Feasibility studies
- Test with mockup configuration
- Dimensioning
- Design
- Construction of prototypes
- Series engineering
- Commissioning
- Worldwide support during installations and during production
- Field-tested hardware up to 5 MW

Experience the difference!

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The management team today, company founders 20 years ago:

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basic research,
R&D

Thomas Vetter,
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CEO

Klaus-Dieter Dünnebeil,
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