

Technical research and development

It is well known, that the most effectively developing countries are those, which expends the most for research and development. Our company contributed to this domestically recognized and supported endeavor, when established such, enthusiastic young research-engineers containing, expert team and R&D laboratories, that may have elected the technical research and a development as his head activity.

During its 30 year long history , Procontrol have always belonged to the line of those few domestic firms, which represents themselves on the international market with their self-developed products, but the exports of the intellectual product and innovation are also considerable.

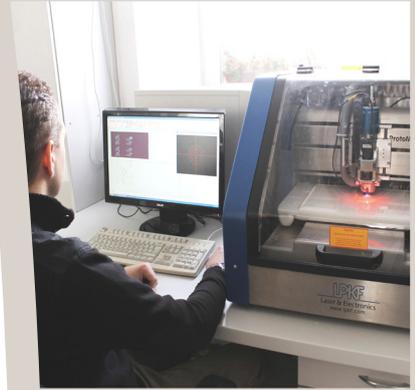
Our company is active in electronics and mechatronics, precisely in the following R&D directions:

- searching for new ways in the area of engineering science
- searching for new ways in the area of software development
- searching for new solutions in the area of industrial product development
- development of prototypes
- development of new devices
- development of new production technology solutions

The starting impulsions of the R&D are own ideas, own concepts for the formation of innovative products, or exterior customers „brought” ideas.

A single R&D project - that is the birth of a new solution, system or product - consist the whole process from the idea through prototype completion and mass production until realization, and consist a lot of steps:

- Professional fixing of the starting idea (at exterior costumers with official secrecy and inventor declaration).
- Making of feasibility studies, with a technical and economic analysis
- Survey of a novelty examination and the present development of the area
- Tracing of rival products, market analysis
- Processing of the exploitable scientific results
- Resolution of the project to subtasks of research and development
- Definition of optimized personal and objective conditions onto the task (teams, devices, environment)
- Project budget, and making of a time plan
- Obtaining the finances from an inner or exterior source
- Purchase of devices, substances are necessary to the R&D task
- Coordinated development of subtasks (hardware, software)
- Measurement of experimental models, board models
- Analysis of the results, designation of actually optimal directions and modifications
- Planning of a prototype based on the results of the subtasks
- Production and documentation of a prototype



The created innovative product may get to market at this phase already, example for manufacturers, but the necessary resources of the production and realization are at Procontrol disposal. At this stage the following subtasks come into the foreground:

- Product planning, design
- Production of samples, judging and measurement
- Market introduction, product presentation, advertisement
- Production planning, harnessing
- Pilot lot manufacturing
- Mass production
- Installation, operation, maintenance services

R&D and a merchandising activity may consist of significantly fewer steps than the listed ones in case of small projects, plain products, and some may end successfully under even few days.

Procontrol undertakes the full management of complex research-developmental projects, applications and their realisation, or single R&D tasks for inland and foreign customers.

Furthermore we undertake consultancy, the analysis of private person's ideas and their realisation.

The real engine of the R&D activity is the brain stormings of the educated, creative engineers, but the followings gives an efficient support:

- modern CAD-CAM technology
- integrated infromatics system
- advanced designer-, modeller-, editor softwares
- precision instrument park
- high-tech lab equipment

The following serves for the express production of modells and prototypes:

- precision laser cutters
- prototype maker and mounter robot production lines
- 3D printer, CNC metalworking and cutting machine
- 24000 component depositories

The production works by cautiously regulated, ISO 9001 quality management system attested processes.

R&D related questions and requests are welcomed on the KF@procontrol.hu email address.

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