



Heat Pump

2005–2006

MANUFACTURER: PZP Komplet, a.s.

Internal unit of the heat pump brings original partition of the sheathing case. This enables to **reduce the assembly time** and to **make easier the access** to the control electronics in the case of service need. **Unification** of the sheathing parts makes the discrimination of the particular power lines transparent.

Outdoor unit appears to be compact and up-to-date product and aesthetically tunes with the contemporary architecture, in neighbourhood of which it is most often installed.

The new solution of the shape brought also **improved warehouse logistics**, supported the **penetration of the EU market** and contributed to the **significant increase of the turnover**.

COMPETITION: Outstanding product of year 2007

AWARD: Excellent industrial design

International jury statement:

"Concise clean solution taking in account the unification upgrades the product appearance above the industrial machinery category. Simple and clever design follows the function in an elliptic graceful line."



MARTIN
TVARŮŽEK
DESIGN



**MARTIN
TVARŮŽEK
DESIGN**

Atelier

MARTIN TVARŮŽEK DESIGN

Established in 2000 in Brno

13 years of the business experiences

machine and device design

transport design

medical devices design

product design

interior equipment

Martin Tvarůžek Design

Hněvkovského 65

617 00 Brno

T +420-543 529 388

M +420-602 588 078

martin@tvaruzekdesign.com

www.tvaruzekdesign.com

VISION. Our activity stems from the Czech industry tradition, from the confidence in ambitions and innovation potential of Czech manufacturers and from the trust to our abilities.

Each project we participate in starts with the careful listening to the client's motivation, by the study of his commercial-marketing strategy and problems he deals with.

Often we help by our pro-active approach to the task identification to develop this strategy. We count on the close link and communication with all investor's departments.

Thanks to the perfect knowledge of many technological procedures, to self-discipline and managerial experience in the field of design, we are able to finalize each project up to the implementation in batch production.

We collaborate with many experts from the different fields of the research, design, marketing, financing of both prototyping and production. Hence the aesthetics is only one among many features according which our activity is assessed.

FACTICITY. We help our clients to penetrate the markets abroad and to reach the rapid turnover increase.

We have contributed in many cases to the decrease of the production costs and hence created the space for the improved facilities of the production and to the utilization of the high quality materials without the increase of the selling price. Economies represent also either the increased profit or the tool for further innovations financing to the preservation of the permanent competitive advantage.

Thanks to the former experience in the given industrial field we are able to influence positively the user friendliness, assembly and/or service time of the designed equipment.

Also we are able to improve the warehouse logistics and the outsourcing procedures and distribution.

REFERENCES. Adast Systems, Viadrus, Alois Dallmayr, Protronix, Reemtsma, PZP Komplet, BTL Medical Technologies, MBG, Exxonmobil, CSO Ostrava, Eden Czech, Chirana X-RAY.

ATELIER FOUNDER. Martin Tvarůžek, M.A., successfully studied High School of Applied Art in Uherské Hradiště, and later the University of Applied Art Prague, dept of Industrial Design in Zlín.

—

He is involved professionally with Industrial design since 1996.

—

Between 1998 and 2000 he worked as a sales manager of Městský Mobiliář Cité for foreign markets. Here he gathered rich experience with the utilization of design as marketing tool in the penetration of foreign markets and in the generation of the new trade opportunities.

—

He develops this know how during all his profession, and hence offers to his clients a significant support in the building of their trade-marketing strategy and the approach to their customers.

—

His experience with the trade negotiations involves the deals in UK, Norway, USA, Sweden, Austria and Hungary.

RECORDS AND AWARDS.

1999 – National award for design competition:

Outstanding design – Luminometer

Outstanding design – Hemodialytic monitor

—

2007 – Outstanding product of year competition:

Outstanding design – Heat Pump

Ecology design – Heat Pump

Outstanding design – Fuel dispensing pumps

—

Selected products are items of the collection of National Technical Museum Prague.

—

Representation in the specialized publications on Czech design, interviews and papers in the journals.

LECTURING. Martin Tvarůžek has an External lecturer status of CzechTrade agency, delivering seminars on “Industrial design as a tool of competitiveness”, “Industrial design and its support of the penetration to the markets abroad”, “Industrial design and its significance for industry”.

—

He presents his papers at the seminars and conferences aimed to the export strategy of corporations, expected development of market segments, innovations, productivity growth in the industrial companies, etc. He is lecturing for the Konference Ltd, company collaborating with the regional chambers of commerce.

—

Within the frame CzechTrade Agency he represents Czech Republic in the international design associations BEDA and ICSID.

CIDAI — CZECH INDUSTRIAL DESIGN AND INNOVATION.

This multidisciplinary association is an export alliance of CzechTrade Agency.

—

The aim of the alliance, head of which is Martin Tvarůžek, is to spill over and support the design as a key innovation activity, and to support its role in industry, economy and in generation of the cultural wealth of Czech Republic.

—

CIDAI associates the subjects – both persons and companies active in the design, production and financial segment etc, who realize the contribution of the design and its significance for the society.

—

Alliance organizes subject seminaries, collaborates in the common design and the further support of the industrial design profession. It influences pro-actively national strategy of the industrial design support.

UNIE PROFESIONÁLNÍCH DESIGNÉRŮ ČESKÉ REPUBLIKY.

Martin Tvarůžek zastává v této organizaci pozici viceprezidenta.

Fuel Dispensing Pump

2004–2007

MANUFACTURER: Adast Systems, a.s.

In this case the new design solution has influenced quite a wide scale of fields and processes of the manufacturer.

The identification element of the newly designed assortment of fuel dispensing pumps is the **breach of the hose console** to the shape of the letter “v”.

This breach has significant impact on the rigidity of the hose module and allowed to use thinner sheet for its production. This contributed to the **reduction of the production costs and decrease of the dispensing pump mass**, and now it is possible to produce the dispensing pumps from the higher quality metals without the increase of the selling price.

The new shape solution brought the **annual increase of the turnover** of the order of several tens of percent points, and higher quality material allowed the **prolongation of the guarantee period for 12 months**.

COMPETITION: Outstanding product of year 2007

AWARD: Excellent industrial design

International jury statement:

“Set of equipment built on the segment unification features exquisite style of the shape design. Formed element of profiled parts combines functionality with aesthetic appearance in an outstanding way.”



MARTIN
TVARŮŽEK
DESIGN





The luminometer became popular in the field of Czech industrial design, it was presented at several exhibitions and papers on design.

Luminometer

1997–1998

DESIGN: Ing. Jaroslav Svoboda

PROTOTYPE: Martin Tvarůžek

Luminometer has been developed and its prototype manufactured for the laboratory at Masaryk University Brno under the head of project Prof MUDr Martin Klabusay, PhD.

The instrument serves for the detection of the light signal, used in the various methods of molecular and cellular biology and immunology. It measures the concentration of calcium ions within cells. The signal is further digitally processed and analyzed.

This project represents one of the first authors implementations, but it is **exceptional by its scale and author's responsibility**. The aim of the activity was not only industrial design of the instrument, but also its structural design, manufacturing of prototype and job-order manufacture of particular electronic parts in Japan.

The project success is based on the several months study stay of the author at the Friday Harbor Laboratories (University of Washington) in USA, where the luminometry with utilization of Ca^{2+} regulated proteins has been studied.

COMPETITION: National competition in design 1999

AWARD: Outstanding design

International jury statement:

"This unique solitary object responds by its shape the oneness of the instrument in the context of common laboratory equipment."



MARTIN
TVARŮŽEK
DESIGN