



ZARGES – Your partner for

effective solutions

At ZARGES decades of experience in the development, design and implementation of individual projects right through to the volume production stage have generated unparalleled skills in working with aluminium.

ZARGES offers you a comprehensive product portfolio that not only covers highly-specialised applications but also meets your professional requirements in terms of everyday business and industrial operations.

What you get is a fund of accumulated know-how in relation to access technology and logistics.

The same goes for scaffolding, elevators and construction lifts, transport and storage containers, light alloy trolleys, housings for electronic devises and the Medical.Systems sector where we have gained the respect of discerning customers throughout Europe.

At ZARGES we put safety and commercial viability first.

Our development processes and products comply with the current national and international standards (certified to DIN EN ISO 9001-2000).

The wide range of product lines and variety of fittings that we offer add up to a guarantee of outstanding cost-effectiveness.

$\label{lem:more innovation - for ZARGES an uncompromising standard.}$

ZARGES volume products are constantly undergoing further development and improvement. However, if a product does not meet your requirements we shall be happy to work together with you on site to come up with the best possible solution.











ZARGES PROFI FORUM presents: the best bespoke solutions from ZARGES

ZARGES plan, develop and produce on behalf and in co-operation with their customers projects that encompass a very wide range of requirements. The following case study reveals in detail a complex assignment and the effective solution provided by ZARGES:



Safety and Quality – even under the harshest conditions.

Development of a transport and storage container for mobile EDP workstations in the Congo.





1. The Customer:



The Zetes Group in Brussels is one of Europe's leading suppliers of identification and mobility solutions linking the automatic identification of goods or people with mobile communication facilities and data processing.



ZETES Pass is a business unit within Zetes that specialises in bio-metric recognition systems. In May 2005 the company was successful in the award of a United Nations tender for the supply of 10.000 mobile, bio-metric registration systems to the Democratic Republic of the Congo.

Contract background: in order to prepare for the elections scheduled to take place in the Congo this year, the first requirement was to compile a register of the electors. The Democratic Republic of the Congo is, in terms of the area which it covers, almost seven times larger than Germany – and this meant that 10.000 mobile EDP workstations would therefore be needed to ensure the fastest possible registration of the region's population. Because the country does not have a guaranteed power supply, it was necessary for each system to be capable of operating for eight hours without mains power. A further crucial point was the fact that the poor condition of the majority of roads (only a few hundred kilometres are asphalted) made robust transport packaging essential.







2. The Mission:



Zarges' commission from Zetes was to provide secure packaging for the 10.000 workstations – in each case consisting of a laptop, a printer, a fingerprint scanner and a webcam to take passport photographs, as well as consumables and additional batteries.

Reliable protection for the commercial standard EDP components against vibration and impact during transport as well as against damp, dust, heat and even theft was of paramount importance. In addition, the mobile workstations would need to be set up quickly so that they were ready for use within as short a time as possible.





A logistics challenge: production of the 10.000 "Voters' Kits" in Belgium



Ready to be shipped by air to Kinshasa

3. The Solution:



Together with our partner, ISL Schaumstoff-Technik GmbH – one of the largest manufacturers of foam inserts in Germany – ZARGES managed to find a timely and successful solution for this tricky task. ISL fitted the K450 cases with moulded foam inserts that were precisely tailored to the components used.

The moulded foam insert, made from expanded polypropylene (EPP), was made up of two sections:

- The bottom section which was the container for consumables such as paper, ink cartridges, blank CDs as well as the extra battery remained permanently in the aluminium chest.
- The top section containing the actual workstation was constructed in the form of a tray. This meant that it could be set up and dismantled in a very short space of time.
- The use of the moulded foam construction section made it possible to deliver the large number of items involved within a short-term period of 8 weeks as agreed.



4. Special Technical Features:





- Using commercially available electronic devices in a tropical climate calls for a reliable cooling system to be incorporated. For this reason, when it came to the design of the foam insert, the engineers took into account not only stability but also made provision for generously proportioned air supply and discharge channels.
- In the interests of streamlining the installation and wiring of the components, an easily accessible cable conduit was fitted.
- A plug accessible from the outside of the case enabled the battery to be charged with the lid closed. This meant additional protection against manipulation or theft.
- The development work on the foam insert was carried out with the aid of 3D CAD drawings. The resulting improvement in transparency made it possible to reduce the development time.





To ensure transportation to Kinshasa on time, an Antonov was used in addition to 4 Type B-474 aircraft.



An average of 1.700 sets per aircraft were loaded for shipment.





Transport conditions in the Congo mean higher expectations in terms of packaging quality.



Most of the goods were transported via waterways.

5. Interview with Johan Rommelare, Zetes Project Manager:

Z-Profi Forum: What were the most important reasons for choosing ZARGES as far as Zetes were concerned?

Johan Rommelare: First of all, schedule reliability. We

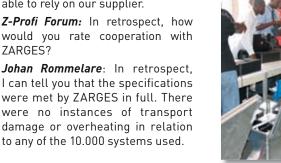
were under major time pressures on this project. It was essential for the first 2.500 systems to be available in Kinshasa within four weeks of receipt of order and for all 10.000 kits to be there after a further four weeks. We were able to comply with this thanks, too, to the fact that we were able to rely on our supplier.

would you rate cooperation with ZARGES?

I can tell you that the specifications were met by ZARGES in full. There were no instances of transport damage or overheating in relation



Operator training in Kinshasa.



Data logging independent of power supply.



ZARGES PROFI-FORUM:

More Questions, More Ideas, More Solutions



What is the ZARGES PROFI-FORUM?



The Profi-Forum is a meeting point and information platform provided by ZARGES for industry professionals. The Profi-Forum presents successful ZARGES projects and gives you an insight into their implementation, technical details and special features. The Profi-Forum offers you the opportunity to contact the ZARGES experts direct so as to find the most appropriate solution for you.

Who is in the ZARGES PROFI-FORUM?



The Profi-Forum is made up primarily of our ZARGES specialists who are standing by ready to make their experience and knowledge available to you – and, of course, our customers, for whom we have carried out a large number of successful projects over many years.

What does the 7ARGES PROFI-FORUM have to offer?



The Profi-Forum puts forward a selection of projects in the form of case studies. It offers you the opportunity to obtain detailed information on the particular project and to analyse the extent to which your own requirements are comparable. It provides you with a direct link to the ZARGES specialists with whom you will be able to discuss and plan your own individual requirements. This means you will have the opportunity of seeing just how we operate at ZARGES. Why not join us?

Where can I locate the ZARGES PROFI-FORUM?



- 1. On the Internet: www.zarges.com/profiforum
- 2. Why not request our information brochure "The Profi-Forum".







If you would like to know more:

On our website you will find at: www.zarges.com/profiforum more interesting examples and CASE STUDIES that will explain exactly how we approach our work.

We are also happy to advise you personally:

Just give us a call on the following number: 0881-687-131

or email: profi-forum@zarges.de



If you would like to find out more about ZARGES products, please request the following documents:

Logistics with System

The specialist department dealing with packaging, transport and storage applications in the industrial, service, craft and trade sectors.

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Logistics Equipment – Special.Systems:

The department specialising in military packaging, electronic housings, hazardous goods packaging, collapsible containers, containers with internal fittings, large containers and specials.

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