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**POLY
RACK**
TECH-GROUP



MEDICAL TECHNOLOGY

DEVELOPMENT, TECHNOLOGY, KNOW-HOW, PRODUCTS, QUALITY

Products for prevention and emergencies on land, at sea or in the air.

Patients all over the world trust in the proper function of medical components and systems.

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PREVENTION / EMERGENCY

Products for prevention and emergencies on land, at sea or in the air.

LINE-UP Patients all over the world trust in the proper function of medical components and systems. Justifiably the companies of the medical industry have high demands concerning quality and reliability to its suppliers. Our customers supply the market with high-quality devices which are for example used in the areas of emergency ventilation, intensive care, patient monitoring, surgical procedures and inpatient treatment. The POLYRACK TECH-GROUP supplies parts or assemblies which built the mechanical device basis or which are used

as design covers. Early supplier involvement is not only a phrase for us!

With our experience of more than 40 years in manufacturing and technology we accompany our customers from the early development stages on. We consult you across technologies in sheetmetal, plastics and die cast components, since the best solution often develops out of the mix of these technologies. The finishing of your parts with technical or decorative surfaces completes our portfolio.

KICK-OFF

QUOTATION
PHASE

QUOTE

DESIGN
PHASE

TRANSPORT VENTILATOR



Consisting of one- and two-component thermoplastic injection molded parts as well as sheetmetals, which are mounted as mechanical sub assemblies.
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PRODUCTS FOR THE COMPREHENSIVE ANAMNESIS OF DISEASES

DEVELOPMENT & PROTOTYPING We support you in all phases of your development process related to the technical layout and construction of your mechanical assemblies as well as by providing advice across potential manufacturing technologies from our portfolio.

The production of the first prototypes and advanced integrational samples for the verification of the functionality complete our portfolio.

DESIGN & DEVELOPMENT TOOLS

- CAD System SolidWorks
- Thermal simulation
- Filling simulation and distortion analysis
- FEM calculation

DRAFT

ENGINEERING-
PHASE

FINISHED
CONSTRUCTION

PROTOTYPING-
PHASE

DEVELOPMENT & PROTOTYPING



CONTROL SYSTEM FOR A CT (COMPUTER TOMOGRAPH)

19" 5-slot microcomputer packaging system based on CompactPCI. The fully assembled functional unit is used as a control system for CTs.



ANALYZER FOR BLOOD DIAGNOSTICS

Foamed thermoplastic molded covers (TSG), including wet painting and sheetmetal parts, which are mounted to a mechanical sub-assembly.

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SURGERY / INTENSIVE CARE

Products to support the surgeries and monitoring of patients in intensive care.

DESIGN TO COST It is our declared target to define the perfect product solution considering all technical requirements as well as the planned cost structure, together with our customers.

DESIGN TO MANUFACTURING An important element for a successful product are stable and

technologically feasible processes which provide a reliable production. Therefore we consult you with an interdisciplinary project team, which is complemented by experienced production technologists. With this team we focus on the Design for Manufacturing from the first day of development until the series production.

SAMPLE PARTS

INDUSTRIALIZATION PHASE

SERIAL TOOL

QUALIFICATION PHASE

SURGERY / INTENSIVE CARE



INCUBATOR

Foamed thermoplastic molded parts (TSG) including wet painting, thermoplastic injection molded parts, laser welded sheet-metal assemblies.

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SYSTEM FOR THE TREATMENT OF (CARDIAC) ARRHYTHMIAS

Consisting of an aluminium die-cast part, extruded profile and sheet metal parts which are mechanically processed and powder coated.
Source: Stockert GmbH. All rights reserved.

AFTERCARE / HOME CARE

Products for home care and aftercare.

FIRST ARTICLE INSPECTION & QUALIFICATION

An important element for the product success are the implementation, first article inspection and qualification of efficient and stable processes which provide a long term production of your product. All production processes are initially qualified and verified upon the series start-up.

RELIABLE PRODUCTS IN SERIES

With our cross technological business model we are your competent partner for the long-term production of single parts, components and complex assemblies of your product in series. You decide what technologies and services you wish to use.

FIRST ARTICLE
INSPECTION

SERIES LAUNCH
PHASE

COMPLETION
SERIES LAUNCH

SERIES
PRODUCTION
PHASE

AFTERCARE / HOME CARE

AFTERCARE / HOME CARE

AFTERCARE / HOME CARE

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AFTERCARE / HOME CARE

AFTERCARE / HOME CARE



MICROCOMPUTER PACKAGING SYSTEM

For clinical applications based on CompactPCI.



PORTABLE PATIENT MONITOR

Thermoplastic injection molded parts in one and three component technology.

Source: Philips Medizinsysteme.
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PRODUCT HIGHLIGHTS

Dräger Babyleo® TN500

APPLICATION The Babyleo® TN500 IncuWarmer from Dräger ensures constant, optimal thermo-regulation in the open and closed care of premature babies and in the transition phase. Three synchronized heat sources protect the smallest patients from heat loss and promote their healthy development. The easy and convenient access to the Baby facilitates the daily work processes.

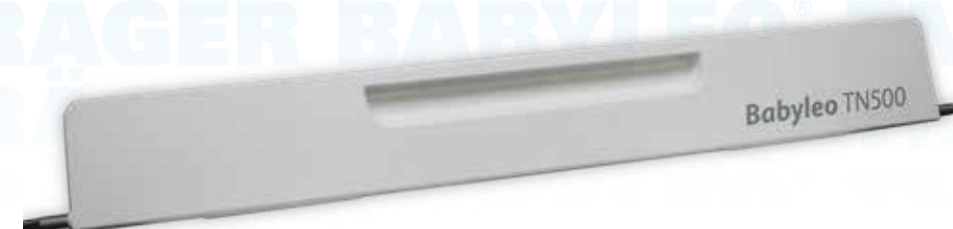
TECHNOLOGIES

- Sheet metal processing
- Fully automatic laser welding
- Galvanizing
- Milling
- Injection moulding
- Thermoplastic foam rubber molding (TSG)
- Wet painting
- Powder coating
- Printing
- Assembly

DRÄGER BABYLEO® TN500



LASER WELDING ASSEMBLY, INDIVIDUALLY GALVANIZED



X-RAY FLAP, FULLY ASSEMBLED

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TECHNOLOGY HIGHLIGHTS

Multi-component injection molding, aluminium die-cast, sheet-metal processing, surface treatment.

INTELLIVUE X3 PATIENT MONITORING

Philips IntelliVue X3 is a compact portable patient monitor that can be used in two different ways, offering smart phone-style intuitive operation and a scalable set of clinical parameters.

TECHNOLOGIES

The handle of the device is produced in 3-component injection molding. The component is produced in an automated 3-component injection molding process in one casting. The Insertion of pre-molded parts or manual insertion by personnel is not necessary.

SMARTABULATE SYSTEM

The SmartAblate® System is the market-leading solution for minimally invasive electrophysiological procedures in which the source of a cardiac arrhythmia is safely and effectively treated with a high-frequency energy source.

TECHNOLOGIES

The combination of different technologies from our service portfolio forms the mechanical structure of the product. The product is based on a sheet metal case with an internal frame made of extruded profile. The operating elements are housed in a hinged front made of powder coated die-cast aluminium parts.

TECHNOLOGY HIGHLIGHTS

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HANDLE INTELLIVUE IN 3C INJECTION MOLDING

CONTROL ELEMENT: ALUMINIUM DIE-CAST PART WITH SURFACE TREATMENT








Corporate Identity Design - the POLYRACK TECH-GROUP is the right contact for the design and implementation of your product image.

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CROSS TECHNOLOGICAL SYSTEMS PARTNER

Due to the technology crossing company concept POLYRACK distinguishes itself from the market and combines all different fields that are shown below.

 PROCESS DEVELOPMENT Plastic solutions Tool construction, injection molding	 PRODUCT- & SYSTEMS DEVELOPMENT Mechanical production Welding, laser robot, CNC punching, milling, etc.	 TECHNOLOGY & MATERIAL CONSULTING Extrusion solutions, cast Aluminum-, zinc-, magnesium casting
Electronics	<ul style="list-style-type: none">• Development and layout of circuit boards• Interface connection test for backplanes	<ul style="list-style-type: none">• Partially and fully assembled systems• Cable assembly
Surface Treatment	<ul style="list-style-type: none">• Wet painting• Powder coating	<ul style="list-style-type: none">• Silk screen, pad printing, HD printing• Electroplating
Mounting and Assembly	<ul style="list-style-type: none">• ESD-compliant assembly• Function and final testing	<ul style="list-style-type: none">• Quality control• Software installation and testing
Logistics	<ul style="list-style-type: none">• Packaging concepts• Global inventory support• Individual logistic concepts	

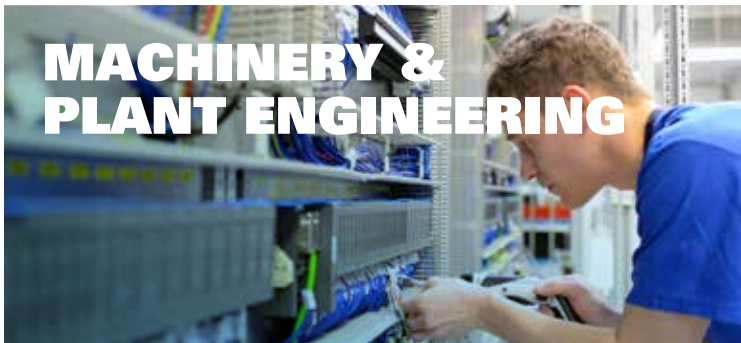


With our wide range of products we can always offer our customers the optimal solution across technologies.

Andreas Rapp



AUTOMOTIVE



MACHINERY & PLANT ENGINEERING



TELECOMMUNICATION



AEROSPACE & DEFENSE



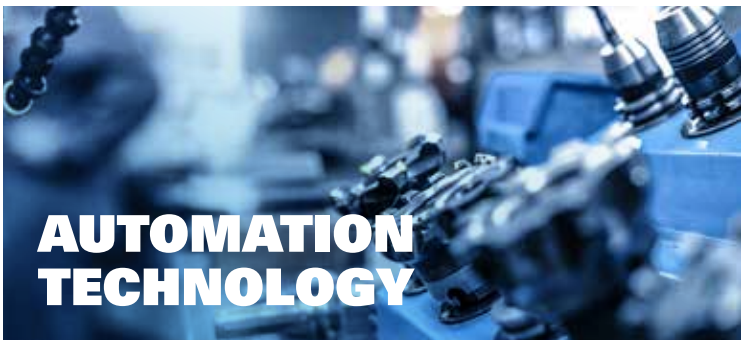
MEDICAL TECHNOLOGY



TRANSPORTATION



ENERGY TECHNOLOGY



AUTOMATION TECHNOLOGY



MULTIMEDIA & BROADCAST



MEASUREMENT & CONTROL

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MARKETS & INDUSTRIES

Industries at a glance: The more diverse the challenges become, the more individual our solutions are.

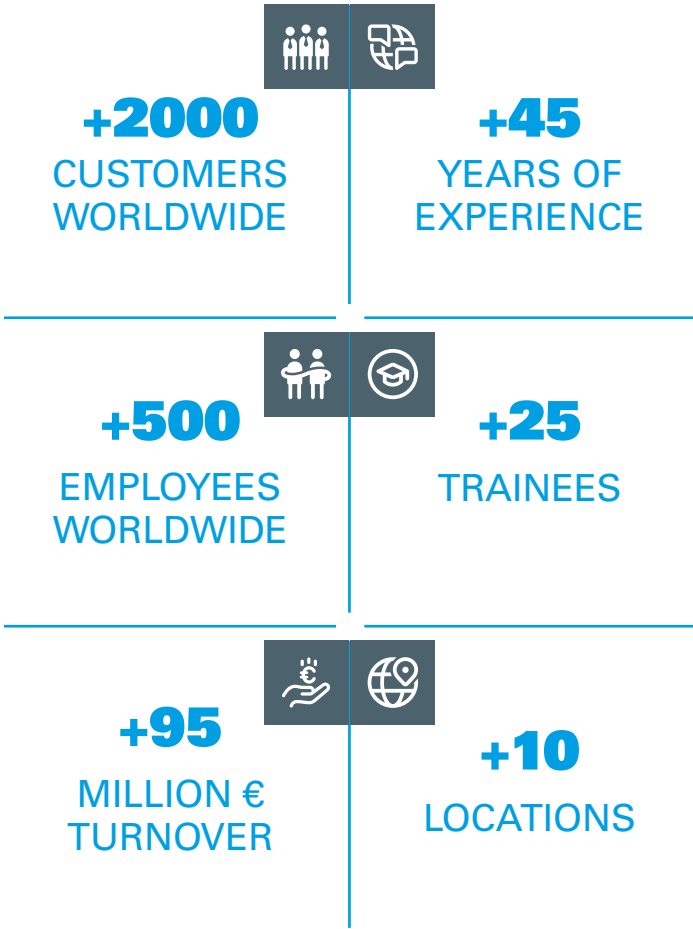
Take advantage from our know-how of more than 45 years.

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POLYRACK TECH-GROUP

Our group of companies – POLYRACK Electronic Aufbausysteme GmbH, RAPP Kunststofftechnik GmbH, POLYRACK Aerospace GmbH, Metalle in Form Geräteteile GmbH, as well as their subsidiaries abroad - offers an innovative and comprehensive range of products that are manufactured in high quality and with the economical benefits of series production.

Our focus is particularly dedicated to the development and manufacturing of customer-specific products and solutions. Extensive consultancy in the conception stage, right at the start targeted and reliable development, production and assembly combined with on-time delivery are characteristic of our service offering.



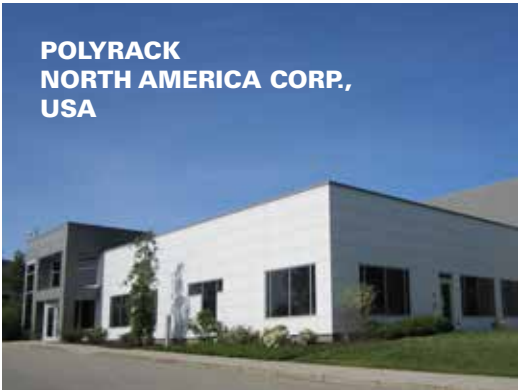
Effective: 01.01.2025



PLANT 2, STRAUBENHARDT, GERMANY



PLANT 1, STRAUBENHARDT, GERMANY



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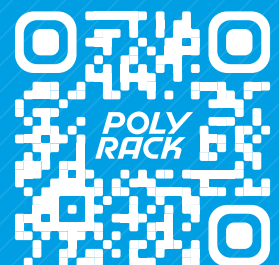
You will find the closest sales representative or distribution partner responsible for your area at:
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