HOSE AND SILICONE HOSE TECHNOLOGY
INNOVATIVE SOLUTIONS OF TECHNICAL PERFECTION
REHAU, founded in 1948, is pushing global innovation to the fore.

Polymers provide the platform from which REHAU constantly presents new perspectives to both private and commercial users.

REHAU fulfils the exacting demands of its customers to their optimum satisfaction from over 170 locations worldwide. REHAU’s international structure affords flexibility with local presence precisely where the customer needs us to be.
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WHO IS REHAU?
UNLIMITED POLYMER SOLUTIONS

As the premium brand for polymer-based solutions, REHAU is the international leader in the construction, automotive and industrial sector.

REHAU initially established itself in Germany and the surrounding western countries before commencing its early expansion into all the European countries, North and South America, Asia and Australia. Today REHAU is globally represented across all continents in over 50 countries.

REHAU performance is second to none in terms of scope and quality.

INDUSTRY
- Hose and silicone technology
- Automotive and aircraft industry
- Furniture and woodworking trade
- Household appliance industry

AUTOMOTIVE
- Exterior body parts
- Water and air management systems
- Seals

CONSTRUCTION
- Window and curtain walling technology
- Building technology
- Civil engineering and infrastructure
Around 17,000 employees across the globe in over 170 locations afford a flexible network that encompasses customers, suppliers, universities and research institutes. This outstanding level of expertise extends beyond borders and continents to enable optimum results.
REHAU has established itself in various industrial sectors as a leading system and development partner, groundbreaking innovator and reliable series-production and system supplier.

- Hose and silicone technology
- Automotive and aircraft industry
- Furniture and woodworking trade
- Household appliance industry

Constantly focusing on developing individually designed solutions of supreme quality.
Be it pneumatic hoses in measurement and control technology, abrasion protective hoses, bundling of automotive wiring harnesses, mini hydraulics and high pressure cleaning hoses, drinking water hose or garden hose — you’ll find REHAU hoses everywhere.

With such a comprehensive range you are sure to find just the right hose whatever your application — be it individual hoses or complete prefabricated hose systems. Naturally, should you fail to find exactly what you are looking for, we will help you develop the hose you need.

REHAU hose and silicone technology is the optimal partner for customised hose and profile solutions.

Your needs present us with a permanent challenge which we successfully meet with new materials and innovative production processes and design concepts.

In fulfilling your needs, we rely on expertise gathered over 60 years of processing polymers into high-grade, technical products. REHAU hose and silicone technology serves the following sectors:

- Automotive industry
- High pressure technology
- Industrial technology
- Food and beverages industry
- Garden and agricultural technology
- Technical specialists
International exhaust emission standards impose additional emission controls for both commercial and passenger diesel vehicles. Emission reduction is effected via a process called selective catalytic reduction (SCR) using AdBlue®, whereby heating of the hose also supports this functional process.

REHAU has addressed the various requirements and supplies complete assemblies that include electrical heating. As such, REHAU products are available as rigid, heatable hoses for installing in control units, or as flexible, heatable laminated hoses for distributing AdBlue®.

However, REHAU hoses are not just helping the commercial vehicle industry to comply with stringent standards. We also offer innovative system solutions in the passenger vehicle sector with AdBlue®-compatible material and individual heating layout according to customer specifications.

REHAU also supplies hoses for systems heated by coolant.
The unparalleled joy of driving with an open roof is guaranteed in numerous convertibles from prestigious manufacturers through a whole package of practical hydraulic hoses from REHAU.

When the sun shines, using electro-hydraulics these mini hydraulic hoses help rapidly open and close convertible roofs without interruption and all at the push of a button.

Manufacturers also rely on hydraulic solutions from REHAU for their hydraulic locking systems.
REHAU silicone and heat-shrinkable tubing is used in air conditioning technology on account of its positive physical attributes.

REHAU silicone abrasion protection hoses provide optimal functionality in automotive AC units at both high and low temperatures thanks to their positive absorption characteristics.

RAUCROSS DSC is the REHAU specialist product for radiator manifolds. This abrasion-proof heat-shrinkable tube made of modified, braided polyolefin was specifically developed for insulating and protecting intricately bent parts and will not kink even when applied in tight radiuses.

High expansion rates allowing for easy fitting and resistance to petrol, oil, weather, ageing and abrasion round off the attributes of the RAUCROSS DSC product range.
The REHAU pneumatic hose generation is extremely elastic and light, but also highly robust. These pneumatic hoses are particularly suitable where numerous supply lines lead to a moving machine part.

As such, the special formulations using polyurethane (RAU-PUR), polyethylene (RAU-PE) and polyamide (RAU-PA) can also be applied in the following areas:

- automotive and engine construction
- measurement and control technology
- hydraulics
- central lubrication systems
AUTOMOTIVE INDUSTRY
HYDRAULIC TILT MECHANISMS
FOR THOSE CONSTANT UPS AND DOWNS

Quality products from REHAU are also found in industrial and mobile hydraulics. Single and dual hose solutions are employed above all in heavy goods vehicle cabins and loading platforms as well as in fork-lifts and lifting equipment. Other application areas include lubrication systems, measurement and control technology, and hydraulic control systems.

**Hose attributes include:**

- minimum weight
- small external diameter
- minimum flow resistance due to smooth internal surface
- low diffusion rate with standard gaseous media
- simple fitting (no need to peel off the top layer)
- abrasion resistant
- chemical resistant
- ageing, ozone and UV resistant

RAUPHORAM single and dual hoses
REHAU heat-shrinkable tubing, insulation tubing and silicone tubing insulate, sheathe and protect on-board power supplies in cars and commercial vehicles as well as in electronic sector applications.

Example applications include grouping and marking cable looms/cable insulations, thermal insulation, or protecting car aerials against environmental influences.

RAUCROSS DOA, for example, was specifically developed for exterior application components with varying diameters and is used in the production of rod aerials.
Silicone profiles and tubing are true “allrounders” in the automotive sector. Our premium products are subsequently encountered in the sunroofs, sliding roofs, panorama roofs, headlights and rear lights of vehicles from prestigious manufacturers.
Rigorous demands require special materials!
REHAU has been supplying silicone seals and hoses to the aerospace industry for decades and consequently meets all the stringent safety requirements.

REHAU supplies specifically qualified materials that meet the strict requirements in terms of fire and toxicity standards.
- RAU-SIK 8968, Shore hardness: 50 +/-5 Shore A
- RAU-SIK 8964, Shore hardness: 70 +/-5 Shore A

In addition to the supply of bundled goods, more intricate finishing is also possible.

Finishing options include:
- fixed lengths
- as stamped parts
- as bonded parts
- use of adhesive tape
Our comprehensive high pressure cleaning product range encompasses hose solutions for all unheated cleaning devices ranging from the quality category with a 110-bar pumping pressure to the 160-bar top-of-the-range class.

Using standard cleaning additives in accordance with respective manufacturer recommendations, all the high pressure cleaning hoses can be employed under pressure for a broad range of applications.

The extensive material selection affords the following attributes:

- high degree of flexibility
- excellent abrasion resistance
- tight bending radii for optimal utility and packaging
- temperature resistant from -20 °C to +60 °C
- secure fittings
- long service life

Customised hose concepts, such as special outer layer colours and qualities or various printing options, provide our customers with the potential for differentiation and distinctive product labelling within the market.

As add-ons, REHAU high pressure hoses are also available with corresponding accessory hoses and extension hoses.
Mini high pressure hoses and small-diameter high pressure hoses from REHAU are perfect for applications where a high degree of pressure is required in a limited space.

The array of pressure media includes mineral and plant-based lubricants, low-flammability hydraulic fluids and mineral-oil-based or glycol-based fluids. However, REHAU mini high pressure hoses can also withstand pressure from coolant, water, carbolic acid, nitrogen and oxygen.

**The product attributes speak for themselves:**

- small inner and outer diameters
- high flexibility
- extremely pressure resistant
- low weight
- tightly bending radiuses

*High pressure hoses for central lubrication systems*

*Measuring and mini hydraulic hoses*

*Hydraulic hoses for cycle disc brakes*
High pressure technology also encompasses high pressure hoses for diving equipment.

Special material formulations in polyurethane (RAU-PUR) mean that you can fully rely on REHAU hoses – whether diving under ice or in warmer waters.

**Hose attributes include:**

- no embrittlement as a result of UV/ozone
- no streak formation (in pools)
- brightly coloured outer layer
INDUSTRIAL TECHNOLOGY
ALLROUNDER FOR EVERY SECTOR
REHAU provides numerous hose systems for a variety of applications in the area of industrial technology.

**RAUCROSS DOU tubing is our specialist product for fluorescent lamps.**

Benefits of **RAUCROSS DOU tubing** are:
- thin-walled
- UV stabilised
- decorative lighting effects
- fragment protection
- absorption of selected wave lengths

This segment also encompasses silicone seals for outdoor lamps.

**RAUFILAM-E and RAUCLAIR-E industrial tubing**

Completely transparent **RAUCLAIR-E tubing** is employed in applications where the clear visibility of liquids and technical gases is required.

For applications carried out under pressure, **RAUFILAM-E** with reinforcing filaments is the right choice. As a result of their excellent attributes, these tubing solutions are used in areas such as:

- laboratories
- mechanical engineering applications
- measurement and control technology
- compressed air delivery
Sanitary engineering hoses

The following types of hose are available for sanitary engineering:
- filament-reinforced pressure-resistant hoses
- non-reinforced cost-efficient hoses
- retractable shower hoses and showerhead hoses with foil decoration
- shower panel hoses

Hoses for welding applications

For welding applications we supply flexible, reinforced, compression and temperature-resistant polyvinylchloride (RAU-PVC) and polyurethane (RAU-PUR) coolant hoses for inert gas welding equipment and silicone hoses for high performance welding equipment.
INDUSTRIAL TECHNOLOGY
ALLROUNDER FOR EVERY SECTOR

Hoses for fire prevention technology

Fire prevention technology encompasses fire prevention and extinguisher hoses in so-called wall-mounted fire-hose reels, which are used to initially tackle fires by those on the spot. Silicone seals for fire doors complete our portfolio.

Concrete injection hoses

Components made of water-resistant concrete also have to seal off water in any joining areas. Through the injection of compressed material via injection hose into the relevant joints, the joint and even directly connected flawed areas in the concrete, can be filled out with the injected medium so that water no longer seeps through. For such applications, REHAU provides specially developed industrial hose solutions.

Pneumatic hoses

In addition to the generation of pneumatic hoses for the automotive industry, REHAU also develops special hoses for other pneumatic applications, such as compressed air feed hoses.
REHAU beverage tubing is physiologically harmless, odourless and taste-free as well as easy to clean.

Compliance with the various national food and beverage regulations (BfR/FDA/Manual 1227) is ensured by way of carefully selected formulations.

Our RAUALCO and TUBALCO products are used in the manufacture of beverage dispensing systems and beverage dispensing machines. Both ranges meet SK and, in-part, Coca Cola standards.

For applications in corresponding closed cooling systems, the RAUALCO and TUBALCO tubes are sheathed in REHAU Pythons.
Automatic “high-tech” coffee and espresso machines are increasingly dominating the market.

Whereas hot water seeps without pressure through the coffee powder during the standard preparation of coffee, in the case of espresso, hot water is pushed through finely ground coffee at a pressure of between 9 and 16 bar.

As such, the demands placed on water feed tubing materials are continuously increasing. They not only need to be heat and pressure-resistant, but also have to be extremely flexible. Hybrid reinforced silicone tubing from REHAU combines all these attributes.

Globally recognised companies in the automatic coffee machine sector use REHAU tubing in their machines. Firstly, because the silicone tubing, with its hybrid reinforced braid, is an innovative and efficient variant to standard tubing solutions; and secondly because REHAU can provide specific support to ensure taste-free attributes thanks to its formulation expertise.
FOOD AND BEVERAGE INDUSTRY

DRINKING WATER TUBING

PRESERVING DRINKING WATER QUALITY
Water is an essential foodstuff for humans.
The average person consumes between two and three litres per day in addition to using numerous litres to cook, wash up and for personal hygiene.

Drinking water meeting the most stringent requirements is used in all these applications. In Germany, these requirements have now been tightened in the wake of new drinking water regulations.

The RAUAQUA product range from REHAU provides drinking water hoses for a variety of applications. RAUAQUA hoses naturally meet German DVGW, Worksheet W270 and KTW A standards. Thanks to a special material formulation and mature production processes, RAUAQUA products boast numerous type-dependent attributes:

- totally non-transparent
- no microbe or algae formation
- UV and abrasion resistant
- resistant to standard cleaning and disinfection agents

Specially developed RAUAQUA silicone hoses that impress primarily with their flexibility round off the portfolio.
The REHAU garden technology range offers numerous products for domestic gardeners, professionals and garden centres alike.

**Improved overview, straightforward selection**
The three-category system in which all REHAU garden hoses are classified provides an improved overview and creates clear structures. Categories describe the attributes of garden hoses in terms of use and application and, as such, help the end consumer with their purchase decision at the point-of-sale.

**“PREMIUM”** category hoses are ideal for demanding, extended applications and tough conditions in complex, multi-faceted gardens. Whether applied in nurseries, local authority, sports facilities or in construction, premium hoses will hold up even on hard surfaces such as gravel or concrete.

**“COMFORT”** category hoses are recommended for intensive applications in, for example, market gardens. Products from this line easily cope with the high demands of complex garden facilities and are characterised by their excellent handling.

The **“ALL-ROUND”** category encompasses a large selection of different hoses for the domestic gardener and regular medium-load use.

**Quality stars for even greater clarity**
To enable a quicker overview of the various hose ranges, REHAU has provided its products with quality stars. This new system will help in terms of reference and decisions as to which garden hose is suitable for the respective application.

**High quality**
Throughout its entire scope of performance, REHAU attaches great importance to the fact that its products meet the highest quality standards. As a consequence, diagonal reinforcement is used in the manufacture of garden hoses throughout all the product lines, thereby guaranteeing a high degree of burst resistance. In the diagonal reinforcement used by REHAU, two counter-rotating reinforcement filaments are introduced into the inner hose at a precise filament angle of 54 degrees. This process provides a high level of robustness in terms of hose shape and also prevents deformation in length and diameter as well as twisting or kinking. This is why REHAU garden hoses have such a long service life.
A comprehensive selection of accessories rounds off REHAU’s range of garden technology products.

**Hose box – flexible in every way**
Quicker, tidier and more convenient hose application is ensured with the flexible REHAU hose box. The integrated hose box technology provides convenient handling: simply pull out the hose to the required length and give a short tug to activate the locking device. Another tug after watering and the hose is automatically rolled back into the hose box.

**Hose storage**
For secure and space-saving storage and easy transportation of REHAU garden hoses, REHAU offers a variety of hose holders and carts that are compatible with the various applications.

The “PREMIUM” category metal hose cart allows up to 50m of ¾” hose to be easily rolled up and transported. Both frame and drum are made of galvanised steel, which makes the cart extremely robust and stable. The “COMFORT” category metal hose cart has room for 50m of ½” garden hose.

The hose cart and hose holder are also available in plastic and are available as an option with hose included.

**Irrigation control**
Make the most of your free time with the automatic garden irrigation controller from REHAU. This practical water timer and irrigation computer ensures that sprinkling is carried out punctually. And it couldn’t be easier: simply set the duration and interval or select the desired program and the garden promptly waters itself!
The REHAU range of fittings has the appropriate solution for every application. Systems specifically coordinated to the various requirements of different garden layouts enable appropriate selection of the necessary fittings.

**Convenient handling**

All the functions and ergonomics of fittings and sprinklers are optimally adapted to the requirements of gardening tasks. As such, the ribbed grips and soft inlays make for comfortable and easy work, even during extended use. Additionally, all the fittings are simple to connect with the “snap-on system” and all the connecting systems are compatible with the standard market systems.

**Appealing look**

Additionally bolstered by the new packaging design, REHAU fittings have a high degree of recognition due to their well-rounded design and uniform colour scheme.

**Striking variety**

- Plastic/aluminium fittings
  - lightweight for easy handling
  - particularly robust on account of aluminium components
  - modern aluminium look is a real “eye catcher”

- Plastic/metal fittings
  - ideal for professional applications
  - extremely long service life

- Plastic fittings
  - cost-efficient allrounder for domestic gardeners
  - broad product range

- Technical brass fittings
  - practically indestructible and extremely hard wearing
  - dimensions ½” to 1 ½”

The appropriate connectors, sprinkler heads, nozzles and sprinklers are available for all types of fitting.
RAUSIL FG and RAULAB FG are our specialist products for milking technology applications. These are the ideal hoses for hygienic milk processing.

RAUSIL FG and RAULAB FG silicone hoses are suitable for application in the food industry and complies with the requirements of German BfR recommendation XV (Silicone) and U.S. FDA §177.2600 standards as well as EU Directive 1935/2004.

Silicone milk hoses impress with the following attributes:

- flexibility and long-term elasticity, even at low temperatures
- improved positioning of milking equipment on the udder
- optimum weight distribution enables gentler milking
- ageing, ozone and UV resistant (no embrittlement)
- long service life, longer standing time, less conversion time
RAUTOXAM hose for pest control

Safety is of utmost importance when handling pesticides. RAUTOXAM hose meets this requirement. The operating pressure is 80 bar – safety factor 3, which fully complies with the German “Guidelines on the Accident Prevention Regulations of the Federal Union for Agricultural Trade Associations”. RAUTOXAM is abrasion, weather and ageing resistant, flexible, cadmium-free and easy to handle.

Grafting clips for vegetable plants

REHAU special silicone formulation grafting clips are used for top grafting vegetable plants as the binding element between the stock and the vegetable/fruit and also simultaneously ensure the required connection stability. The clips can be used with all graftable vegetable types. Thanks to the elastic characteristic of the special silicone formulation, the firmness of the grip is regulated by the respective stem resistance. As such, crushing of the stem is consequently avoided.

The attributes of the silicone material in terms of being physiologically harmless and heat resistant are just two of the benefits of using special REHAU silicone formulation grafting clips.

Grafting clips are available for a variety of young plants in the diameters 1.3 mm/1.6 mm/2.1 mm and 2.7 mm.
TECHNICAL SPECIALISTS
STANDARDISED PERFECTION

We offer the following product ranges for technical specialists.

RAUCLAIR
RAUFILAM
RAUSPIRAFLEX
RAUCROSS
RAUAQUA
Silicone seals and profiles
Silicone hoses
Silicone press and ironing pads
Garden technology
HOSE/SILICONE SOLUTIONS
ARE YOU IMPRESSED?

Automotive industry

High pressure technology

Industrial technology
Need further information or have questions regarding our product range? Then simply take advantage of one of our many contact options:

Sales offices
Our REHAU sales office staff would be delighted to provide you with advice and support. See the list below to find a REHAU branch near you.

Internet
Our extensive range of products is naturally also available on the Internet, including an overview of our comprehensive service range. Find out more at: www.rehau.com

Customer portal
The REHAU customer portal offers a whole host of functions that are available to you around the clock, 365 days a year. In the password-protected area, you can place orders via article selection, direct ordering or by uploading from your own goods management system, and can then subsequently follow the status of your purchase order. Price information provided in the portal can be conveniently prepared as a price list and printed out. We have also provided data sheets and downloads in the information section.

Access to the customer portal is facilitated directly via your country Internet website.

Our verbal and written advice relating to technical applications is based on experience and is accurate to the best of our knowledge; however, such advice is provided without obligation. Any claims pertaining to statements on our part are precluded whenever products are used in conditions that are beyond our control or are other than those specified.

We recommend checking whether the REHAU product is suitable for the intended application. Application, utilization and processing of the products are beyond our control and are therefore exclusively the responsibility of the purchaser. In the event that liability is nevertheless considered, any compensation will be limited to the value of the goods supplied by REHAU and used by the purchaser. Our warranty is based on the homogenous quality of our products in accordance with REHAU specifications and conditions of sale.

In the interests of continuous product improvement, we reserve the right to implement changes in relation to construction and production.

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