

# Cleaning, maintenance, protection **We deliver your brand experience**

**OEM success  
concepts for  
vehicle  
manufacturers**



**Sustainable  
solutions for quality  
chemical-technical  
products**

**Individual  
full service, from  
development to  
logistics**

30,000 customers worldwide

Reliable.  
Safe.  
Sustainable.



# TUNAP inside: the right choice Everything at a glance

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## Intelligent, innovative, international, individual.

It is a true pleasure for us to present new examples from our product range for original equipment manufacturing (OEM) to you today.

**Research, development, production, and logistics from one single source:** TUNAP is one of the largest international producers of aerosols and active ingredients. We can provide you with custom-made solutions that meet your special needs.

Using the very latest research, development, and testing methods, we will analyse your exact requirements and develop solutions designed exactly with your profile in mind. We will stand resolutely by your side throughout the entire process – from the procurement of raw materials and production to labelling and the market introduction of your original part. But we do not stop there. We can also help you with such things as sell-out activities.

We invest a tremendous amount of money in new developments and expanded production capacities to ensure that we can provide you with active, long-term support.

We really look forward to assisting you!

**Maximilian Buchner**  
Managing Director of TUNAP GmbH & Co. KG



## Sustainable solutions for 50 years now.

We think along.  
We think about it.  
We think ahead.



## At work around the world for OEMs The key to our success for five decades now

**TUNAP full service:** research, development, production and logistics from one single source.

- **Internationally operating manufacturer** of aerosols, active ingredients, and additives for industrial and technical applications
- Around 700 employees in more than a dozen countries
- Our **development and production expertise**, combined with the experience gained from our own brand and direct sales operations, makes us your perfect partner

**TUNAP is a problem solver** in a wide range of markets, industries, and regions.

- **German technology** in a wide variety of markets, sectors and regions
- Effective support for national and international customers through a **large network**
  - Three own production manufacturing sites
  - 14 own foreign representatives
  - Wide range of sales partners located around the world

### TUNAP Network



Evaluating and solving market problems



Access to repair shops around the world



A network that extends from raw material selection to logistics



Global production options

### INDUSTRY Market Requirements

### CUSTOMERS Task Definition

### TUNAP FULL SERVICE

Core expertise: aerosol production, active ingredient development, application and packaging concepts



5 decades of experience



3 manufacturing sites



700 employees



30,000 customers



### SOLUTION



Established products from our standard range



Product alternatives



Exclusive developments

By combining our expertise with your commitment to brand quality, we can create appealing maintenance and service concepts, all while achieving the very highest level of customer satisfaction.

**0.000000001  
millimetre in  
size but still  
a milestone.**

We turn tiny molecules  
into tremendous  
success stories.

## A passion for the world of chemistry **Custom-made and sustainable**

### Expertise from one single source: TUNAP's range of services

**TUNAP develops sustainable innovations** – standardised and tailored. You do not just buy a product from us – thanks to our own chemical compliance, you also benefit from our commitment to reliably fulfilling the associated **legal requirements for you.**

### Advantages of TUNAP

- State-of-the-art technologies
- Industry-leading patents
- Expertise from our chemical-technical specialists
- Close to the market
- Development of specific solutions in dialogue with workshop partners
- Research into fundamental problems
- Continuous proactive further development of recipes in order to be able to offer customers the right solutions at all times

### We will develop the following products for you:

- Additives
- Aerosols & active ingredients
- Oils
- Greases
- Hygienic concepts
- Cleaning procedures
- Aqueous and solvent-based cleaners

### Professionalism and precision – TUNAP's lab equipment

Sizes, densities, pressures, flash points, frictional coefficients, surface tensions, flow behaviour and much more: **analysis is our strong point.**

We continuously create special chemical-technical solutions in our extensively equipped research and development centre, a facility that has more than 500 m<sup>2</sup> of space.

Thinner than a human hair, but a fundamental focal point at TUNAP: deposits that form on injectors and nozzles can be analysed with our test benches. World-class solutions can then be developed on the basis of these findings. One example among many. The list of TUNAP test and lab equipment is long.

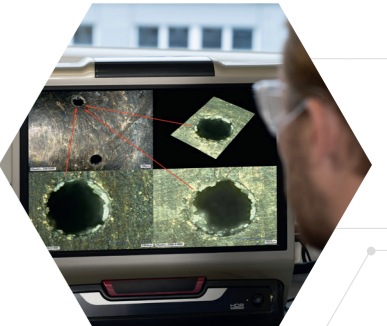
**Research &  
development**



**Chemical  
compliance**



**Quality assurance**



**110  
million units  
per year.**

3 manufacturing sites.  
16 filling lines.  
Monitored production  
around the clock.

## Certified quality Directly from the factory

As a manufacturer and full-service provider, we possess a comprehensive range of expertise, one that extends from **development and the procurement of raw materials to quality-tested filling and custom labelling.**

We are ISO 9001, ISO 14001 and ISO 45001 certified.

### TUNAP – CERTIFIED QUALITY



**TUNAP gives you flexibility:** you gain the exact packaging technology required to meet your needs. We can provide you with a range of advisory assistance that extends from material compatibility and dosing to tailored application options.

We offer our customers special expertise in technical aerosols, an area where we are Europe's market leader. Our latest innovation: aerosol cans made of recycled cardboard. Let's work together to sustainably enhance your product line!



 **100% climate neutral if you wish**

#### WOLFRATSHAUSEN



Headquarter and  
manufacturing site

4 production lines

11.6 million units per  
year

Focal points: additives,  
active ingredients,  
concentrates

#### LICHTENAU



Manufacturing site

8 production lines

73.5 million units per  
year

Focal points:  
aerosols

#### MÄRSTETTEN



Manufacturing site

4 production lines

25.2 million units per  
year

Focal points:  
aerosols

**TUNAP produces 110 million units on  
16 filling lines each year.**

# Ideas<sup>3</sup> for a more livable world.

Our responsibility for the  
environment and health.

## Concepts for more sustainability We work together – worldwide

TUNAP systems provide care and protection while combining high-impact technology with a passionate commitment to sustainability. Our intelligent and individual solutions help to promote health, conserve resources and pursue demanding international sustainability goals. Three elements form the basis for these efforts.

### Active ingredients

Active ingredients that we provide to our customers should offer optimal health and environmental compatibility. A whole range of options is available for this.

#### Health compatibility

- No allergenic dyes and fragrances
- n-hexane-free products
- NSF-certified products (food contact compatibility)
- Cleaning agents with reduced fire and explosion risk

#### Environmental compatibility

- Climate friendly, non-flammable propellants
- Alternative solvents
- Renewable, bio-degradable raw materials
- Microplastic free
- Reduced hazardous labelling
- Climate neutral
- Development of PFAS and fluorine-free formulations

### Product & packaging

TUNAP material-component concepts extend from alternative propellants to post-consumer recycling materials and recycled paper. Upon request, we can also provide you with carbon-neutral products and packaging.

#### Waste reduction

- Cans made of recycled materials
- Can caps made of recycled paper/cardboard
- Can caps made of recycled plastic
- Sustainable transport packaging

#### Lower emissions

- Climate-neutral packaging made of recycled material
- Alternative propellants
- Compressed gas (30 % more efficient than liquified gas)
- Bag-on valve technology

### Application

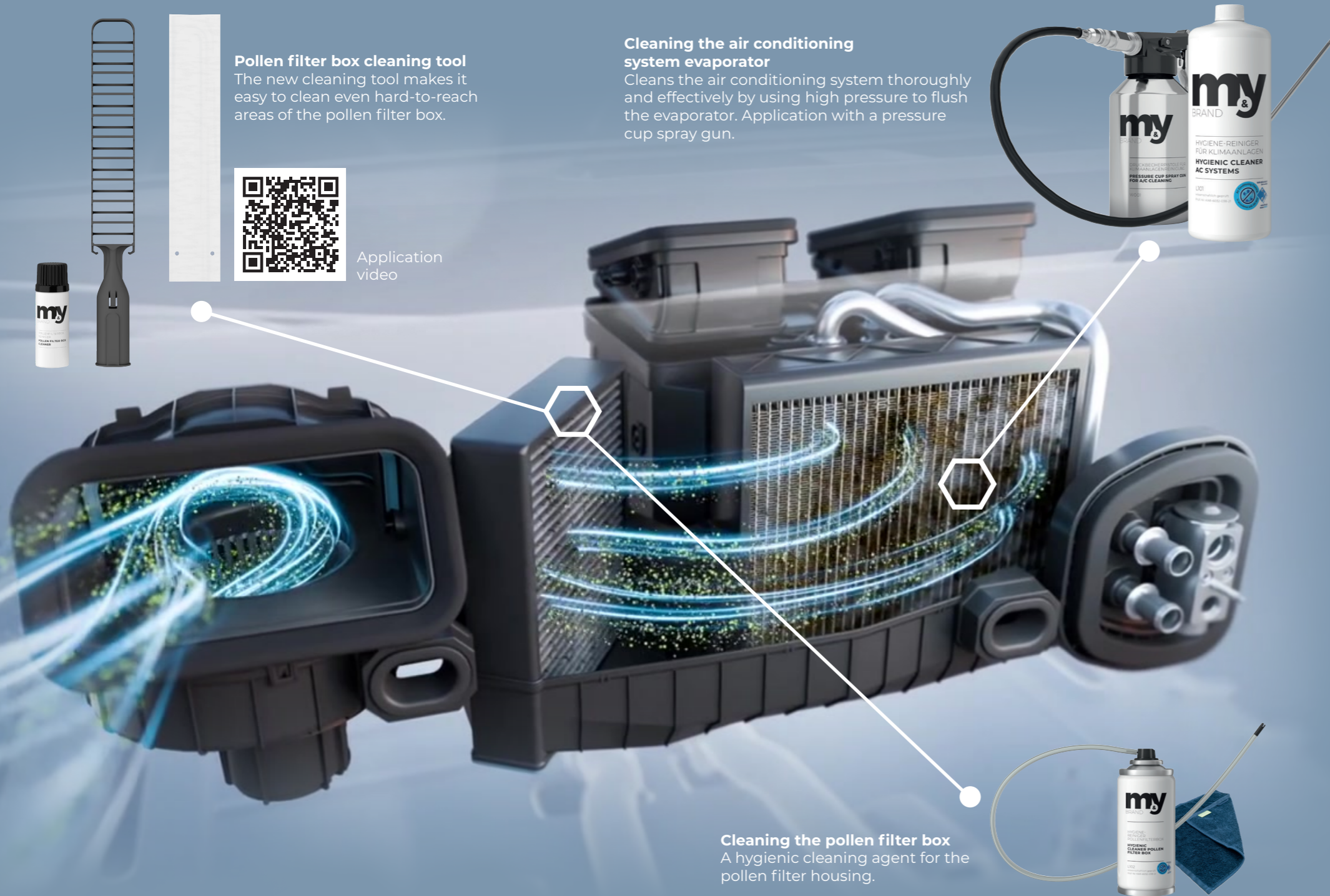
Clean it rather than replace it: TUNAP solutions make it possible to reduce emissions, consumption and production of new energy-intensive components. The best waste is the waste that is never created at all.

#### Optimisation of the product lifecycle

- Concepts to ensure the functional integrity of components
- Products to reduce friction, wear and tear (OMC<sub>2</sub> technology)
- Lifetime lubrication

#### Lower emissions

- Products to reduce CO<sub>2</sub>, nitrogen and consumption



## Hygienic air conditioning cleaning Based on the current state of the art

After a very short time, harmful bacteria, pollen, invisible germs as well as fungi settle on the air conditioning evaporator and in the pollen filter box. This can put a strain on your health every time you drive. In addition, these impurities lead to a smelly air conditioning system. The specially developed TUNAP air conditioning cleaning process cleans these areas effectively and highly efficiently, ensuring better air in the vehicle in the long term.

### TUNAP air conditioning cleaning system

- Removes dirt, harmful bacteria, pollen, invisible germs and fungi according to the current state of the art in accordance with VDI/ZDK guideline 6032
- Independently tested effectiveness
- Tested conformity with all treated air conditioning surfaces
- Allergy-friendly – without disinfectants, colourants and fragrances
- Eliminates the cause of unpleasant odours
- Improves the cooling performance of the air conditioning system with reduced fuel consumption
- Process has been tried and tested internationally for many years
- With ECARF sub-registration on request (tested health compatibility)
- With gui-lab seal on request (if fulfils VDI/ZDK guideline 6032)
- With TÜV Thüringen certificate on request (improved cooling performance of the air conditioning system)

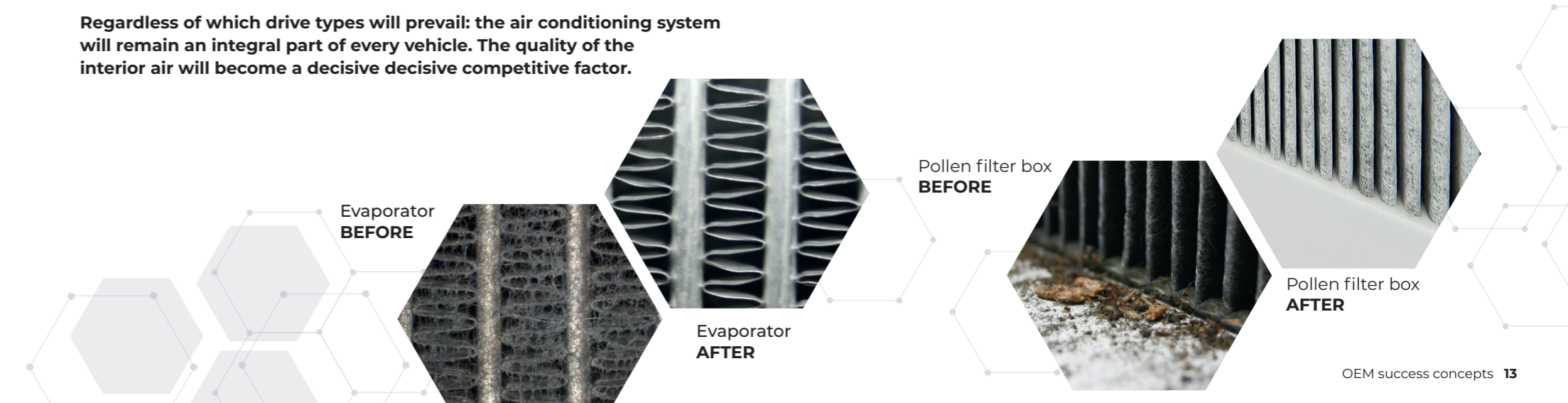
**Regardless of which drive types will prevail: the air conditioning system will remain an integral part of every vehicle. The quality of the interior air will become a decisive competitive factor.**

### Cleaning process according to VDI/ZDK RL 6032

The cleaning process and cleaning agents must fulfill these requirements:

- Prevention of harmful or malodorous substance concentrations in the inlet air
- No use of aromatising or masking substances
- Verified prevention of surface changes
- Verified prevention of health hazards to travellers in the vehicle
- Cleaning the filter housing when the pollen filter is replaced.
- Effective pollen filter housing and evaporator cleaning through the combination of mechanical and chemical cleaning
- Regular cleaning intervals

Your product will be eligible for the gui-lab seal if it meets all of these requirements and thus reflects the latest state of technology (VDI/ZDK guideline 6032).



**my BRAND**

**Interior engine cleaner**  
Protects new motor oil from grime created by deposits of used oil, upon request with TÜV registration.

**Injector cleaning and protection**  
Complete service program for problem prevention and solution, for both diesel and gasoline-powered engines, upon request with TÜV registration.

**Valve cleaning**  
Granulate technology for effective, material-preserving cleaning.

**Particle-filter cleaning system**  
To quickly remove soot and ash residues, upon request with TÜV registration and the VERT seal.

**Combustion chamber cleaner**  
Effectively reduces LSPI.

**EGR valve cleaning system**  
Instantly cleans carbon-based grime.

**Oil system protection**  
To restore surfaces in the engine and transmission, upon request with TÜV registration.

**Diesel stabiliser**  
To safeguard the general fuel quality from native sources and to prevent deposits.

## Improving engine efficiency Avoiding repairs

TUNAP cleaning technologies extend the life of the engine, exhaust and intake system and improve driving performance. Innovative chemistry and specific tool technology are used to break up deposits and contamination from surfaces. The result is significantly improved maintenance efficiency.

### Win-win situation for manufacturers, repair shops and customers

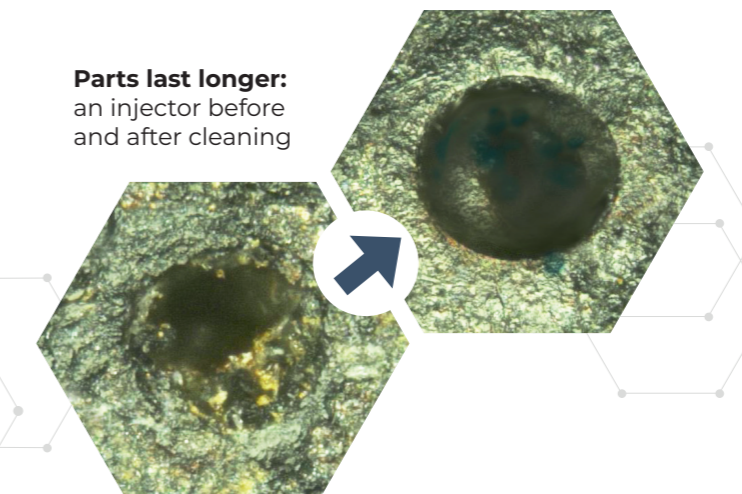
- Vehicles ready for use again in a short time and with low material costs
- Systematic application of TUNAP engine system solutions offers the highest potential for sales and earnings

### The result:

- Fewer emissions
- Improved fuel efficiency
- Less repairs
- Significant cost savings
- Increased customer satisfaction



**Parts last longer:**  
an injector before and after cleaning



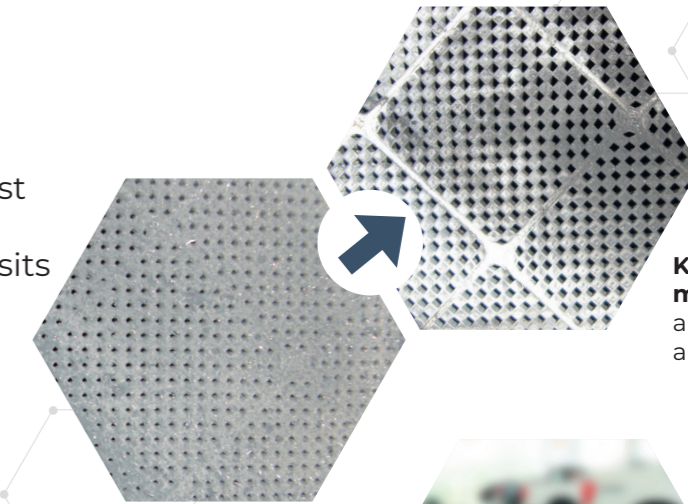
**Deposit free:**  
a valve before and after cleaning



**Clean burns better:**  
LSPI reduction in the combustion chamber



**Keeping things moving:**  
a particle filter before and after cleaning



**High-performance electrical contact grease**  
Dynamically light electrical contact grease to protect plug and sliding contacts under harsh conditions and throughout a wide range of temperatures.

**Cleaner**  
Professional cleaning agent for the entire car, including the brakes, engine, interior and exterior.

**Damping grease**  
A special synthetic grease to acoustically dampen switch and folding mechanisms in a vehicle's interior.

**Boot-mechanism grease**  
Special synthetic grease for the boot-opening mechanism.

**Leather care**  
Effectively cleans leather seats and surfaces while preserving material.

**Long-term lubricating grease**  
Special grease that is used to provide long-term lubrication of actuators/transmissions/connecting rods of front-light systems with low starting torque at very low temperatures and under harsh conditions.

**Long-term lubrication**  
Spray grease, oils, and dry-film lubricants for all moving parts.

**Cockpit spray**  
Reduces wear and eliminates unpleasant squeaking noises.

**Low temperature electrical-contact grease**  
Dynamically light electrical contact grease to protect plug and sliding contacts at very low temperatures.

**High-temperature paste**  
Efficient lubrication of parts subject to high temperatures.

**Rust remover**  
Loosens oxidized screw and plug-in connections in seconds.

## Highest performance level For daily use and production processes

### Professional maintenance and care

Quality for satisfied customers: the OEM range of maintenance products is the result of five decades of research, development and on-the-job experience, all conducted in close collaboration with our partners and end customers.

- Highest level of quality
- Simple, fast and effortless application
- Optimal spray pattern
- Fast evaporation

With NSF seal on request  
n-hexane-free on request  
CO<sub>2</sub>-neutral on request



### Tribological solutions for your production process

We devise customised solutions for you with the help of developers and application engineers. In addition to maintenance, we also address your needs that arise in the production process. Our vastly equipped chemical-analytical test lab and test benches enable us to internally conduct nearly every conceivable tribological test.

- Reduction of development times
- Concepts for long-term and lifetime lubrication
- Tailored applications
- Highest quality





## TUNAP Product groups



# TUNAP works.



## About TUNAP

The TUNAP business group is an international maker of aerosols and active ingredients that are used for industrial and technical purposes.

Research, development, production and sales from one single source:  
TUNAP systems combine innovative chemicals with high levels of sustainability to deliver care and protection.

The TUNAP business group operates three manufacturing sites and 14 country subsidiaries.  
TUNAP is a cooperation partner with all well-known car manufacturers.

### The TUNAP vision

TUNAP makes the world a more liveable place: by developing sustainable solutions for cleaning, maintenance and protection.

### The TUNAP mission

With products for many different industries and applications, TUNAP improves people's everyday lives.

We inspire our customers with smart product concepts, applications, and the highest-quality service.

Our customised products help promote personal well-being and good health while also conserving resources.

## Have we convinced you?

Then get in touch with us:

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