



Your operator's health is our concern

New technology cutting oils developed to make the working conditions of your production site safer for your employees!

OUR RESPONSE FOR NEAT CUTTING OILS

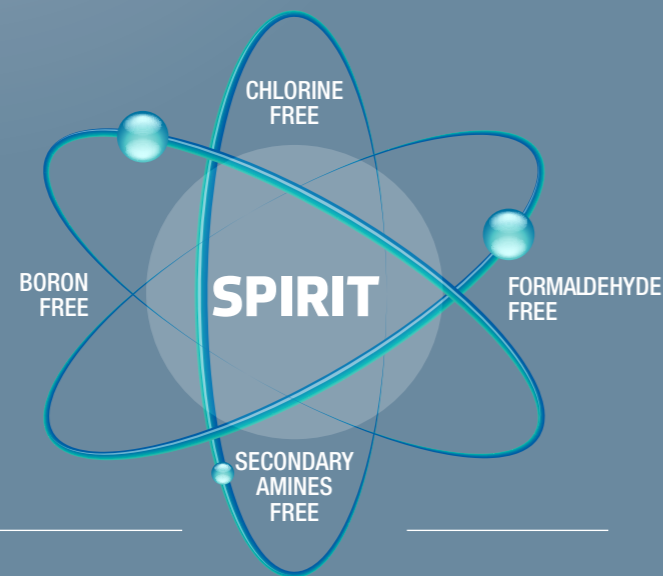
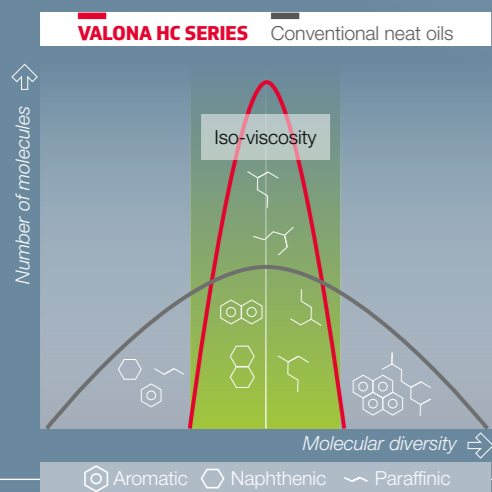
VALONA HC is a line of neat cutting oils formulated exclusively from hydro cracked base oils. **Transparent** and **odorless**, these oils offer excellent usability in many applications.

In addition, their low volatility and high resistance to oxidation reduce misting and oil vapors contributing to operator's health.

OUR RESPONSE FOR SOLUBLE OILS

SPIRIT is specifically formulated taking in to account the new regulations on the uses of dangerous components. Our products are free of **Chlorines** and **Formaldehyde releasers** what are hazardous to operator's health.

The formulas we use contribute to your employee's safety, without compromising the operational performance.



A major player
With our production, supply chain and commercial presence in more than 150 countries, we deliver a full range of lubricants.

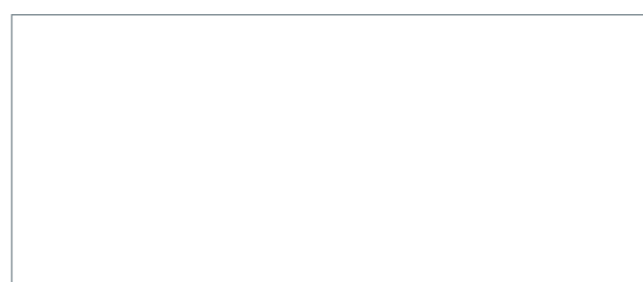
Support and partnership
Thanks to local technical presence, we provide a high level of service to optimize your Total cost of Ownership.

References & OEMs
Total Lubrificants cooperates with equipment manufacturers to create high-technology products for optimal performance and production of your machinery.



Innovation & Research
Total invests in biotechnologies to find the most suitable components to reach energy efficiency through formulations designed in our Research Centers.

Quality and environment
Total Lubrificants ISO 9001 certification is the guarantee of a long term commitment to quality. From the initial design stage, our R&D teams seek to develop products that minimize toxicity risks and environmental impact.



Safety Data Sheets are available at quickfds.com
lubricants.total.com



Transmission manufacturing Gears & Housings



12/2018 - TOTAL Lubrificants SA 552 006 454 RCS Nanterre - Photos: 123RF, Siemens Copyright - Design: © corona design





Your stakes

- Increase in productivity**
 - Shorten production cycles
- Cost savings on production**
 - Extend tool lifetime
 - Reduce fluid consumption
 - Decrease wastes
- Respect for users and the environment**
 - VOC's reduction
 - No faint smells
 - Elimination of dangerous substances

Our reply

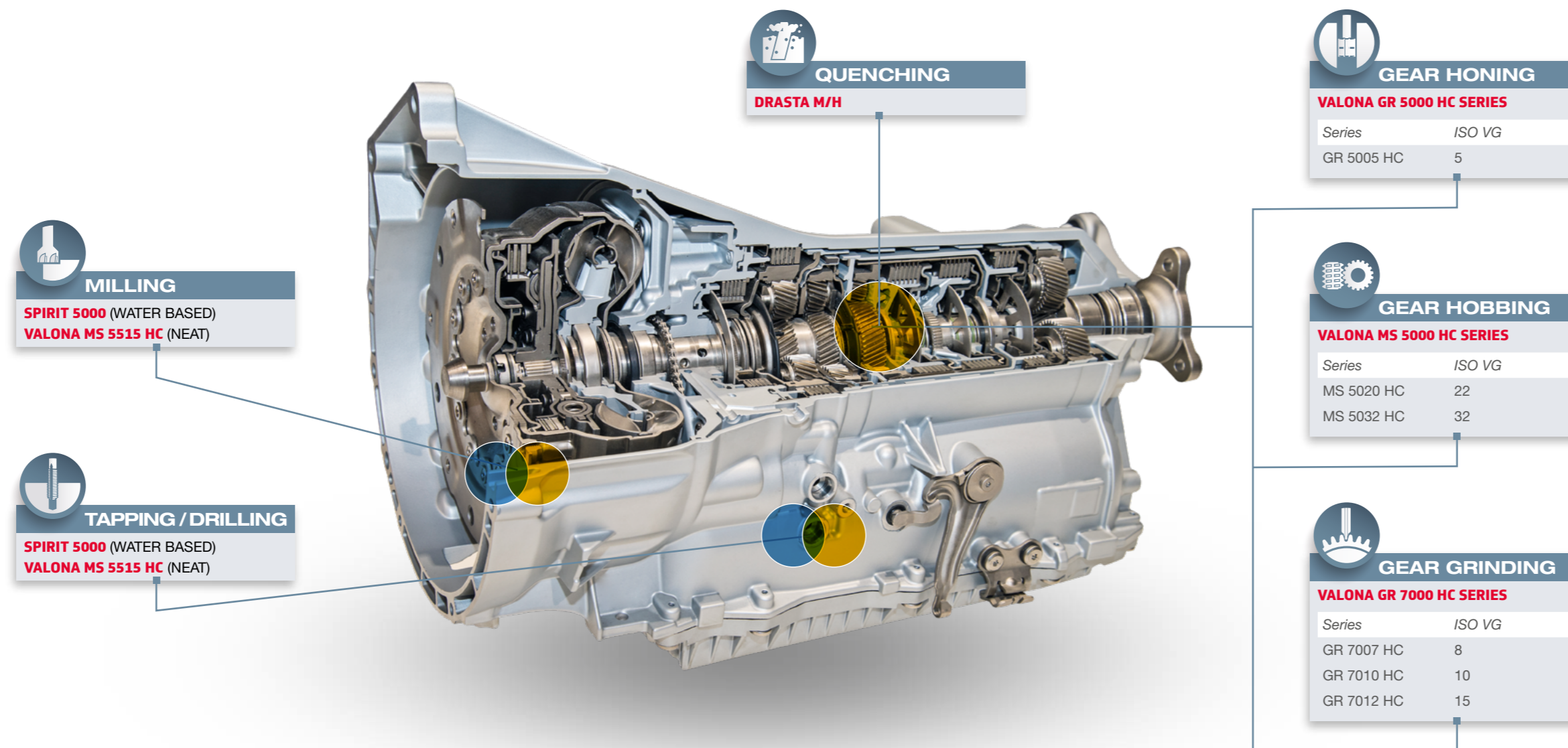
- Efficient machining for all metals and the most **stringent operations**
- Increased **tool lifetime**
- Increased **productivity (Less down time)**
- Outstanding **surface finishing**
- Savings** on production costs (reduced cutting effort, better cleanability...)
- Longer **lifetime** of the **cutting fluid**
- Reduced fluid **consumption** (Less volatile neat oils)
- Focus on operator **safety** and **health**



TRANSMISSION MANUFACTURING

Often the term transmission refers simply to the gearbox that uses gears and gear trains to provide speed and torque conversions from a rotating power source to another device, but in fact a transmission is a high performance part that has a big role in the machine it is used for. The better the design, the more efficient the energy transfer will be.

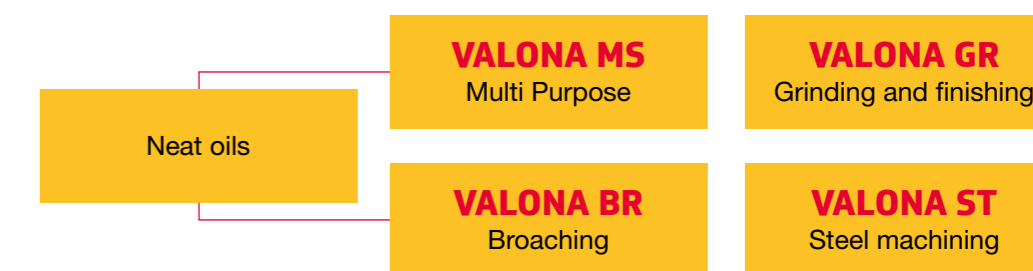
We provide high performance oils and fluids to help you produce transmissions efficiently, without compromising productivity and your operator's health.



TOTAL CUTTING OILS & FLUIDS

VALONA HC

Hydrocracked Neat Cutting Oils



Userfriendly water based cutting fluids



OTHER PRODUCTS

- HYDRANSAFE**
Fire resistant hydraulic oil
- AZOLLA**
Hydraulic oil
- GREASES**
Specialty greases
- DROSERA**
Slideway oil
- FINADET**
Degreaser
- OSYRIS**
Rust Preventive