

## CONDAT: New Technology for Cold Heading Operations

Since 2015, concerns about PAHs and BaPs have been current in France and Europe in the metalworking industry. Indeed, some petroleum-based products, such as process lubricants, can release PAHs and BaP under severe operating conditions. For greater vigilance, the **French Health Insurance** authority issued a recommendation, reference R.451, concerning the "Prevention of chemical risks caused by cutting fluids". It uses the data provided by the **INRS** on the risks and thresholds related to BaP contained in new and in-service neat cutting oils.

As this issue needed to be addressed in Europe, **CONDAT** became a forerunner in offering safe machining coolants. The qualities/performance of these products also drew attention of many manufacturers and thus contributed to their international success.

Guided by its HSE and CSR convictions, **CONDAT** decided to go a step further by considering the PAH and BaP issues and now offers cold heading oils to this end even if there is no recommendation in Europe. The aim is to provide the safest possible lubricants.

In-depth knowledge on how to reduce PAHs/BaPs in in-service machining oils led to development of **NEAT GREEN** oils—new generation machining oils that do not show any increase in BaP content after 1500 hours of machining. **CONDAT** requested its R&D lab in early 2018 to work on new formulas for cold heading oils with neutral impact in terms of BaP. Beyond its CSR commitment, **CONDAT** also wants to address concerns of automotive suppliers and provide customers with the safest possible products. The aim was to co-develop with major automotive



groups a high-performance product for very difficult forming operations.

After six months of R&D, a new technology was born. In partnership with a first grade automotive supplier, one product has been tested for nearly 12 months on cold heading operations for the manufacture of seat pinions and hubs and showed very good results.

Following the success encountered with this partner, this new solution was positioned as a premium one specially formulated for extreme operations that generate excessive heat (stainless steel, alloy steel with high elastic limit). Developed to solve BaP emissions problems encountered today in France and Europe, this neat cold heading technology is also showing outstanding performances. Formulated from high-quality, highly refined base oils, it contains fewer residual compounds that may degrade to PAH. Much more stable and pure, it resists oxidation, increases the life of the baths and facilitates degreasing by preventing the formation of sticky residues on the parts. Less volatile, it limits oil evaporation and mist generation, thus improving the atmosphere in the workshops. A highly additive formula, it offers high-level performance for all difficult operations on hard metals such as stainless steel and alloyed steel.

The **CONDAT** lubricant range is recognized in the metalworking market, in particular for cold heading, stamping and cutting processes. [www.condat.fr](http://www.condat.fr)



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