

冷間加工用潤滑剤の現状と将来
Trends in Lubricant Chemicals for Cold Forming

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抄 録

日本の塑性加工業界の現状の課題は、CO₂ 排出規制、有害化学物質の使用抑制などの環境対応と BRICs に代表される発展途上国との価格競争の二つである。自動車为例にとると、自動車部品の軽量化とコストの低減を求められており、日本の塑性加工業界が強みとしている“ものづくり”の本領発揮が必要になっている。それに伴い“ものづくり”の一翼を担ってきた潤滑剤も変わらざるを得なくなっている。冷間加工用潤滑剤を例に、潤滑剤の現状と今後求められる性能についてまとめた。

ABSTRACT

The current issues to take into account in the cold forming business in Japan can be classified into two major categories. One is environmental related issues such as reduction of the CO₂ footprint and the restriction of hazardous substances and the other is the price competition with developing countries such as BRICs (Brazil, Russia, India and China).

Taking the automotive industry as an example, the main concerns are reducing the weight of automotive parts and reducing cost; and it is necessary to bring out the best in ‘monozukuri’ or manufacturing technology which is the strength of Japan’s cold forming industry and make improvements to the lubricating agents which have played an important role in manufacturing technology. We focus on the current situation surrounding lubricants and what additional performances will be required of lubricants in future, using lubricants for the cold forming process as examples.