

Cleaner and Sharper Blades

for Long-Life Performance



Cutting, Cleaning, Lubricating and Preservation Oils for Corrugators

NSF/InS classified



LUBCON cutting oils for the corrugated and paper industry improve the service life of cutting knives and grinding stones as well as the quality of the cuts due to their excellent corrosion protection and superior starch and glue dissolving capabilities significantly.

High-Tech Cutting Oils for the Slitter and Scorer

In close cooperation with the OEMs (Original Equipment Manufacturer) LUBCON has developed the next generation of cutting fluids for the corrugating industry. The introduction of **Turmocut SR 15** signifies a unique success in today's business environment. The ability to increase the life of knives and grinding stones while decreasing the maintenance effort contributes to consistently lower costs and increasing production capabilities.

The work on today's most demanding machines and on-site inspection evaluations during research and development of **Turmocut SR 15** has helped us to meet the desired criteria in relation to production, maintenance and cost.

Tests under extreme operating conditions have proven that **Turmocut SR 15** increases the product performance to dissolve the formation of starch in the felts, grinding stones and knives. This unique preservation and cleaning oil significantly diminishes the necessity to clean the stones and thus increases the life of the knives dramatically.

Increasing tool life and reducing maintenance makes the **Turmocut SR 15** a revolution in the cutting fluid market. This product is InS/H1 food grade approved and recommended by BHS for use.

Better Cut - Less Maintenance

Corrugated machines produce many kilometres of corrugated board every day, which is subsequently cut and scored into the right shape by means of longitudinal cutting. Further down it is cut again in the orthogonal direction by the cross cutter.

However, paper is extremely abrasive and in combination with starch it generates a chemically aggressive layer on the cutting discs and blades. If this layer is not removed, the starch and fibre deposits lead to corrosion of the steel material and therefore increases the abrasive wear of the cutting discs and blades. This prolongs the maintenance depending service life of the machines and decreases the quality of the cutting systems.

Maximum Performance for the Corrugated Industry

Wet, lubricated blades make it possible to cut even through highly adhesive material and prevent any starch and paper fibre deposits efficiently. The knives are able to maintain their sharpness significantly longer, ensure smooth cuts, reduce friction, prevent material from being burned, sub-standard or damaged.

Consequently, cutting oils must fulfil the following conditions:

- Good lubrication capabilities
- Friction reduction
- Good corrosion protection
- Cooling capabilities
- Starch and glue dissolving capabilities



Fig. 1: Felt pads from Slitter & Scorer before treatment with **Turmocut SR 15**



Fig. 2: Felt pads from Slitter & Scorer after treatment with **Turmocut SR 15**



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LUBCON High-Tech Cutting Oils Improve Blade Service Life

Turmocut SR 15 – Lubricating oil for the Slitter and Scorer

Turmocut SR 15 is a lubricating oil based on high-purity hydrocarbons (close boiling protection). It is a combination of base oil and additives, which can be used in the food processing industry. It has very good surface wetting properties, shows excellent lubrication characteristics, dissolves starch and thus keeps the knives clean and sharp and prolongs the life with less maintenance. The lubricant is InS/H1 food grade approved.

Turmocut LMI 22 – Cleaning oil for the Corrugating Rolls




Turmocut LMI 22 is a fully synthetic oil, based on ester for the faster and easier cleaning of corrugating rolls on the Modul Facer. This heat-resistant lubricant is NSF/H1 certified and has excellent creeping and spreading capabilities combined with excellent lubrication properties. As the flash point of **Turmocut LMI 22** exceeds 230 °C (> 446 °F), it is ideally suited for cleaning and preservation of hot corrugating rolls.

Turmosynth VG 220 – Cutting oil for the Cross Cutters

Turmosynth VG 220 is a premium lubricating oil based on high-purity hydrocarbons with paraffin oils for exceptional performance of the cross cutter knives. It has excellent friction reduction and wear resistance for maximum accuracy even at high speeds of up to 400 m/min. Due to its excellent surface affinity the corrugated paper will not be contaminated by the lubricating oil. It prevents build up on the knives while keeping them clean and sharp. **Turmosynth VG 220** is NSF/H1 certified.

Modern Lubricants for Best Machine Performance and Reliability

LUBCON's lubricants are extensively used in the corrugating industry and contribute to long term reliability and superior performance significantly. The full range of lubricants together with the highly developed lubrication systems are available from a single source.

LUBCON Cutting Oils			
	Turmocut SR 15 	Turmocut LMI 22 	Turmosynth VG 220 
Colour	yellowish/clear	clear	clear
Structure	liquid	liquid	liquid
Base oil	high-purity hydrocarbons	Ester	White oil
Base oil viscosity DIN EN ISO 3104 at 40 °C (104 °F) at 100 °C (212 °F)	17.3 mm ² /s 3.8 mm ² /s	15 mm ² /s 3.6 mm ² /s	222 mm ² /s 22.8 mm ² /s
Viscosity index DIN ISO 2909	109.5	125	124
Density DIN 51757 at 20 °C (68 °F)	0.856 g/cm ³	0.946 g/cm ³	0.87 g/cm ³
Operating temperature range	-15 °C – +150 °C (5 °F – +302 °F)	-5 °C – +220 °C (23 °F – +428 °F)	-10 °C – +120 °C (14 °F – +248 °F)
Pour point DIN ISO 3016	-18 °C (0 °F)	< -5 °C (< 23 °F)	< -15 °C (5 °F)
Boiling point	> 250 °C (> 480 °F)	> 240 °C (> 464 °F)	> 250 °C (> 482 °F)
Flash point DIN EN ISO 2592	> 190 °C (> 374 °F)	> 240 °C (> 464 °F)	> 250 °C (> 451 °F)

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