

Engineering applications for metal deformation

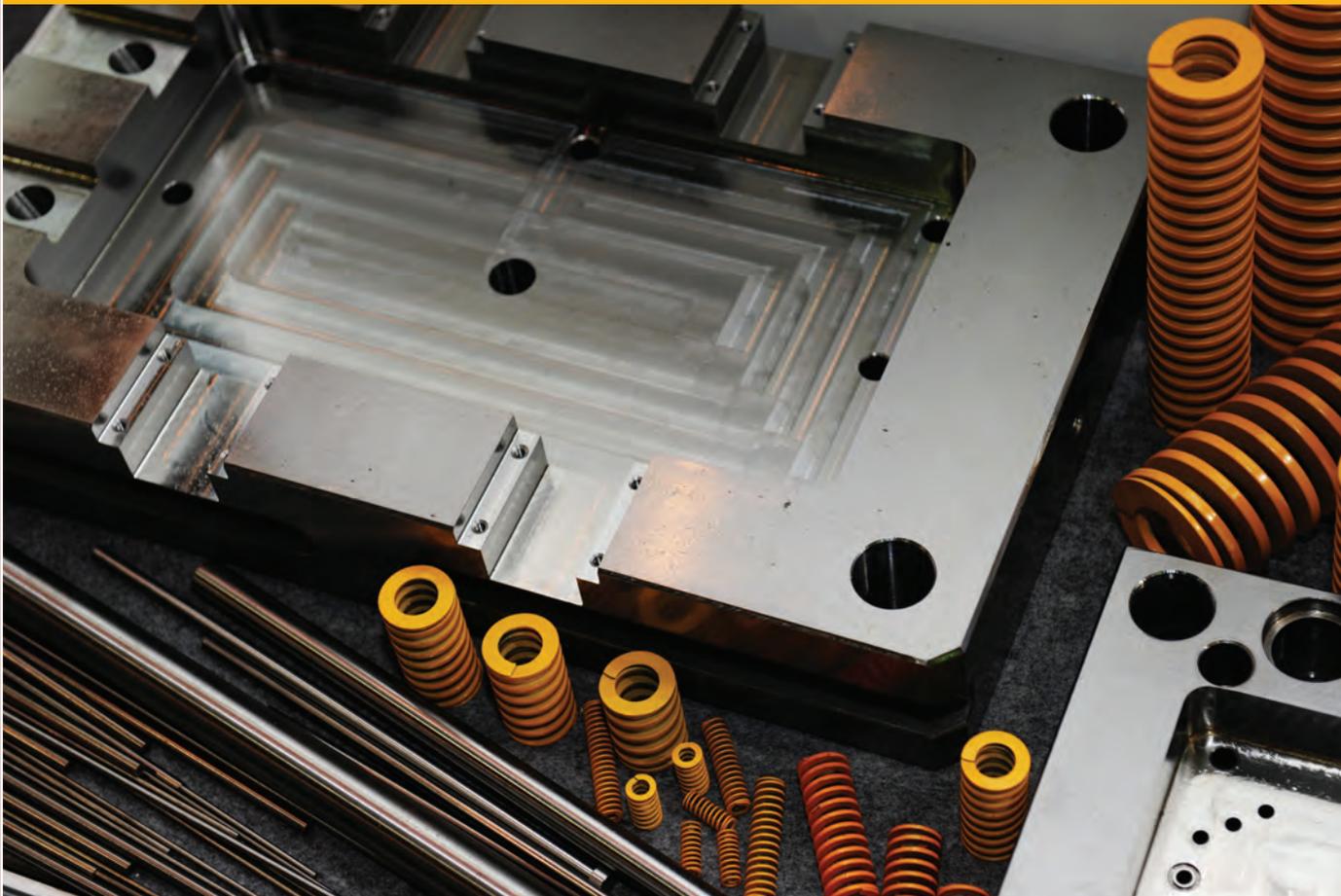
Neat drawing and stamping fluids are used across a multitude of engineering applications where varying amounts of fluids are applied to arduous applications and wide ranges of materials. These products provide different qualities and are designed around specific applications dependant on customer requirements.

The range includes heavy duty fluids, evaporative oils, water washable, water extendable products and state of the art synthetic fluids covering all drawing and stamping applications.

These products are developed to optimise, quality, cleanability, tool life and of course cost efficiency.



VAROL
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Drawing & Stamping Oils

Many varying applications in the engineering sector require a wide variety of drawing and stamping fluids. Therefore, depending on the complexity, size, shape and materials being used, the correct selection of the forming fluid is critical to ensure that components are manufactured consistently to minimise downtime, rework and waste.

Many components need to be oil free once formed, some will need washing, some may need galvanizing or even painting, again product selection is key.

Material type is another area that will need to be considered, drawing and stamping fluids contain large amounts of additive in the formulation which is required to carry out complex shape formation sometimes over a multi stage process and often using one single stage pressing operation.

All these different parameters need to be assessed so the customer will be satisfied in all areas and the benefits below will come to fruition.

- Tool life
- Multi metal compatibility
- Operator acceptability
- Lubrication qualities
- Cleanability

Chlorinated & Sulphur-Chlorinated Oils

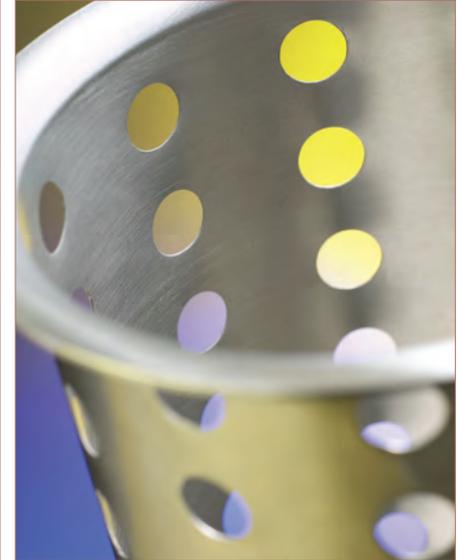
A wide range of products that vary in additive level, viscosity and oil content. These high performance forming oils are often bespoke formulations to meet the customers specific requirements.

Chlorine Free Oils

Advanced formulations across a wide range of viscosities containing varying levels of extreme pressure performance and lubricity additives. Suitable for very arduous applications such as cold heading and cold extrusion.

Vanishing Oils

Ester based vanishing oils used on piercing and blanking applications where the customer requires very little residue once the application is complete, they can be used on a broad range of materials varying from steel, zinc coated materials and aluminium.



Neat Drawing & Stamping Fluids

Chlorinated & Sulphur-Chlorinated Oils

Varform 149	Light coloured low viscosity drawing oil designed for arduous applications on a wide range of alloys, stainless and non-ferrous materials.
Varform 150	Heavy duty, EP, neat or water mix drawing and stamping fluid, high film strength characteristics and adhesion properties, used mainly in severe light to heavy gauge metals on deep and intricate draws where splitting and galling are problems.
Varform 159	Medium viscosity heavy duty drawing compound, designed for use on fine blanking, swaging, deep drawing and stamping.
Varform 180	Heavy duty drawing and stamping oil for heavy duty pressings, formulated on high levels of EP and lubricity additives, used for tube forming and drawing.
Varform 228	Medium duty sulphur-chlorinated oil for drawing, fine blanking and also cold heading used on broad range of materials.
Varform 247	Sulphur-chlorinated drawing oil used widely in the cold heading & thread forming industry can be applied by all methods and multi metal compatible.
Varform 264	Very heavy duty drawing compound used on very severe deep drawing applications and cold heading where conventional oils would fall short due to scoring or splitting.

Chlorine Free Oils

Varform 430	Solvent refined oil with EP additives and corrosion inhibitors, used on severe applications, can also be diluted with light lubricating oils for other operations.
Varform 438	Heavy duty neat drawing compound, having high levels of EP making it suitable for cold extrusion work, cold heading and drawing of bright bar steels.

Vanishing Oils

Varform 307	Low viscosity, ester based vanishing oil designed for high speed blanking, punching or piercing operations on thin gauge steel strip, also used as light duty forming and stamping fluid, designed to evaporate off the component post application.
Varform 325	Low viscosity, designed for high speed presswork operations producing relatively small or flat components, can be used on a broad range of materials.
Varform 326	Low viscosity, neutral ester to provide high film strength, allowing good protection of tooling to avoid pick-up and wear; typically used on drawing, stamping and blanking.

Hot Forming and Forging

Varforge 4000	Water extendable, graphite free, synthetic hot forming compound for forging automotive and aerospace components. Economic in use and does not leave deposits reducing build up in dies.
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