

ALDRAW® J-2, J-1, J-4, J-50 *Metalforming Compounds*

GENERAL DESCRIPTION

Hangsterfer's Aldraw Series of forming and fabricating compounds offers high performance lubricants for a broad range of applications. From stamping and blanking of carbon steel to drawing of high nickel tubing, Aldraw products provide extended die life, improved surface finish and reduced scrap material. The **non-hazardous** formulation provides for a safe work environment and easy waste disposal.

APPLICATION

J-2 - The heaviest of the Aldraw series, J-2 provides the maximum adherence and shear resistance for the most severe forming operations. The physical film characteristics and EP additives in the J-2 provide unparalleled performance in severe reductions of tube and bar. The extreme viscosity also makes it ideal for metal spinning operations.

J-1 - Slightly lower in viscosity than the J-2, J-1 provides excellent results on tube drawing, deep drawing, forming and stamping of stainless steel, titanium and other exotics. Because of its high viscosity, J-1 clings to the die, reducing application steps, while increasing die life in severe stamping and forming operations.

J-4 - This medium weight compound is ideal for drip, roller and brush applications on stamping, forming, deep drawing and wire drawing operations.

J-50 - The lightest of the Aldraw series, J-50 is recommended for stamping, forming, wire drawing, broaching and tapping of all materials. Its lower viscosity makes it easier to pump and allows it to penetrate metals more rapidly.

Materials & Forms

Stainless Steels, <i>tube, bar, rod, wire, blanks</i>	Nickel Alloys, <i>tube, bar, rod, wire, blanks</i>
Titanium, <i>blanks</i>	Carbon Steels, <i>tube, bar, rod, wire, blanks</i>

Operations

Tube, Bar, Wire and Rod Drawing	Blanks - Deep Drawing, Progressive and Transfer
Stamping & Forming – Progressive and Transfer	Fine Blanking and Coining
Swaging, Pointing	Spinning
Heavy Duty Tapping and Threading	Broaching

MAINTENANCE & CLEANING

Maintenance: When in use, the Aldraw products should be kept free of metal particulate, solvents, water and cleaners, which may interfere with the performance of the product. When thinning down any of the Aldraw products for specific applications, we recommended the use of our Hard Cut 541 (formerly known as J-1 Thinning Oil). The use of mineral spirits, kerosene or other items is not recommended. All products should be stored in a sealed container, in a cool, dry place.

Cleaning: For the best results, Hangsterfer's recommends the use of non-ozone-depleting solvents for removal of the Aldraw compounds. Hangsterfer's offers its environmentally friendly line of cleaners, the Ozonic Series, to help with the removal of the Aldraw compounds. Because of their extreme viscosity, J-2 and J-1 are best removed in a vapor system or a hot solvent wash. The J-4 and J-50 may be removed with a solvent dip or with a hot alkaline wash system.

PRODUCT CHARACTERISTICS				
Aldraw	J-2	J-1	J-4	J-50
Form	Liquid	Liquid	Liquid	Liquid
Color	Golden	Golden	Golden	Golden
Odor	Mild	Mild	Mild	Mild
Specific Gravity	1.30	1.23	1.20	1.05
Viscosity: SUS @ 100°F	55,500	9,260	4,170	973
cSt @ 40°C	12,000	2,000	900	210
Flash Point, COC, °F/°C	478 / 248	478 / 248	478 / 248	400 / 204
Fire Point, COC, °F/°C	478 / 248	478 / 248	478 / 248	415 / 212
Pour Point, °F/°C	36 / 2	36 / 2	36 / 2	10 / -12
Solubility in Water	<0.01%	<0.01%	<0.01%	<0.01%
Boiling Point, °F/°C	478 / 248	478 / 248	478 / 248	440/226
Vapor Pressure, mm Hg @ 25°	<0.01	<0.01	<0.01	<0.01
pH @ 10%	N/A	N/A	N/A	N/A
Chlorine	Added as EP Additive	Added as EP Additive	Added as EP Additive	Added as EP Additive

SHIPPING UNITS

Aldraw's J-2, J-1, J-4 and J-50 are available in 5 gallon, 55 gallon and Intermediate Bulk Containers (275 or 330 gallons). All products are distributed worldwide.

Revised: July 6, 2006

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