

INK
Model 105 System

JanTech Model 105 machines use "paste" or "semi-paste" letterpress offset inks. Many kinds and colors are available, formulated for both general and specific needs.

GENERAL PURPOSE INK

General purpose marking inks are sub-categorized as either non-oxidizing or oxidizing type. Both kinds are air drying and cure at room temperature upon evaporation of a volatile component. Drying may also be accelerated by elevated temperature. The C-100-1 is a non-oxidizing, solvent based general purpose ink that is the easiest ink to use with the Model 105 system. The Oxy-Ink 6403 is an oil varnish resin based ink that further cures by oxidation after drying. The oxidation process creates a skin that in most cases is tougher and more abrasion resistant, but care is necessary to prevent ink spoilage.

EPOXY INK

For applications requiring greater abrasion resistance, epoxy inks should be considered. Epoxy inks are available in either two-part or one-part systems. Two-part epoxy inks (2PE) will cure at room temperature and may be force cured at elevated temperatures. One-part epoxy inks (1PE) require the elevated temperatures to cure.

Important Note about Two-Part Epoxy Marking Ink: Two-part epoxy marking ink is packaged in bulk containers. The two parts of the epoxy ink must be mixed proportionately **by weight**. It is very important that the two parts be accurately weighed. The amount typically mixed in preparation for marking parts is from one to ten grams of material each. An accurate scale suitable for weight measurements as small as one gram is required.

SPECIALTY INK

Ultraviolet curing inks are another option for demanding applications. These inks are very tough. An additional benefit is that they will cure, virtually instantly, upon exposure to a high intensity UV light source.

Many other inks are available for specific applications.

INK COMPARISON CHART

	GENERAL PURPOSE INKS		EPOXY INKS	
	C-100-1	OXY-INK 6403	ONE-PART	TWO-PART
Colors:	Black, White & All Major Colors	Black, White & All Major Colors	Black, White & All Major Colors	Black, White & All Major Colors
Shelf Life:	Unlimited when stored in cool dry conditions.	One year Refrigeration extends life Do NOT freeze	One year Refrigeration extends life Do NOT freeze	One year Refrigeration extends life Do NOT freeze
Mixing:	No mixing required for all colors, except silver & gold.	No mixing required for all colors, except silver & gold.	No mixing required.	1. <u>All colors except silver</u> : 2 parts resin to 1 part catalyst by weight. 2. <u>Silver</u> : 2.4 parts resin to one part catalyst by weight.
Cure Cycle:	1. Cure at room temp. 2. Tack free in 1-2 hrs. 3. Able to handle in 6-8 hrs.	1. Cure at room temp. 2. Tack free in 1-2 hrs. 3. Able to handle in 6-8 hrs. Several days to fully cure. 4. Requires several days to fully cure.	Does NOT dry. Requires heat to cure. Bake at one of the following temperatures: 250°F (121°C) 30 mins 300°F (149°C) 10 mins 350°F (177°C) 2 mins	1. Cure at room temp. 2. Tack free in 1-2 hrs. 3. Able to handle in 6-8 hrs. 4. Solvent resistant in 4-7 days. 5. Force cure cycle: 250°F (121°C) 30 mins 300°F (149°C) 10 mins 350°F (177°C) 4 mins
Pot Life:	Unlimited when tack is maintained with suitable reducer.	May "skin over." Skin should be removed and discarded.	Unlimited	At normal room temp: 4-5 hrs after mixing. Higher room temps will shorten pot life.
Thinner:	C-100-1SDT reducer	C-100-1SDT reducer	Special thinner/reducer	Special thinner/reducer
Cleaner:	1. 99% isopropyl alcohol 2. Acetone	1. 99% isopropyl alcohol 2. Acetone	1. 99% isopropyl alcohol 2. Acetone	1. 99% isopropyl alcohol 2. Acetone