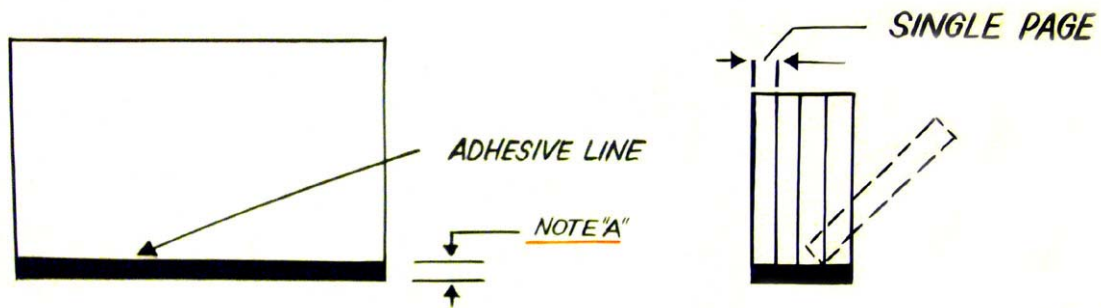


Perfect Binding

In this process, the book block is clamped against the binding edge and the spine passed first over a rougher and then over a glue roller that applies either an EVA or PUR hot melt. Unlike the Double-Fan Adhesive Binding process, bonding together with hot melts takes place in the form of mechanical adhesion. The adhesive, which is 100 % solid, is liquefied by exposure to a heat range of 200° to 400° F, and through a hooking or clinging effect surrounds the fibers or irregularities of surfaces, and within seconds and upon cooling, shrink down tightly around them, returning to its solid or plastic state. Stresses are on a paper thin line of glue mechanically clinging to fibers.



Note 'A': Increased layer thickness of hot melt does not add to strength of binding. Also, in the cooling of a hot melt, the loss of solvent may cause the glue line to contract. Strains are set up which induce the adhesive to pull away from the substrate (adherend).

