3.4 Blank Stacking Requirements

Maintaining stack levelness and adhering to blank stack requirements is essential to creating and maintaining a repeatable process without lost productivity. TWBs are dimpled to compensate for differences in stack height and is probably the single most important procedure for achieving efficient cycle times and part quality.

The main problem that can occur from shipping is settling of blanks over long distances. Long transports for blanks should consider blank settling, TWB dimples lose much of their shape with time and having to bear the load of stacked blanks. Newer de-stacking equipment may only have a tolerance of +/- 1". In any case, a standard should be agreed on, and must consider handling equipment.

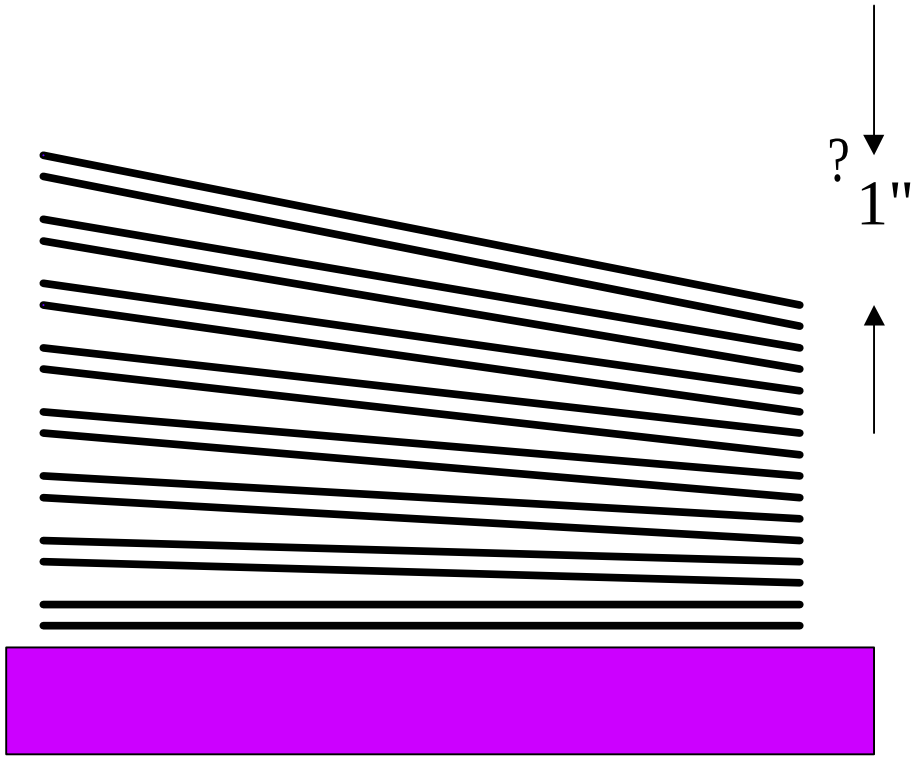

Figure 3-20. Tolerance of Stack Height for Automation

Unleveled blank stacks increase de-stacker cycle time, cause extra wear on de-stacker cups and cylinders, and may be incompatible with newer equipment. It is generally the responsibility of the TWB supplier to ensure stack levelness. If TWBs shift out of alignment in the stack, the overall stack height will be affected. Also, if the blanks are shifted in the stack, blank location variation will increase at the centering station.

The consequences of these problems may include:

- More unscheduled downtime
- Increased maintenance of automation
- Lower productivity from slower cycle times and a higher number of pallet changes

Unleveled blank stacks

Shifted Blanks on pallet

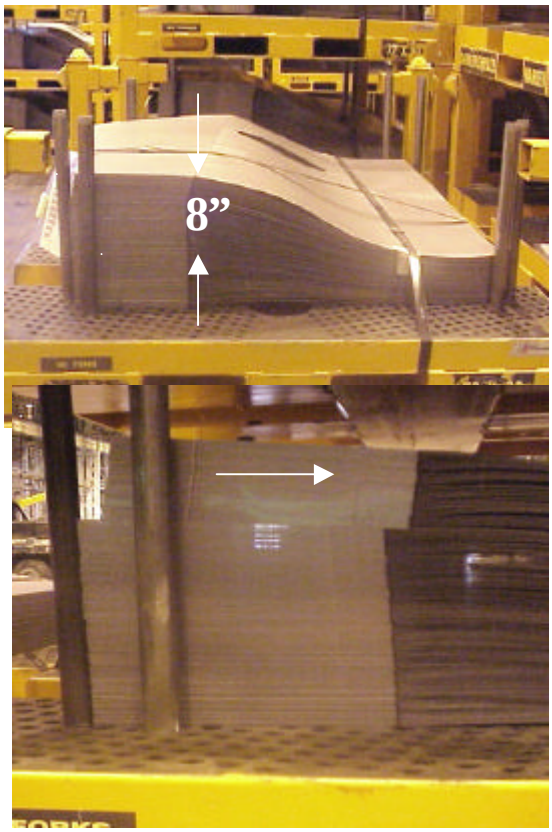

Figure 3-21. Stacking Issues