



## Vision Tips:

### Taming the Monsters of Date/Lot Code Marking

Is your packaging line haunted by date/lot codes that are mysteriously unreadable? Performing optical character recognition (OCR) and verification (OCV) using machine vision techniques requires careful adherence to basic guidelines for spacing, print quality and reading speed. Deviating from the rules can create monsters that slow your production, misidentify acceptable product and miss imperfect product. The toll in frustration and delays can be lethal.

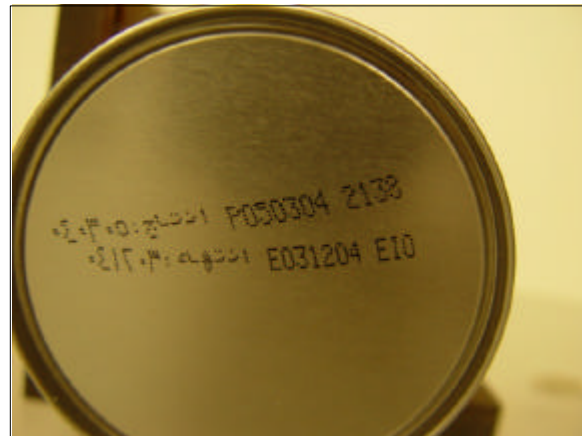
Do you have some of these monsters? Here are some suggestions for taming them.

**Good print, but no control of can position**



*Improve existing control of the can or replace the conveyor section with something that works.*

**Poor control of can position and mixed fonts: Arabic and English**

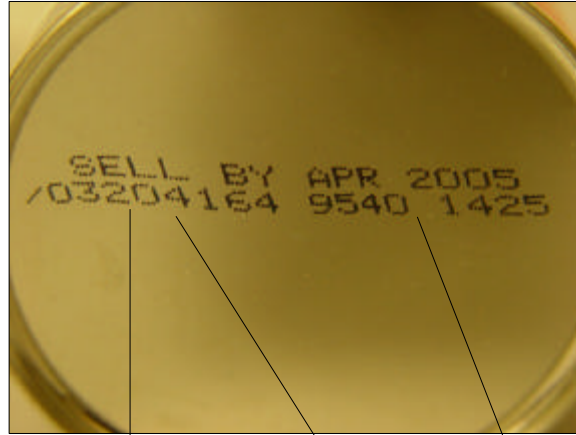


*Improve existing control of the can.*

*Improve the quality of printing to ensure consistency.*

*Separate regions of interest can read different character sets when using Quest OCV capabilities.*

**Inconsistency in character spacing and print angles**



Separation

Angle A

Angle B

**Improve inkjet printing consistency with these guidelines:**

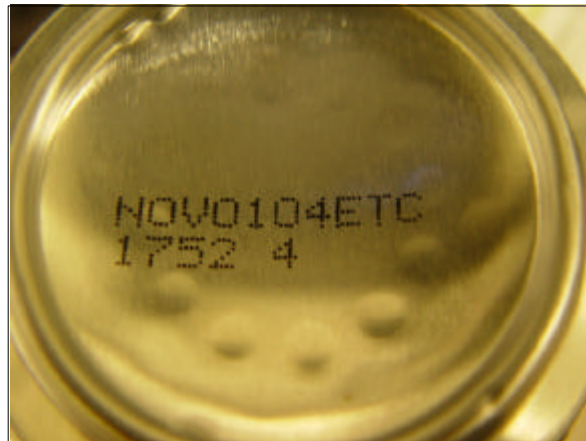
**Minimum one pixel wide vertical line must be able to separate the characters for readability.**

**Print angle should be the same within the area of interest.**

**Gradients in the image slow down reading.**

**Multiple print angles make this very hard to read in spite of the good quality print.**

**Space between lines and characters is too close**



**Improve separation in both directions by adding more light. This erodes the dark pixels, making them smaller and, therefore, adding separation.**

**This does not work when the image's dots are already small and faint.**