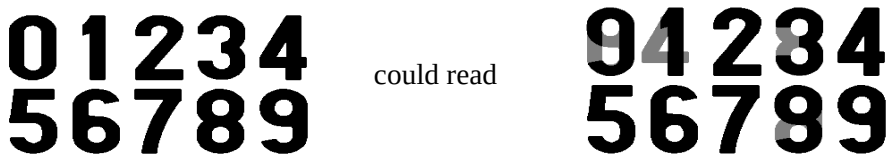
Font for Tyre Identification Number

1. Document TYREgtr-08-01e in its Paragraph 4.2.1. describes the format of the Tyre Identification Number. This description contains among others the requirement that it must be under the form of a marking to be "*located on the intended outboard sidewall of the tyre, and positioned between the bead and [50% of] the distance from the bead to the tread. On the other sidewall of the tyre either a tyre identification number or a partial tyre identification number is required. The partial tyre identification number is comprised of all characters except the date code*"
2. This description then provides provisions for the Plant Code, the Manufacturer's Code and the Four Digit Date Code. Paragraph 4.2.1.5. well indicates which symbol must be used, and which must not be used.
3. The vehicle manufacturers make use of this marking in the logistic management of their vehicles with regard to the mounting of the tyres/rims e.g. to connect the tyre and its manufacturing week to each car, based on the NHTSA rule Part 574.10, to be able to trace relevant tyres in case of a technical problem. In general an automated optical reading system is applied to recognize the tyres and to guarantee that the proper tyres are mounted on each vehicle according to its variant (engine, level of equipment, etc.).
4. As a matter of fact, paragraph 4.2.1.5. already partially addresses the problem of optical automated character recognition by prohibiting some characters which do not sufficiently differentiate from each other. However, due to the nature of the tyres and of the marking, current optical recognition system may still encounter difficulties in differentiating some characters:



5. In order to overcome this problem, OICA proposes to add the provision that the characters used for the mandatory marking of the tyre must be easily legible by automatic optical reading systems. For this purpose, OICA recommends the use of specific fonts, known as OCR-fonts, which maximize the differences between the characters to optimize OCR reading. These fonts are defined in ISO 1073-2: while OCR-A is not very beautiful, it is very efficient; the OCR-B is indeed a better looking alternative.
6. OICA proposal for amendment to the draft text of the gtr (only the bold text is changed):

"4.2.1.5. Tyre Identification Number Location: Must be located on the intended outboard sidewall of the tyre, and positioned between the bead and [50% of] the distance from the bead to the tread. On the other sidewall of the tyre either a tyre identification number or a partial tyre identification number is required. The partial tyre identification number is comprised of all characters except the date code.

4.2.1.6. Tyre Identification Number format

4.2.1.6.1. The following symbols shall be used:

"A, B, C, D, E, F, H, J, K, L, M, N P, R, T, U, V, W, X, Y, 1, 2, 3, 4, 5, 6, 7, 8, 9, 0".

4.2.1.6.2. The following symbols shall not be used:

"G, I, O, Q, S, and Z"

4.2.1.6.3. The Tyre Identification Number shall be of a font easily legible by automatic optical reading systems."