

A high corrosion resistance grade for medical and automotive applications. X15TN

A technical brochure dedicated to X15TN is now available.

Hard, wear resistant steels, even if Cr-rich, show limited corrosion resistance. The most widely used grade, 440C, has to be used with care in order to avoid any failure due to corrosion. X15TN was developed to offer our customers a high corrosion and wear resistant grade.

The development consisted in replacing part of the C with N, in such proportions that the 58HRC minimum hardness can be achieved for low (180°C) and high (500°C) tempering temperatures.

X15TN has been used for several years in the medical and automotive industries. Examples include :

- Injection systems for flex fuel engines,
- Components for marine injection systems,
- Medical ancillaries and surgical tools.

The replacement of C by N results in fine and homogeneous precipitates and higher free Cr content in the matrix. As a result, the grade offers numerous advantages compared to 440C :

- Improved corrosion resistance,
- Increased fatigue strength,
- Higher ductility and less prone to quench cracking,
- Better polishability.

You will find, attached, a .pdf version of the brochure, for your own use only. Customers' copies can be ordered at the following e-mail address documentation-ad@eramet-aubertduval.com.

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PS. We remind you that all the EscalADe issues and their attachments are permanently accessible through the following link : [EscalADe](#)