



## Bearings and Ball-screws Markets : new XD15NW Brochure

A technical brochure dedicated to the XD15NW is now available.

The XD15NW has been developed as a high corrosion and wear resistant grade, for markets where traditional high Cr stainless steels like the 440C are not hard enough to meet our customers' requirements.

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

This has resulted in fine and homogeneous precipitates, and higher free Cr content in the matrix. The XD15NW therefore offers several advantages compared to the 440C :

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

The XD15NW has been used for several years in the bearings industry, not only in aerospace, but also for food processing, paper industry, aerospace... The most recent applications relate to :

- Nuts and bolts for the BOEING 787 electric brakes (through-hardened or surface-induction hardened),
- Bearings used in highly corrosive environments,
- Bearings for competition bicycles,
- Large ball-screws for defense applications.

We would like to emphasize that the XD15NW is an Aubert & Duval proprietary patented grade. **It should be promoted as one of our most prominent achievements.**

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](mailto:documentation-ad@eramet-aubertduval.com).

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