AUBERT&DUVAL

EscalADe

N°15 *The internal Marketing Bulletin from Aubert & Duval* *02 November 2009*

A new range of AD Grades approved by AMS

We are glad to let you know that the following grades have had their specifications recently published by AMS.

STEEL	AMS #	UNS #	ADVANTAGES	TYPICAL USE
FDG	**6492**	K 31980	Carburizing grades If gaz quenching, reduced distortions. Capable of producing large parts. Fabrication process equivalent to 9310 and S82, with higher properties (UTS, KV and no retained austenite in carburized layers)	Gears
FDGW	**6493**			
FND	**6494**	K 51570	Carburizing grades If gaz quenching, reduced distortions. Capable of producing large parts. Relatively high tempering temperature induces increased working temperature (up to 250°C), Compatibility with DLC coatings	Injection systems, gears
FNDW	**6495**			
GKP	**6496**	K 23280	<u>Nitriding grades</u> Nitrided layer up to 1mm. Larger grinding stock for safer milling or for regrinding. Reduction of nitriding time for a fixed case depth compared to current nitriding solutions	Crankshafts, shafts, high temperatures bearings (up to 450 / 500°C)
GKPW	**6497**			
GKPYW	**6498**			

Gears, shafts, transmissions, bearings, crankshafts and many other parts can be made from carburizing or nitriding steels. AD original offering answers most stringent customers' requirements

- Carburizing grades : improved hardenability for larger parts, while the current grades, in case of oil or water quenching, induce distortion after machining
- Nitriding grades : thicker layer (1 mm) for highly loaded surfaces, while it is currently no more than 0.6 mm

These grades have been originally developed for FormulaOne applications, but have gained the areospace market's interest. Hence the sponsoring of aeronautics transmission key-players (MOOG, HAMILTON SUNSTRAND, GOODRICH,…).

This AMS publication means **wider possibilities for AD to promote its offering in the aerospace market, but also in other fields** where these publications are highly regarded, such as in the automotive and mechanical industries.

Additionally the AMS committee members (Goodrich, Boeing, Rolls Royce…) are supporting AD application for MARVALX12, MARVALX12H,MLX19 and NC310YW. Expected date of publication : second half of 2010.

Arnaud Tronche