



TOTAL
Committed to Better Energy

AZOLLA AL



Low staining hydraulic oils designed for aluminium rolling mills.



APPLICATIONS

Hydraulic oil for aluminium rolling mills

- Recommended for the lubrication of hydraulic systems
- Formulated with **low-staining** base oils and high performance additives
- Different viscosity grades available: suitable for **low and high pressure** hydraulic systems

LOW-STAINING PROPERTIES

Classic hydraulic oil



AZOLLA AL



Tested at 300°C **diluted at 10%** in rolling oil



CUSTOMER BENEFITS

- ✓ Decreased production rejects thanks to low-staining characteristics.
- ✓ Extended service life thanks to good anti-wear properties.
- ✓ Maintenance costs reduction: longevity of oil increased by its resistance to oxidation.

PRODUCT PURITY



Compared to a classic hydraulic oil, **AZOLLA AL** range is :

- Clear
- Odorless
- No aromatic compounds

TECHNICAL DATA – AZOLLA AL

CHARACTERISTICS	METHODS	UNITS	TYPICAL VALUES*			
			15	22	32	46
Viscosity at 40 °C	ISO 3104	mm ² /s	15	22	32	46
Viscosity at 100 °C	ISO 3104	mm ² /s	4.2	5.5	7.6	9.9
Viscosity index	ISO 2909	-	207	220	218	212
Density at 15 °C	ISO 12185	kg/m ³	831	834	838	842
Flash point	ISO 22592	°C	>140	>140	>140	>140
Pour point	ISO 3016	°C	-18	-18	-18	-18
Copper corrosion, 3h, 100°C	ISO 2160	-	1a	1a	1a	1a
Rust prevention	ISO 7120	-	Pass	Pass	Pass	Pass

*The specifications above are averages communicated for information purpose only.

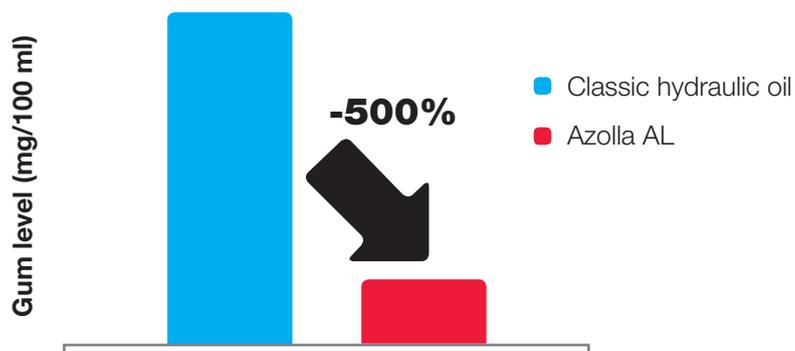
SPECIFICATIONS AND APPROVALS

✓ Registered NSF H1



✓ FDA 21 CFR 178.3570

GUM TEST – ISO 6246



AZOLLA AL range contains on average **5 times less** gums than a classic hydraulic oil, reducing residues after annealing

THERMAL PROPERTIES

Fast evaporation, without stains or residues on aluminium

COMPATIBILITY

Compatible with **conventional hydraulic oils**

STORAGE

Product should be stored under cover in clean, dry conditions and protected from frost

Recommended storage temperature : 5°C to 40°C

TOTAL LUBRIFIANTS
INDUSTRY & SPÉCIALITÉS
22-11-2019
AZOLLA AL

This lubricant used as recommended and for the application for which it has been designed does not present any particular risk. A material safety data sheet conforming to the regulations in use in the E.C. is obtainable via your commercial adviser quick-fds.com.



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