

UniFlor™ 8190

A unique synthetic oil that is completely fluorinated, providing resistance to oxidation and breakdown while operating continuously at very high temperatures while exposed to aggressive chemical environments.













FGD Scrubbers

<u>Application</u>: Exhaust Booster Fans (Variable pitch axial flow)

<u>Component Lubricated</u>: Hub Oil for Pitch Bearings

Since the Clean Air Act (CAA) in 1970; U.S. power utilities have made significant progress installing pollution control equipment to curb power plant stack emissions. The CAA Amendments of 1990 heightened the urgency of installing a large number of Flue Gas Desulfurization (FGD) systems, or scrubbers, in a relative short period of time. As of 2005 with the passage of the Clean Air Interstate Rule (CAIR) along with plans for building new coal-fired stations, a steady number of new scrubbers have been planned for construction through 2030.

Nye Lubricants developed a **high temperature and chemically inert oil** for use in lubricating the blade pitch bearings of axial flow exhaust fan designs used in the FGD scrubbers installed at coal fired power plants. Nye's UniFlor 8190 is applied inside of the fan hub to lubricate the double row spherical roller bearings that enable continuous variable pitch adjustment for the 20 fan blades. Uniflor 8190 can withstand temperatures well over that of the flue gas exhaust temperatures and is **highly resistant** of the aggressive & corrosive exhaust gasses.

Typical Properties

Lubricant Properties	Typical Value	Test Method
Temperature Range	-25 to 250°C	
Base Oil	PFPE	
Kinematic Viscosity (100°C)	40 cSt	ASTM D-445
Kinematic Viscosity (40°C)	388 cSt	ASTM D-445
Pour Point	-30°C	ASTM D-97
Flash Point	Non-Flammable	ASTM D-92
Evaporation (24hrs, 150°C)	0.06%	ASTM D-972

Nye also manufactures and commercializes other **oils and greases** for the power generation industry. Additional lubricants are available to meet a wide range of application requirements. For further information, technical specifications, evaluation samples, questions about any Nye product, or to discuss a lubricant custom-designed for your application - call us at +1.508.996.6721 or visit us at www. nyelubricants.com.



