



## COMPATIBILITY OF SUNTEC INDUSTRIES PRODUCTS WITH BIOFUELS & FUTURE LIQUID FUELS

Fully aware of the global ecological transition, SUNTEC Industries is adapting its products to make them compatible with the new biofuels that will partially or totally replace current fuels. These biofuels are of different origins and characteristics. This information note aims to clarify the compatibility of our different pump ranges for the different fuels available today.

### ■ FAME

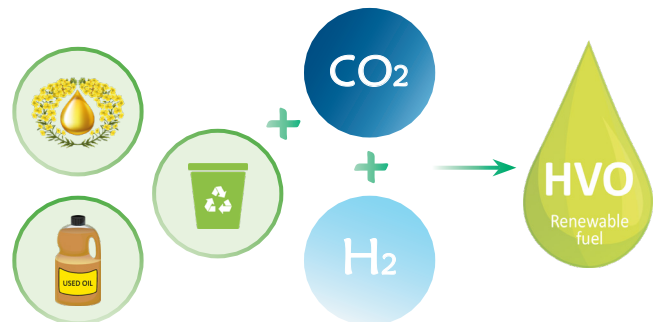


Fatty Acid Methyl Ester is a biofuel produced by a process of transesterification of biomass such as vegetable oils (rapeseed, soybean, corn, beet, etc.), animal fats, used cooking oils or greasy industrial waste.

FAME is generally mixed with fossil fuel oil in varying proportions. A mixture of 30% FAME and 70% fossil fuel oil is referred to as B30.

### ■ HVO

Hydrogenated Vegetable Oils are fuels created by the hydrogenation of biomass such as vegetable oils (rapeseed oil, soybean oil, corn oil etc.), industrial waste or used cooking oils. They can be mixed without restriction with fossil fuel.



### ■ XtL

Depending on the origin of the raw material, we speak of BtL for Biomass to Liquid, PtL for Power to Liquid and GtL for Gas to Liquid. These are synthetic fuels from the Fischer-Tropsch synthesis method. Hydrogen is used for PtL and natural gas for GtL.

*These biofuels, as well as fossil fuels, are subject to different standards. These are indicated in the compatibility table on the back of this document.*



## ■ Impact on SUNTEC Industries products

SUNTEC Industries has been working for more than 20 years on the compatibility of its products with the various European and American liquid fuels.

### **Residential pumps:**

Models identified by the letter "V" are designed for use with biofuels with concentrations below 30%. More than 10% of the components have been replaced, such as O-rings, with new materials with better chemical resistance and improved oxidation stability. The new O-rings are especially adapted to the latest generation of compact boilers. These changes do not affect the technical specifications of the products.

E.g. : AS 47 C 15XX 6P 0700: model only compatible up to B5

ASV 47 C 15XX 6P 0700: refer to the table below.

### **Semi-industrial, industrial and marine pumps:**

AJ pumps compatible with biofuels are identified by the letter "V" as residential pumps.

E, TA, TAR and T models are perfectly compatible with the use of mixtures with concentrations up to B100. They are designed with O-rings and a suitable mechanical seal.

You will find below a matrix showing the compatibility of SUNTEC Industries products with biofuels and future liquid fuels.

Products Fuels	Low Capacity Pumps			Medium Capacity Pumps			High Capacity Pumps	Accessories	
	A and D	AxV	DV	AJV	J rev. 7 and lower	E	TA/TAR/T	TV	SL1 (V version)
Standard fuel* up to 5% of FAME	✓	✓	✓	✓	✓	✓	✓	✓	✓
FAME 30% (B30/R33)**	✗	✓	✓	✓	✗	✓	✓	✓	✓
FAME 100% (B100)***	✗	✗	✓	✗	✗	✓	✓	✓	✗
HVO*	(✓)	✓	✓	✓	(✓)	✓	✓	✓	✓
XtL*	(✓)	✓	✓	✓	(✓)	✓	✓	✓	✓

*Pumps with solenoid valves are certified according to DIN ISO 23553-1.*

\* According to DIN 51603-1 or EN 590 ; or compatible with the requirements of DIN 51603-1

\*\* According to DIN SPEC 51603-6

\*\*\* According to EN 14214

(✓) The existing standard pumps work with HVO and XtL but SUNTEC Industries recommends, when replacing the pump, to prefer a V or biofuel compatible pump in case of evolution of the standards.

*In addition, biofuel compatible pumps are more suitable for high temperature environments.*

**SUNTEC Industries strives to adapt its range of products to all biofuels available on the market. Our team is at your disposal for any further questions or advice on the compatibility of our products for your application.**

## ■ Warranty

*SUNTEC Industries maintains the same warranty period and conditions of use as for standard pumps. See general sales conditions.*