



# High yield, high quality, high value

Increase profitability with MWI™ technology

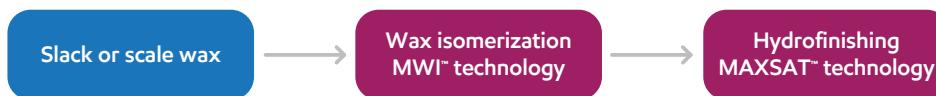
Energy lives here

Refiners can use MWI wax isomerization technology to convert slack wax or other highly paraffinic streams into very high value Group III+ base stocks (high VI –140). Small amounts of valuable winter (low Cloud Point) diesel are also produced as a by-product without need for further processing.

### The MWI process

Wax is liquified and preheated to reactor temperature and fed to a proprietary fixed bed reactor containing an advanced proprietary selective zeolite catalyst. Paraffinic molecules in the waxy feed are selectively isomerized by this catalyst to branched, lower pour point lube molecules with minimal conversion to high-quality diesel. For some feeds (high oil-in-wax slack waxes, for example) an initial hydrotreating step may be required.

### Group III+ production



### Key benefits



#### Exceptional product quality

- High-quality product with high VI
- Ultra-low pour capability
- Haze-free" product



#### Low risk

- Easily retrofitted into existing hydrotreating units
- Robust catalyst with nitrogen and sulfur tolerance



#### High performance

- Increased yield
- High selectivity

### Valuable flexibility

Using MWI technology, refiners can produce high-quality Group III+ base stocks. MWI's processing of slack wax, or a variety of synthetic waxes, can be used to augment a lube plant's VI balance. This capability makes MWI a valuable option for almost any existing or planned lube plant.

MWI technology provides increased yield, high selectivity and exceptional product quality.

### About us

ExxonMobil helps refiners and petrochemical manufacturers increase capacity, lower costs, improve margins, reduce emissions and operate safe, reliable and efficient facilities. Along with a commitment to helping to implement best practices and to achieve better results, we provide cutting-edge proprietary catalysts and license advantaged process technologies for refining, gas and chemical needs.



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