



## **Base Oils II – Product Quality and Global Profitability**

**10.30AM GMT // 2:30PM UAE**

### **Module 1**

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|--------------|--|
| <b>10.30</b> | <b>Welcome and course introduction</b>   |
| <b>10.40</b> | <b>Refresher: Base Oils I Terminology &amp; Technology</b> <ul style="list-style-type: none"><li>• Crude and base oil naming conventions</li><li>• Technology, key properties, and where they're controlled</li><li>• API Groups: the detailed definitions</li></ul>     |
| <b>11.10</b> | <b>Volatility Requirements - Industry Game Changer</b> <ul style="list-style-type: none"><li>• The technical details of viscosity index (VI)</li><li>• Volatility: another base oil property to understand</li><li>• VI – Volatility – Viscosity relationships</li></ul> |
| <b>12:10</b> | <b>Break</b>   |
| <b>12:40</b> | <b>Viscosity &amp; Engine Oils: an overview</b> <ul style="list-style-type: none"><li>• Viscosity measurement under different conditions</li><li>• Putting it together: SAE J-300 Engine Oils</li><li>• Why engine oils matter to all other base oil sectors</li></ul>   |
| <b>13:25</b> | <b>Summary and conclusions</b>   |
| <b>13:30</b> | <b>End of day one</b>  |



## **Base Oils II – Product Quality and Global Profitability**

### **Module 2**

**10:30**

#### **Global Variations in Base Oil Quality**

- Major supplier comparisons: Group I, II, III qualities
- Quality differences within the same groups
- GTL and PAO: quality nirvana (for some applications)

**11:15**

#### **Base Oil Pricing Mechanisms**

- Mechanisms – what sets base oil price?
- Price ceilings: buyers (finished lubricants; process oils)
- Price floors: sellers (base oil refiners & marketers)

**12:00**

#### **Break**

**12:30**

#### **Base Oil Refinery Profitability**

- Profit basics: revenue less expenses
- Fuels versus lubes: who pays for what?
- By-products from base oil plants
- Exercise: Group I vs Group II vs Group III profitability

**13:15**

#### **Discussion: Findings of profitability exercise**

**13:30**

#### **End of day two**



## **Base Oils II – Product Quality and Global Profitability**

### **Module 3**

**10:30**

#### **Base Oil Forecasting Methodology**

- Current global supply and demand
- Factors to consider when doing a base oil forecast
- Example: A simplified 2025 base oil forecast

**11:30**

#### **Group Discussion & Opinions**

- Will Group I cease to exist?
- Global recovery timing post-COVID
- Example: A simplified 2025 base oil forecast

**12:00**

#### **Break**

**12:30**

#### **Trends & Ideas: Survival of the Fittest**

- Unintended consequences from hydroprocessing
- More supply from re-refined oils and bio-lubricants?
- New survival schemes required

**13:20**

#### **Summary and course conclusion**

**13:30**

#### **End of the course**