



**Solutions, Standards, Software**  
[www.klmtechgroup.com](http://www.klmtechgroup.com)

## **March 2019 Newsletter**

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### **1. Distillation Random and Structured Packing Supply**

Since 1997, KLM Technology Group has been providing engineering, operations, and maintenance support for the hydrocarbon processing industry.

KLM Technology Group is an industry leader for distillation simulation, hydraulic design, mechanical design, installation and troubleshooting. With our key partner's we can also supply distillation equipment such as; random packing, structured packing and trays.

#### **KLM Advantages**

- 1) KLM has low overhead and we pass the saving to our clients - you should allow KLM to bid on your projects.**
- 2) As a leader in Process Simulation and Design, KLM will guarantee equipment quality, capacity and product purities. Most suppliers will only guarantee equipment quality and hydraulic capacity, not product purities.**
- 3) KLM can supply from any major distillation equipment provider and KLM will provide equipment quality, capacity and product purity guarantees.**

4) KLM can supply from a high quality generic distillation equipment provider at lower cost, and KLM will provide equipment quality, capacity and product purity guarantees.

5) KLM can provide inspection and installation experts to insure your distillation equipment will meet your requirements.

[http://www.klmtechgroup.com/Distillation\\_Solutions.htm](http://www.klmtechgroup.com/Distillation_Solutions.htm)

## **2. Great Training for your team – In House or Regional Seminar**

Since 2004 KLM Technology Group and their Key Partners have been providing great training for operations, maintenance, and technical support personnel. Since 2015 we have been blessed to provide some great training courses for our key partners

### **1. Total Refining – Port Arthur, Texas, USA**

**2006 – Crude Unit Troubleshooting**

**2015 – Crude Unit Distillation**

**2016 – Operator Safety Training / Basics of Refining**

**2017 – Operator Safety Training / Basics of Refining**

**2018 – Operator Safety Training / Basics of Refining**

### **2. Process Simulation Company – London, UK**

**2017 – Overview of Ethylene Process**

**2017 – Overview of Petrochemicals**

### **3. Large Refinery – Poland**

**2017 – Process Equipment Design including Flare Systems**

### **4. Ethylene Complex – Sulphur, Louisiana, USA**

**2017 – Ethylene for Operators**

### **5. Distillation Regional Seminar, Kuala Lumpur, Malaysia**

**2017 - Refinery Optimization Training**

### **6 Ethylene Complex – Kuantan, Malaysia**

**2017 – Ethylene Optimization**

## 7. Fractionation Research Webinar – Stillwater Oklahoma, USA

### 2018 – Distillation Troubleshooting

The highest factor in a process plant's profit is producing on test products. To have a good reliable plant you need to have at least a 97% on stream time. To obtain this you need to study the causes of failures. Many reliability studies show two main causes of unreliability; human error and instrumentation failure.

To be an effective manager, you should have a plan to reduce the main causes of unreliability. If you reduce the main cause of your problems, it will also make your life in general much better. Imagine having less phone calls at night, on the weekends and a higher bonus.

You should have a yearly budget to replace 10% of your instrumentation. This replaces all of your instrumentation every ten years. How many of your phones have lasted ten years? For certain critical sections of instrumentation ten years is too long.

You should have a training analysis and ongoing training program. For most average size plants, to go from 94% to 97% on stream time is several million dollars extra profit per year. If your training program is not reducing the human error incidents, you need to improve your training program.

The training participates must understand the basic fundamentals of the equipment they are operating to make the correct decisions. This is very important in choosing curriculum and trainers. **They should almost be complaining it is too technical and too hard, gaining real knowledge is rarely entertaining, and it is actually hard work.**

KLM Technology Group has helped train over 1000 participates in the last 21 years. We have hosted regional conferences and conducted numerous In House Trainings. With our operations and design background we understand equipment fundamentals and the level that operators and engineers should master.

<http://www.klmtechgroup.com/Training.htm>

We are developing some videos to assist training needs. Nothing beats the interaction between instructor and student, but training videos can lay some of the basic foundations needed for students.

We have published five introduction videos on U-Tube.

We will publish more introduction videos and we have some advanced videos for purchase.

The Introduction Videos include;

1. Introduction To Distillation Troubleshooting
2. Introduction To Project Management
3. Rating Process Simulation Programs
4. Introduction To Process Simulation
5. Introduction To Process Flares

Please review our Videos at

[http://www.klmtechgroup.com/Training\\_Videos.htm](http://www.klmtechgroup.com/Training_Videos.htm)

### **3. Kolmetz Handbook of Process Equipment Design – 12<sup>th</sup> Anniversary**

In January 2007, we published the first chapter of the Kolmetz Handbook of Process Equipment Design, Fluid Flow Hydraulics Line Sizing and Material Selection. Today we have over 50 chapters on a wide variety of subjects; equipment design, refining, ethylene, natural gas processing and safety.

We have a very good group of chapters that address Ethylene Plants and Refineries. Two of our most popular chapters are Hydrotreater Design and Process Unit Cost Estimating.

Thanks for your continued support of the Kolmetz Handbook of Process Equipment Design in the last 12 years.

The introduction to the chapters can be review on the web site.

[www.klmtechgroup.com/Engineering\\_Design\\_Guidelines.htm](http://www.klmtechgroup.com/Engineering_Design_Guidelines.htm)

#### **Equipment Sizing Software**

We have developed equipment sizing software based on the Kolmetz Handbook of Process Equipment Design. We believe these are some of the best stand-alone sizing programs.

We have completed;

1. Units Conversion Program
2. Hydraulic Line Sizing Program
3. Control Valve Sizing Program
4. Physical and Transport Properties Program
5. Restriction Orifice Sizing Program
6. Flare Sizing Program

[www.klmtechgroup.com/Engineering Design Software.htm](http://www.klmtechgroup.com/Engineering_Design_Software.htm)

#### **4. Random and Structured Packing**

KLM Technology Group with their Key Regional Partners (Summit Technology Management) are happy to source random and structured packing for your team.

KLM Technology Group has partnered with major distillation equipment providers on multiple projects as one would expect for an EPC Company. Some of our end users include Petronas in Malaysia and BST in Thailand.

KLM insist the distillation equipment that we provide are certified to supply to American Major Companies like Exxon and European Majors like Shell. KLM would be happy to arrange a distillation equipment quality review at our certified manufactures.

There are several advantages for you to partner with our team.

1. The advantage for the end user is that KLM's overhead cost is significantly lower than other EPC companies and / or other distillation providers, leading to significantly lower distillation cost with the potential of higher quality, leading to the best of both worlds; high quality at a very competitive cost.

**Our Overhead Cost is low and we pass the savings to your team. You should include our team in your bid loop.**

2. As an EPC Company we can purchase from any supplier.

3. As Distillation Simulation and Installation experts we can provide Process Guarantees, including capacity and purity. Most Distillation Manufactures will only provide hydraulic guarantees, not capacity and purity guarantees. A Process Study can provide a large return on investment.

4. If you decide to do “replacement in kind” – is this the best option? If you have a fouling service, is your current equipment fouling resistant? If you have a clean service, is your current equipment the most efficient? KLM would be happy to quote “replacement in kind” and / or better options.

4. We have replacement stock in key countries leading to the ability to have very fast replacement as needed. We can develop key partnerships to maintain replacement stock in your country for your team.

5. We can provide Installation Experts to work with your team to insure equipment is installed properly on a daily rate basis.

## **5. KLM's Key Partners**

Over the last 21 years we have been fortunate to find some great key partners that have assisted KLM Technology Group.

1. Summit Technology Management- is a Southeast Asia based Consulting Firm that conducts Process Studies, Process Simulation, Basic Design Packages, Random and Structured Packing and Unit Commissioning.

2. Quarks Engineering- is an Indian based Consulting Firm that conducts Process Studies, Process Simulation, Basic Design Packages, Random and Structured Packing, Unit Commission and Training.

3. Process Engineering Associates- is a USA based Consulting Firm specializing in process chemical engineering, process design, and process safety.

4. Broadwind Energy- A precision manufacturer of structures, equipment and components for clean tech and other specialized applications. As an ISO 9001-2008 and ASME certified fabricator, we're experienced manufacturer of turnkey solutions for pressure vessels and process skids. Our expertise is in fabrications —from massive wind towers, to storage tanks, to mining machinery components with pressure boundary / pressure vessel capabilities.

You can find our group of Key Partners here.

[http://www.klmtechgroup.com/Key\\_Partners.htm](http://www.klmtechgroup.com/Key_Partners.htm)

## **6. Advertise with KLM Technology Group**

Since 1997, KLM Technology Group has built their marketing data base. We strongly believe that KLM Technology Group can assist with your advertising and marketing. We have a great internet foot print.

### **1. Monthly Newsletter**

We publish a monthly newsletter to over 220,000 people (which you are reading). We average about 10% of the people opening the newsletter; so about 22,000 people open this newsletter. Most are in Oil and Gas industries. If you have a great product, you need to be listed as a key partner in our monthly newsletter.

### **2. Websites**

We have three websites with over 50,000 visitors per month. Anything we post on the websites will move very high in the search engines, due to our high website ranking. The newsletter will invite people to view the websites. If you have a great product, you need to be listed as a key partner on our websites and your brochure published on our highly ranked web pages.

### **3. Engineering Practice Magazine**

This is our fifth year of publishing Engineering Practice Magazine. The Quarterly Magazine has over 5000 views per issue. If you have a great product, you need to be advertising and publishing articles in Engineering Practice Magazine. Once a quarter we send a newsletter to invite 200,000 people to view the Magazine.

### **4. Social Media - Linked In**

We have 16,000 followers, mostly from the Oil and Gas Industry. These contacts are added to our newsletters emails.

We also manage 6 groups with over 14,000 members;

Distillation Technology (6,191 members),

Petrochemical Plant Commissioning (6,860 members),

Olefin Technology (1,487 members) and others.

Our average post on Linked In receives about 4,000 views. Our largest post received over 40,000 views, 126 likes and 61 comments. We post all our newsletters on Linked In.

We believe that KLM can assist your team in marketing and advertising your product.