KLM Technology Group

Consulting, Guidelines and Training

www.klmtechgroup.com

December 2020 Newsletter

- 1. Happy Holidays and Thanks to our Friends
- 2. 13th Anniversary of Engineering Design Guidelines
- 3. Great Training Courses for your team
- 4. Random and Structure Packing
- 5. Demister Pads
- 6. KLM Technology Group's Great Web Presence

Happy Holidays and Thanks to our Friends

Dear Friends

The holiday season offers us a special opportunity to extend our personal thanks to our friends, and our very best wishes for the future. We wish to you a very Merry Christmas and a prosperous Happy New Year.

It is people like you who make KLM Technology Group such a pleasure all year long. Our business is a source of pride to us and with friends like you, we find going to work each day to make it a rewarding experience for everyone.

May you have the special gifts of Christmas in the New Year;

Love - even for those who do not deserve love, sometimes this includes ourselves.

Peace - which comes from forgiveness of yourself and others.

Truth - which is often hidden in today's world. The fruits of real truth are love, peace and joy.

Joy - what happens when we realize we are blessed far above what we deserve.

All the best to you and your family in the holiday season.

Karl Kolmetz

Engineering Design Guidelines - 13th Anniversary

In January 2007, we published the first chapter of the Engineering Design Guidelines, Fluid Flow Hydraulics Line Sizing and Material Selection. In 2014 we renamed the "Engineering Design Guidelines" to the "Kolmetz Handbook of Process Equipment Design".

Today we have over 100+ 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.

We are adding a Troubleshooting Section to the new guidelines and as we update the older ones. Thanks for your continued support of the Kolmetz Handbook of Process Equipment Design in the last 13 years.

The introduction to the chapters can be review on the web

www.klmtechgroup.com/Engineering-Design-Guidelines.htm

Great Training Courses for your Team

Since 2004 KLM Technology Group and their Key Partners have been providing great training for operations, maintenance, and technical support personnel. We have provided in House Trainings, Regional Seminars and Webinars.

We are currently working on a group of Optimizing and Troubleshooting Courses.

- 1. Process Equipment Optimizing and Troubleshooting
- 2. Refining Optimizing and Troubleshooting
- 3. Ethylene Plant Optimizing and Troubleshooting
- 4. Natural Gas Plant Optimizing and 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 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 2000 participates in the last 16 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.

You can review a synopsis of our training courses here;

www.klmtechgroup.com/Training.htm

Random and Structured Packing

KLM Technology Group with their Key Regional Partners 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.

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

www.klmtechgroup.com/Distillation-Solutions.htm

Demister Pads

We has quoted some demister pads lately at very competitive cost. Be sure and let us bid on your demister pads.

KLM Technology Group's Great Web Presence

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 180,000 people (which you are reading). Most are in Oil and Gas industries. If you have a great product, you need to be working with KLM Technology Group.

2. Websites

We have great rated websites. Alexa.com is an independent website ranking group. They rank website total readership. The lower the

ranking the higher the readership. This is only for online readership - which is most of today's readership.

Google ranks by their algorithms - not by total readership. Many of my readers come from this newsletter direct.

Here are the current Alexa Rankings for KLM Technology Group which are very good - go look at other site rankings.

```
KLM Technology Group ---- World Rank 134,866
USA Rank 57,597
```

If you have a great product, you need to be working with KLM.

3. Engineering Practice Magazine

This is our sixth year of publishing Engineering Practice Magazine. We are honored, the Quarterly Magazine has reached Top Tier Status in just six years. The reason we have many views is the great authors that contribute to the magazine.

Here are some current Alexa Rankings for engineering magazines the lower the ranking the higher the readership. This is only for online readership - which is most of today's readership.

```
Engineering Practice ======== 274,119
Oil and Gas Journal ======= 208,866
EPTQ =========== 776,916
Hydrocarbon Processing ======= 344,429
Hydrocarbon Engineering ======= 550.414
Engineering News Record ======= 897,814
Chemical Engineering Magazine === 253,360
Process Industry Informer ======= 875,362
```

You should consider contributing to the magazine. 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 180,000 people to view the Magazine. We are considering to go to bi-monthly in 2021.

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