Vibrations & Pulsations in LDPE Plants
26 and 27 June 2019 in Rheine/Germany
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Agenda (preliminary)

1. Introduction
   - LDPE process
   - Why do vibrations matter in LDPE plants?
     - Reliability
     - Availability
     - Maintainability
     - Safety

2. Theoretical Basis
   - Vibrations
     - Fatigue
     - 1-DOF systems
       - Stiffness, mass, damping
       - Amplitude and phase
       - Transfer functions
     - MDOF systems
       - Operational deflection shapes
   - Pressure Pulsations
     - Wave propagation inside piping
     - Standing waves and acoustic resonances
   - Dynamic Forces and Moments
     - Machine related
     - Flow related
     - Interaction of machines

3. Equipment Specific Vibration Issues
   - Hyper Compressor
   - Booster/Primary Compressors
   - Intercooler and Reactor
   - Pipe Supports
   - Small Bore Connections

4. Assessment
   - Pressure Pulsations
     - API standard 618 5th edition
     - Vendor/Licensor specific pulsation limits
   - Machinery & Foundation Vibrations
     - ISO 10816 – Part 8
     - Vendor specific vibration limits
   - Pipeline Vibrations
     - VDI guideline 3842
     - Energy Institute guideline

Impressions of Rheine (Rheine City, KÖTTER Consulting Engineers, Nature park with saltworks)
5. Mitigation Measures
- Measures for reducing pulsations in low and high pressure piping
- Measures for reducing structural vibrations at piping, structural steel, machinery foundation etc.

6. Case Studies
- Investigation of elevated foundation vibrations of a hyper compressor
- Mitigation of discharge pipe bend vibrations of a hyper compressor
- Vibration optimization of a primary compressor
- Investigation and mitigation of intercooler/reactor vibrations

If you have special fields of interest please let us know. We look forward to receiving and implementing your ideas.

Enjoy our region “Münsterland”: Castle Nordkirchen, typical landscape, Historical old town of Münster
Vibrations & Pulsations in LDPE Plants.
2-Days-Seminar – all inclusive

Registration

Fee:
Early Bird:
EUR 1.900,00 plus 19% VAT
EUR 1.800,00 plus 19% VAT
Registration until 31st December 2018

The fee is including all seminar documents, catering during two days, evening dinner and hotel costs.

Our Service:
We book the hotel room for you.
Our KCE-shuttle takes you from the hotel to the KCE-Academy and back.

Registration:
Please send an email with contact data to
ldpe-seminar@koetter-consulting.com

Seminar venue:
KÖTTER Consulting Engineers
GmbH & Co. KG · KCE-Academy
Bonifatiusstraße 400 · 48432 Rheine · Germany

Contact:
For all questions regarding registration and organisation please contact

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All participants are accommodated in the Park Hotel Surenburg.

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