

# Energy Pinch Experience Event

2 days, November 8th/9th, 2017 – Breda, The Netherlands



To celebrate our 25 years of experience in the field of energy efficiency for the process industry, we kindly invite you to a 2-day Pinch Experience Event. Subject of this event is **pinch analysis**: the proven key tool to increase the energy efficiency in the process industry. The event not only covers the basic principles of pinch technology, but particularly aims to give the participants a better understanding of how to apply the methodology in practice and generate feasible energy saving measures.

## Motives

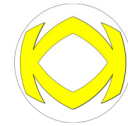
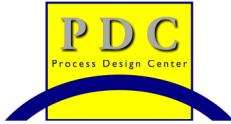
Though the pinch methodology has already been a part of the curricula of chemical and mechanical engineering education for over two decades, engineers are not often faced with it in their daily work. When engaged in energy efficiency, rather than by attending yet another refresher course on pinch analysis, engineers gain added value by experiencing the topic in an advanced and applied format from experts in the field. PDC/Keuken & de Koning BV have gained **over 25 years of practical experience** in the field of pinch analysis for existing industrial processes as well as for grassroots process designs.

## Content

The energy efficiency in the process industry can be increased if the power of the pinch methodology is better understood, the methodology is applied appropriately, and experiences are shared. Furthermore, the power of pinch technology can be boosted if the application is not limited to the actual process, but also covers the utility grid as an integral part of increasing process and total site energy efficiency.

To cover these aspects our 2-day Pinch Experience Event combines the following elements:

- Selected parts of PDC's successful **advanced pinch course**,
- The success story of the company **Qpinch** on upgrading heat with **chemical heatpumps**,
- A **site visit to BASF Antwerp** – one of the world's largest integrated chemical production sites – to experience BASF's Verbund principle.



BASF's Verbund principle is about the intelligent interlinkage of production plants, energy flows and infrastructure. Also, know-how and customers are intelligently connected to each other. In this system, chemical processes consume less energy, produce higher product yields and conserve resources.

### Target audience

The "Pinch Experience Event" is meant for managers and process engineers. Prior experience with pinch analysis is not necessarily required. Nevertheless, some experience in energy efficiency in the process industry will be helpful.

### Where and when

The venue of this two day "Pinch Experience Event" is the offices of **PDC/Keuken & de Koning BV**, Catharinastraat 21-f, 4811XD Breda, The Netherlands. The event will start on Wednesday November 8 at 12:00 and will end on Thursday November 9. A bus is arranged for the group excursion to **BASF Antwerp** on day 2.

### Programme

#### DAY 1 – November 8<sup>th</sup>, 2017

- 12:00 Registration, opening & lunch
- 13:00 Energy efficiency: a helicopter view by Hans Keuken, CEO of PDC/Keuken & de Koning BV
- 13:30 Introduction to the pinch methodology, basic principles
- 14:15 Heat exchanger network design
- 15:00 Pause
- 15:15 Assessment and modification of existing networks
- 15:45 Hybrid heat exchanger networks (direct and indirect heat transfer)
- 16:30 Presentation by Wouter Ducheyne, CEO of Qpinch
  - Potentials of the High Temperature Chemical Heat Transformer
- 17:30 Break / to hotel
- 19:00 Pinch Experience Dinner

#### DAY 2 – November 9<sup>th</sup>, 2017

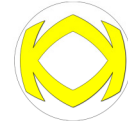
- 08:45 Opening & coffee
- 09:00 PDC's experience with pinch analyses at plant level + data acquisition
- 09:30 Total site analysis + PDC's experience with analyses of industrial clusters
- 10:15 Wrap up, final remarks
- 10:30 Q&A
- 10:45 Pause
- 11:00 Bus tour to BASF Antwerp
- 12:00 Lunch in Antwerp area
- 13:15 Arrival and check-in at the BASF site Antwerp
  - Experiencing BASF's Verbund principle
- 15:30 Return to PDC office Breda; estimated arrival time 16:30

### Fee

The fee for the Pinch Experience Event is **€ 1250 per participant (excl. VAT)**. Coffee/tea, lunches on day 1 and day 2, a dinner on day 1, and the bus tour to BASF Antwerp are included in the fee.



Keuken & de Koning B.V.  
process engineers and consultants



## Practical

The language used during the course and workshop is English.

Upon request, we can book accommodation at [Hotel Nassau Breda](#) or [Hotel Golden Tulip Keyser Breda](#). Both hotels are located at a convenient walking distance from the course location. A reduced rate applies for the course participants, which is not included in the fee.



## Registration and cancellation

To enroll for this event, send an e-mail **before October 25<sup>th</sup>, 2017** citing 'Registration Energy Pinch Experience Event November 2017' and including your name, e-mail address, phone number, company/organization, invoice address and VAT number.

After registration you will receive a confirmation, an invoice, route description and further information.

The number of participants is limited to 15 so early registration is recommended. Cancellation with a full refund is possible up to 2 weeks before the start of the course. After this date restitution of the course fee is no longer possible. Substitutions are possible at all times.

PDC/Keuken & de Koning reserves the right to cancel the course if minimum enrollment is not met, or if conditions beyond the company's control prevail. In the event of cancellation, you will be notified at least 10 working days prior to the course start date.

## Contact information

For further information and enrollment, please contact:

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