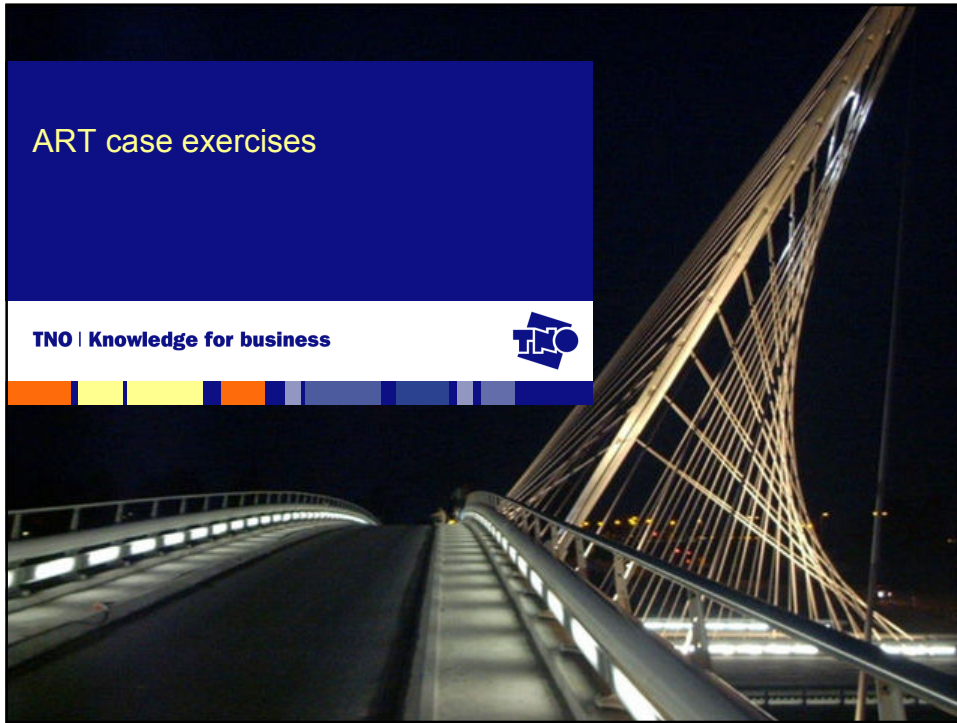


## ART case exercises

TNO | Knowledge for business



### Disclaimer

- These cases and the manner in which they are worked out represent the current opinion of the trainers. They do not necessarily represent the opinion of TNO
- Case exercises are purely fictional. Any resemblance to real life is purely coincidental.
- No legal rights can be obtained from these cases.

## Intention of cases

- Think – Discuss – Imagine
- Tips & tricks
- Work together
- Note down all choices!
- Learning points:
  - Intro: how to use ART
  - Case 1: important details
  - Case 2: Refinement of assessment & efficacy of RMM

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TNO Quality of Life, October 25, 2010

## Introduction case: Printing press



Room size: 300  
ACH: 1

Primary source	Far field
Activity class	Liquids in high speed processes
Containment	Reduced contact product - air
Process type	Large scale
Use rate	Not relevant
Fully enclosed	No
Effective housekeeping	No

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## Case 1: Drum filling



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## Case 1: Drum filling



Let's assess the exposure in ART

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## Case 1: drum filling

Primary source	Near + Far field
Activity class	Falling liquids
Containment	Reduced contact product - air
Loading type	Submerged
Use rate	100-1000 L/min
Fully enclosed	No
Effective housekeeping	Yes

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## Case 2. DEGBE used in glues in a shoe repair shop

- Liquid, low vapour pressure 277 Pa
- Theoretical % in dilution: up to 50% ww
- Theoretical DNEL: 3.8 mg/m<sup>3</sup> (0.56 ppm)
- Application by brush
- Duration: 4 hours
  
- Assess 'good' and 'bad' practices practice with ART



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