

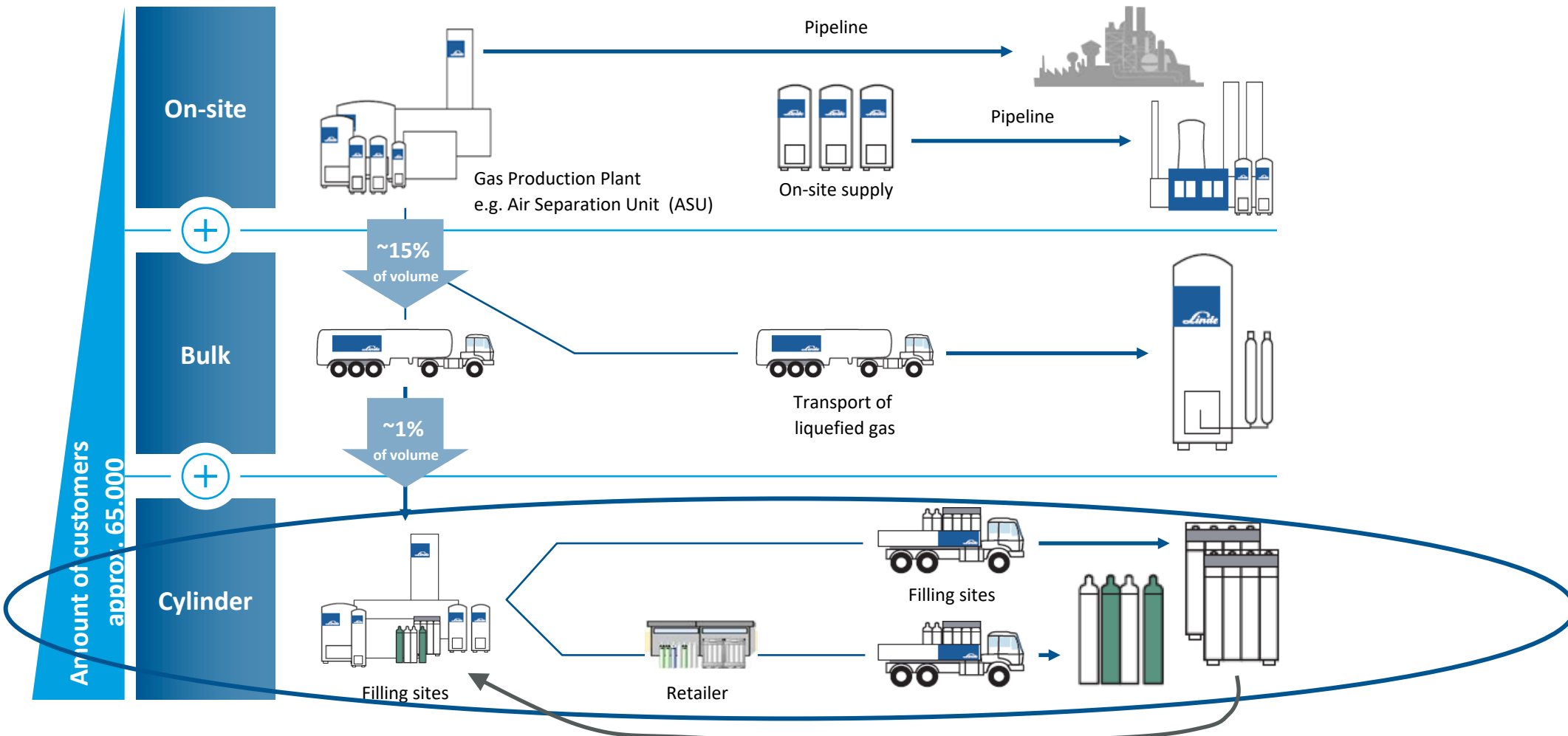
Dangerous Goods Safety Values & Rationales

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Linde Gas Supply Chain



Cylinder Logistics in a year in Sweden: 6 million km, 1,6 million units, 100.000 deliveries to 10.000 customers...and back!

About two years ago...



A visit from:

- Police
- Coast Guard
- Swedish Civil Contingencies Agency
- Swedish Transport Agency

Very good dialogue, where it was clear that Linde is not in the front of all development – but that the business is under control!

Our Safety Principles when it comes to Dangerous Goods!



Linde has outsourced distribution, but not outsourced safety!

Some of our principles:

- We plan the distribution – Transfers and to end customers! Max 12 hours/day and the driver shall come home!
- We don't co-deliver! We only use dedicated vehicles!
- We own the load carriers! All transports are covered!
- We always classify, with points and signs, that a gas cylinder is full!
- We only go at 80 km/h!
- ...and we provide the role as ADR Safety Advisor for all app. 200 reatilers around Sweden – even though they are external companies!



Our work with our Contractors!



Sweden is covered by three main distributors from Malmö to Kiruna – all own companies, no truck centers / firm of haulers.

All contractors follow the same Contract Management Agenda – Safety comes first.

- Weekly meetings between the scheduler from Linde and the Supervisor from each switch point. A total of 13 switch points*.
These meetings are operational, with a focus to address
 - Unsafe conditions on the roads and at customer sites
 - Distribution planning & schedules
 - Load planning and load safety
- Quarterly contract management meetings where we address:
 - Summary reports of unsafe conditions
 - Driving styles, on each driver focusing on speeding, harsh braking and fuel consumption
- Annual meetings with all drivers trying to walk the talk!

**) a switch point is a fenced area, not storing any goods – just used of re-arranging the load during distribution*

The Finnish Stick – An Invention from Safety Work!



- The safety work has resulted in an own load safety system “The Finnish Stick”. We had too many incidents where drivers fell down from the load.
- The Finnish Stick is a steel beam who put pressure on the pallet skids to the vehicle bed and prevent pallet to move. In addition, all units has load securing straps hanging from the roof provides opportunity for mixed securing.





We Empower & We Demand!

Some of our demands:

- We don't use cellphones when driving – not even with hands free!
- All drivers need a minimum of 3 years of driving experience before driving for Linde!
- We train all drivers, both in our own system (+30 courses before you are allowed to drive) and with defensive driving & roll over training!

Some of what we empower:

- We want the driver to stop the truck if the conditions are not safe to drive, especially rain on cold roads!
- We want the driver to report any non-safe conditions on the route, everything from a crossing, to a customer place, to a time frame not covering the need. We want the driver to say, "No, I will not deliver at this location".

Summarizing our work – It's all about behavior!



In-cab distraction, Hazard Perception and Defensive Driving



Drivers hours management, Scheduling and Fatigue



Driving Infringements, excessive Speed and Harsh Braking



Training and Experience on the vehicle being driven





Thank you for your attention.

INTERNAL

