

Integration in Chlor-alkali Industry, Chemical Park Concept,
Dedicated Pipeline transportation and
infrastructure development/improvement
to make bulk Chlorine transportation viable in India

For Alkali Manufacturers Association of India
Seminar on Safe and Efficient Transportation of Chlor-Alkali Products in India

25st September, 2019, N. Ranga Rao
thyssenkrupp Industrial Solutions (India)

engineering.tomorrow.together.



thyssenkrupp

Topics

- ❑ Integration in Chlor-Alkali Industry, Chemical Park Concept
- ❑ Dedicated Pipeline transportation
- ❑ Infrastructure development/improvement to make bulk Chlorine transportation viable in India



Topics

Integration in Chlor-Alkali Industry, Chemical Park Concept

Yarn products
Alumina products
Textile Chemicals
Soap Industry
Paper Industry

backward vertical integration
forward vertical integration
horizontal integration
conglomerate integration



EDC, VCM & PVC Plant
Chloro Methane
Aluminum Chloride
Chlorinated Paraffin Wax
Thionyl Chloride
Chlorinated Aromatic compounds
Stable Bleaching Powder
Chloro sulphonic acid
Calcium Chloride
Epichlorohydrine
Mono Chloro Acetic Acid
Phosgene
Epoxy products
Sodium & Calcium Hypo
HCl solution
Ferric Chloride

Phosphoric Acid
Poly Aluminium Chloride
Sodium Chlorate

Common Power Plant

Hydrogen Peroxide
Hydrogenation based products
As Energy fuel

Common Offsites, Utilities and Industrial gas (Hydrogen, Nitrogen etc.)

Common Effluent treatment system

Common Infrastructure, Excellent Rail and Road connection, Close to container Terminal



Topics

Dedicated Pipeline transportation



Pipeline



Topics

Infrastructure development/improvement to make bulk Chlorine transportation viable in India



Pipeline



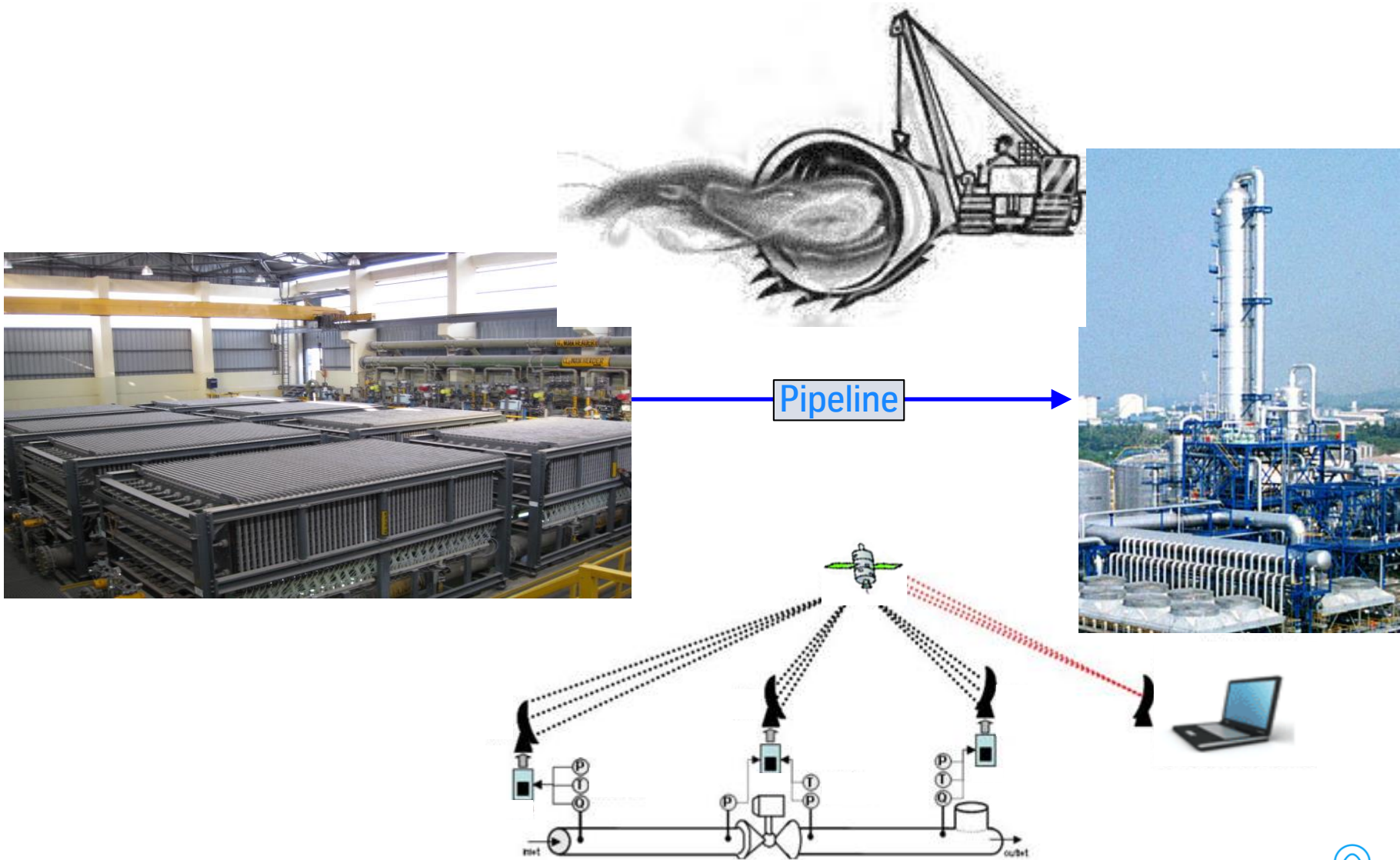
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Infrastructure development/improvement to make bulk Chlorine transportation viable in India



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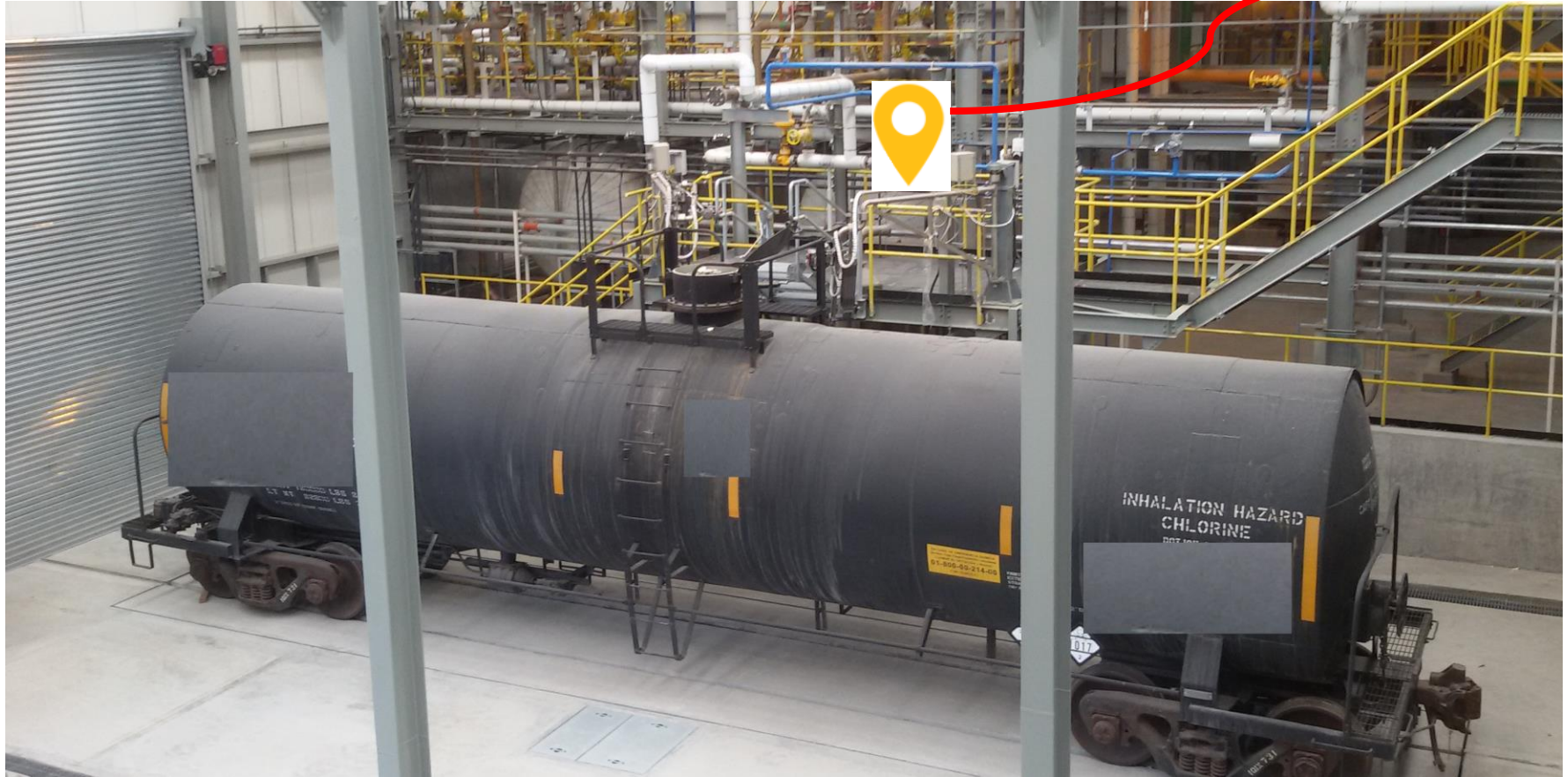
By Rail - ISO Container



Topics

Infrastructure development/improvement to make bulk Chlorine transportation viable in India

By Rail - ISO Container



Thank You

