Cardox System in the Civil Engineering Field

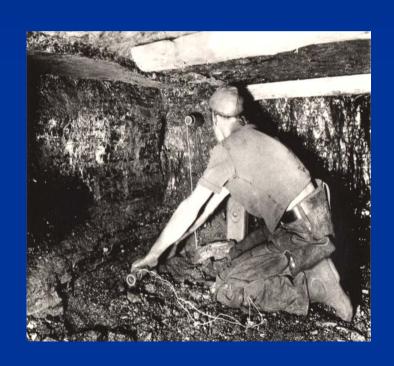
Contents

- 1. History and Theory
- 2. The Advantage of ATD Pressure Gas System
- 3. ATD Cardox System in Civil Engineering Field
- 4. Conclusion: no problem or complain

1. History an Theory

歷史/原理

ATD Pressure Gas System 又稱ATD Cardox System. Cardox 英文爲Carboniumdioxid. Cardox 原理在1920年爲開採地下煤礦坑發展出來.





Why liquid CO2?

- 不會自燃助燃
 - 遇熱從液態轉成氣態
 - 瞬間澎漲500 600倍
 - 壓力可達 2700 Bar

2. The Advantage of ATD Cardox System 系統優點

ATD System 優點: Safety 安全

Cardox action is the expansion of CO2 and not an explosion

不需申請許可!!

ATD System 優點:

- 成本低
- 人員需求低
- 低耗材費用

ATD System 優點:

Fast and Efficiency 裝填迅速、高效率

3. ATD Cardox System in Civil Engineering Field









Coal Mine





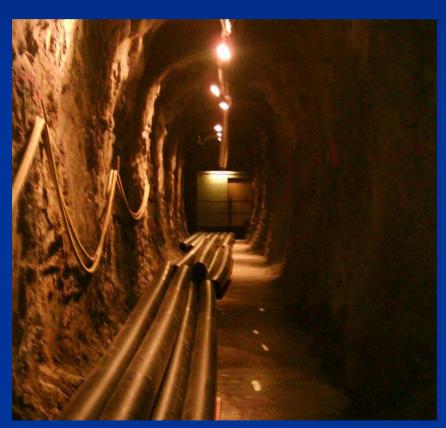
Development of Shaft





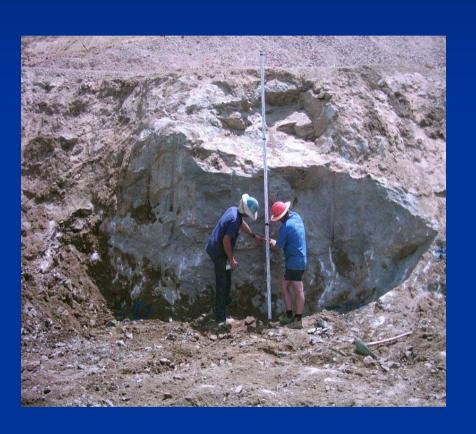


walk way tunnel





Excavated 120m3







4. Conclusion: no problem or complain

結論: 摘自粉體儲槽技術論文

From: Bulk on Line Forum 粉體儲槽技術論壇

hi

what is the best method to clean the clinker silo especially to remove/break the harden clinker?

normally what we did before was enter the silo and clean harden clinker inside but very risky? ...so not so many people willing to do it.......

need your suggestion/input

tq

From: Bulk on Line Forum 粉體儲槽技術論壇

- There is only one safe, fast and effective way to break/remove/clean the harden clinker in the silothe Cardox CO2 Blasting System.
- Cardox action is the expansion of CO2 and not an explosion, it does not affect the steel silo structure.

The system can be used for breaking concrete, rock, granite etc so breaking harden clinker will not be a problem. When use for other processes, it will not damage the refractory lining.

Cardox has been used for silo cleaning for more than 20 years and so far there is no problem or complain.