



# Alba Potline 6 Bahrain



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**Case Study**  
GCM17-01

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**Year**  
2017

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**Client**  
Bechtel International

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**Site/Location**  
Kingdom of Bahrain

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**Region**  
Middle East

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**Scope**  
Cut Limestone material in accordance with Contract Milestones

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**Total Production**  
800,100 bcm

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**Rock Type**  
Limestone

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**Rock Hardness**  
50-80mpa

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**GET Consumption**  
32 bcm/pick

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**Safety**  
0 LTI's

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## PROJECT SUMMARY

In 2017, Global Civil and Mining were contracted by Bechtel International to assist in the early excavation phase on construction of Potline 6 at the Alba Aluminium Smelter in Bahrain in the Middle East.

This Potline is an extension of the existing facilities, and upon completion will be the world's largest single-site Aluminium Smelter. The site is an active Industrial site and the works had to be implemented with no unplanned interruption to operational activities

The proximity of the new extension to the existing Potline, operating infrastructure meant blasting was impossible and, faced with such a large excavation, Bechtel turned to GCM and Surface Mining to get the job done.

The three Wirtgen 2500SM's GCM mobilised to site from Australia and Qatar milled over 800,000m<sup>3</sup> of hard limestone, and averaged an instantaneous production rate of over 150m<sup>3</sup>/hr. The floors of the excavation were trimmed to within plus and minus 50mm. All staff were employed out of Australia and the project was completed without any incidents GCM was awarded a "Journey to Zero Incidents" award as part of the team that worked onsite from September 2016 to December 2017.

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