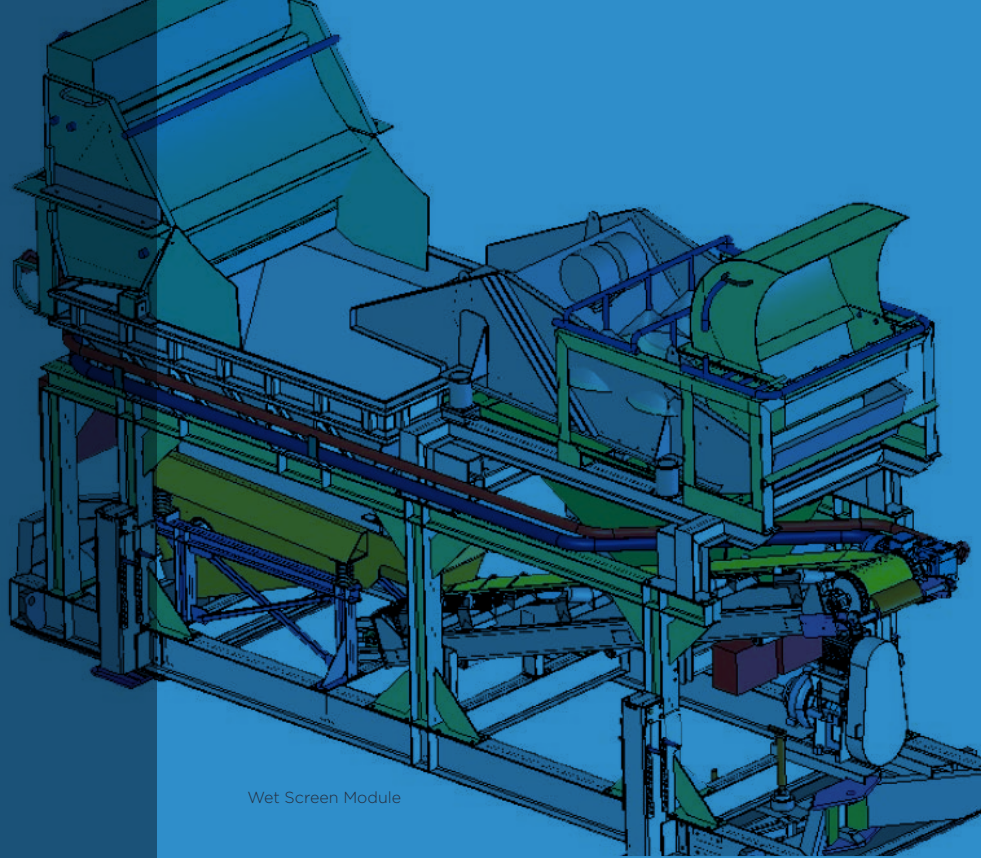


## PROJECT SHEET

# Gold Crushing Plant



Wet Screen Module

Carnot supported an Australian company by designing for them a mobile underground gold ore crushing plant. The advantage of crushing underground is associated with minimizing the movement of ore especially to the surface. Carnot carried out the full design from concept to manufacturing drawings including 3D modelling, FEA based stress analysis, and detailed drawings.

The team was made up of mechanical and materials engineers all experienced with process and equipment development.

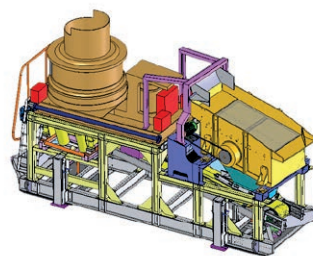
## PLANT DESIGN

There were tight constraints on the design of the underground plant imposed by limited space, weight and manoeuvrability. Also, the plant needed to comply with strict underground safety standards. Modelling the multi skid plant in 3D was an important factor in ensuring it could be constructed and used within the specified envelope underground.

The following indicate some of the important tasks undertaken:

- » Design using 3D modelling
- » Stress analysis: both static and dynamic
- » Process control
- » Interaction with suppliers of equipment
- » Material selection
- » Detailed drawings for manufacturing purposes
- » Regular design reviews with the client
- » Risk assessment

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Secondary Crushing Module

For more information visit [carnot.com.au](http://carnot.com.au)

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