

## PROJECT DETAILS

### Customer:

QTS Group Ltd

### Location:

Mallaig, Scotland

### Project Duration:

05/2018 – 05/2020

### Products Offered:

- Rockfall netting
- Rockfall accessories
- Galvanised ATB rock bolts
- Lokset resin capsules

### Industry Sector:

Construction - Infrastructure

### Applications:

Anchoring  
Ground control  
Special construction



## CP5 AND CP6 MALLAIG, SCOTLAND.

The 'West Highland Mallaig Line' is a single, 41 mile stretch of track linking Fort William with Mallaig and has featured in many of the Harry Potter film series, including the Glenfinnan viaduct.

The route was also voted as "best line" for scenery by readers of Wanderlust magazine for its views of some of Scotland's finest lochs and mountains.

### CHALLENGE

While the line is rural, the remote nature of the section means that geotechnical incidents such as rockfalls, soil failures and toppling of trees can result in significant disruption.

QTS Group were awarded the contract to provide geotechnical solutions to reduce the risk to the line posed by these assets, particularly during periods of intense or prolonged rainfall.





## SOLUTION

The 'one stop shop' offering from Minova provided all the support products required to secure the exposed rock faces. Products included, passive rockfall netting and accessories, galvanised ATB rock bolts, Lokset resin capsules and technical back up.

The rapid set and strength gain possible from the Lokset Resin Capsules allows the product to be used in time critical and early support applications including the possession restraints of open rail lines.

Our ATB rock bolt is made from 500N/mm<sup>2</sup> steel and features a hot-rolled continuous thread. The bar is ideal for installing into Lokset resin capsules, achieving optimum mixing and full encapsulation.

The netting is hung down the slope face from a secure crest rope. The mesh is enhanced by rock bolts and plates contouring the mesh back to the rock face, safely containing any rock debris.

## RESULT

The first sites on the Mallaig line have been delivered on time, inspected and signed off.

With various other locations to begin shortly, the collaboration between Minova and QTS will ensure the success continues throughout CP6.

## ACHIEVEMENTS

- Over 200 Tons of products delivered on time.
- 25,000m<sup>2</sup> of rock fall prevention.
- More than 20 rock cuttings safely secured.
- Little interruption to the public during the works.

**SECURING  
PERFORMANCE.  
TOGETHER.**