

Nailed with Trust



Monsoon season's intense precipitation is the main cause that triggers the natural shallow landslide phenomena. This phenomenon can be disastrous and widespread in occurrence even in undisturbed forested catchment. To prevail over this catastrophe, soil nailing technology emerged.

Soil nailing is a technique used to bring soil stability in areas where landslides might be a problem. Soil nail can prevent landslides by inserting steel reinforcement bars into the soil and anchoring them to the soil strata.

The basic concept of soil nailing is to reinforce and strengthen the existing ground by installing closely-spaced steel bars, called 'nails', into a slope as construction proceeds from 'top-down'. This process creates a reinforced section that is in itself stable and able to retain the ground behind it. The reinforcements are passive and develop their reinforcing action through nail-ground interactions as the ground deforms during and following construction.



Soil nail is commonly used in Malaysian slopes both as a stabilization measure for distressed slopes and for very steep cut slopes. The popularity of soil nail slope is due to its technical suitability as an effective slope stabilization method, ease of construction and is relatively maintenance free. As such, soil nail slope of up to more than 25m high is increasingly being used for Malaysian slopes.

Soil nails use compressed air from an auxiliary air compressor mounted on the rear of the excavator and fired through an air cannon mounted on the end of the excavator's articulated boom. Soil Nails use compressed air to accelerate steel nail or rod into the ground at over 350 km/hr. A high velocity shock wave is generated ahead of the nails that elastically deforms the soil which subsequently rebounds and bonds to the nails.

North Soles, Malaysia uses ELGI compressors for this technology. Elgi has provided a reliable compressed air solution for soil nailing. ELGI compressors have proved a good choice to meet the demand of the client with faster drilling, it ensures higher productivity at a lower drilling cost – per – foot. The Diesel-powered versions are mostly used in this process. Four nos of DT 450/150 units for soil nailing application is used by North Soles, Malaysia.



Disclaimer:

This e-mail and any attachment is intended only for the exclusive and confidential use of the addressee(s). If you are not the intended recipient, any use, interference with, disclosure or copying of this material is unauthorized and prohibited. If you have received this message in error, please notify the sender by return e-mail immediately and delete the message from your computer without making any copies.

For further information, visit us at www.elgi.com.

For any product related enquiries click here enquiry@elgi.com.

Send us your feedback for our improvement.

Click on this link to unsubscribe this mailer.