

# PERSEVERANCE

DRILLING UNDERGROUND

## PERBOLTER



### Features

The Perbolter has been built utilising a Normet 1814B carrier and fitting it with a modified Sandvik cable grouting system. The rig is powered by a Detroit engine with a diesel particulate filtration system fitted. The diesel engine eliminates the need for electrical reticulation while the filter reduces problems with emissions, providing a cleaner workplace. The instillation head has been designed to allow the full range of movements which allows instillation of bolts in dumped rings as well as 90° rings.

The operating system utilizes a state of the art WIFI control system, thus allowing the operator to have full control over the operating system while providing the utmost safety. The operator can position themselves in the safest location. With the counting system that has been designed into this unit,

it enables the operator to know how much grout is pumped into a hole, the depth of the grout hose and the depth of the cable. The counting system also has the ability to subtract millimetres when the cable has to be retracted to clear an obstacle in the bore hole.

Perseverance Drilling also have a full safety and training system to support the unit. The training manual shows step by step exactly how to operate every part of the unit. During our initial trial of this unit, where we were installing rings of bolts ranging from 6 m to 30m in length. One 12 hour shift we were able to install 444.7m of twin strand grouted cables. For the trial we averaged 240.7m per 12hr shift, which included commissioning the rig.

### Specifications

- Normet 1814B Carrier
- Mercedes Benz 2016 Diesel Engine with Diesel particulate filtration system fitted.
- Sandvik grouting and cable installation system
- Certificate of structural integrity issued by Wilshaw Engineering for the conversion
- Boom reach of 8m in the horizontal plain and 10m in the vertical plain
- Minimum drive sizes 3 x 3.5 straight drives
- WIFI remote operators panel
- 80L Grout mixing capacity
- Cement bag storage compartments allowing rapid turnout instillation
- Limited site set up requirements, air and water only
- Instillation of cables up to 30m in length.

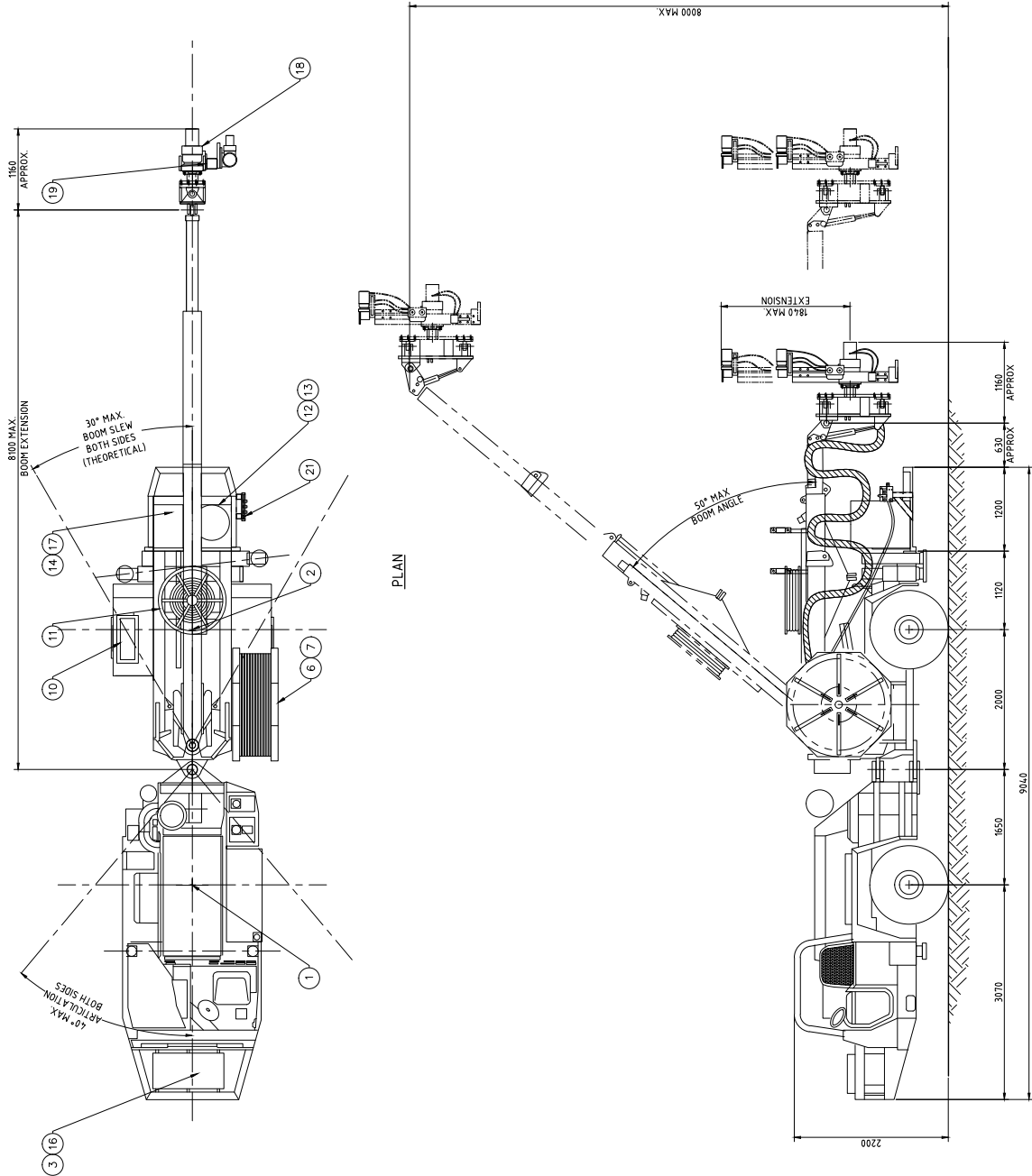
PERBOLTER

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ITEM LIST	
No	Item
1	Front axle
2	Rear axle
3	Front frame mesh
6	Cable on Reel
7	Cable Reel, Frame & Drive Motor
10	Hydraulic controls
11	Grout hose reel
12	Mixer bowl
13	Mix of concrete
14	Mixer deck
16	Cement bags Front 20x20kg
17	Cement bags Rear 4x20kg
18	Rollover
19	Feed extension
21	Cable feeder

THIS IS A CERTIFIED PRACTISING ENGINEER  
DESIGNED MACHINE.  
ANY MODIFICATIONS REQUIRE APPROVAL BY  
WILSHAW.  
FAILURE TO DO SO VOIDS THE DESIGN.



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<p>CLIENT PERSEVERANCE DRILLING UNDERGROUND PTY LTD</p>		<p>PROJECT APPROVED</p>		<p>DATE</p>	
<p>TITLE PERBOLTER 1814B / NBB175 GENERAL ARRANGEMENT</p>		<p>DESIGN APPROVED</p>		<p>DATE</p>	
<p>DRAWING No. 267-M-001</p>		<p>ISSUED FOR CONSTRUCTION</p>		<p>DATE</p>	
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