



EXPLANATION SHEET

MEDUSA DMT

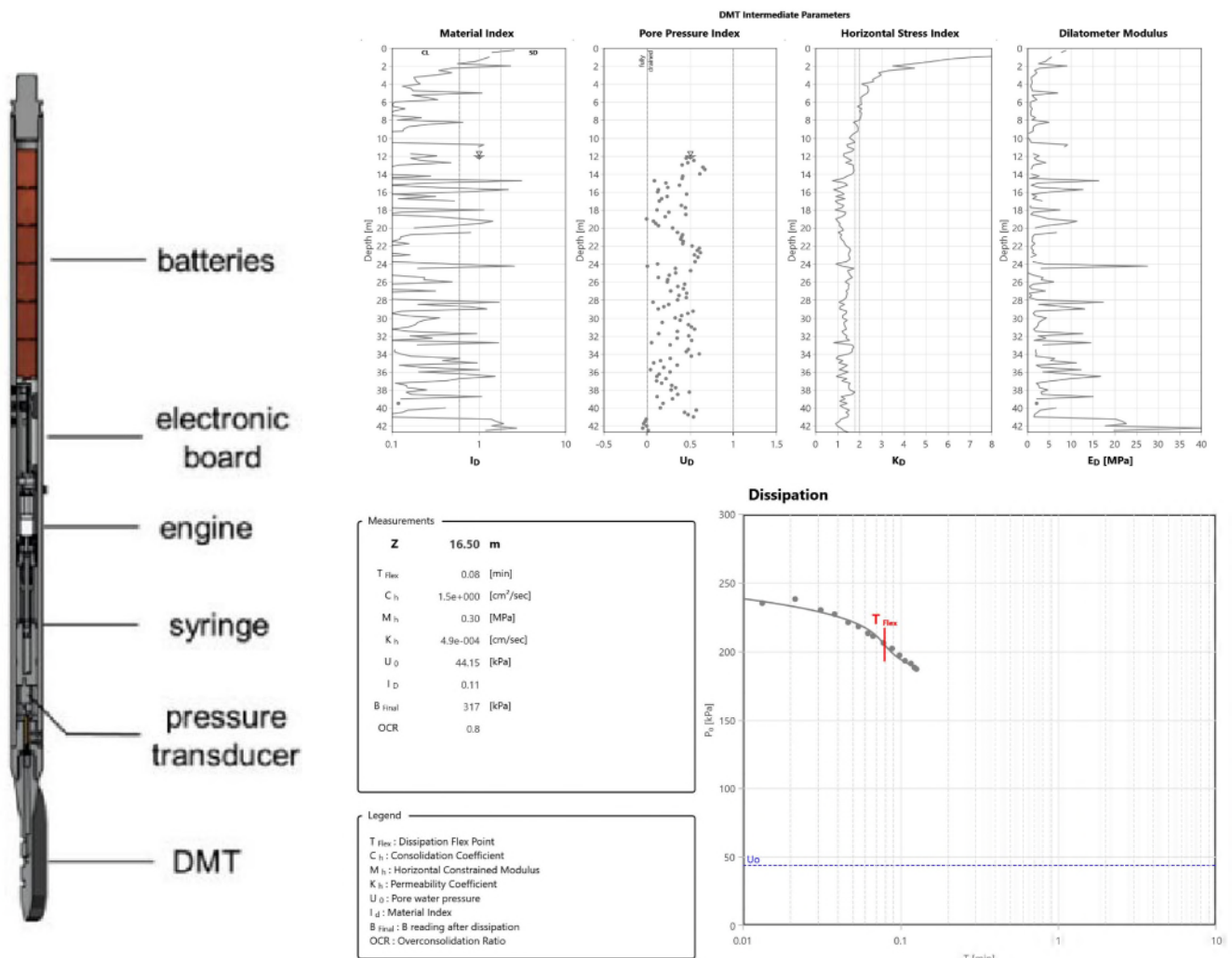
The Marchetti Medusa DMT is a fully automated probe. The probe has onboard electronic control system, rechargeable batteries and a motorized syringe that hydraulically controls the expansion of the membrane. The blade has the same dimensions as the standard DTM. Connected to a laptop real time results can be viewed by the operator.

The Medusa is new and improved technology. It not only provides the parameters derived from the standard DMT test but also offers some significant advantages over the normal mechanical DMT:

- Almost completely removes any operator influence/bias over the test data. Is more responsive/repeatable, particularly in soft soils.
- Due to the electronic control of the hydraulic inflation of the DMT membrane the Medusa enables short or long duration dissipation tests automatically. Dissipation tests are possible but labour-intensive using the mechanical DMT equipment, but are essentially automated and thus able to be made “normal practice” using the Medusa.

Control of the test and assessment of the dissipation test data allows evaluation of whether test results are undrained, drained or partially drained. Understanding this data can help better determine penetration speeds and or rotation speeds for other testing such as CPTu and Vane Shear Tests.

The Medusa DMT is a very powerful tool, it provides a greater understanding of in situ test data and therefore in situ conditions than has previously been possible.



Also refer to our Data Sheets on the DMT and Seismic DMT for full details of our DMT testing capability.