

73mm High-Pressure Dilatometer (73HPD)

Cambridge
insitu




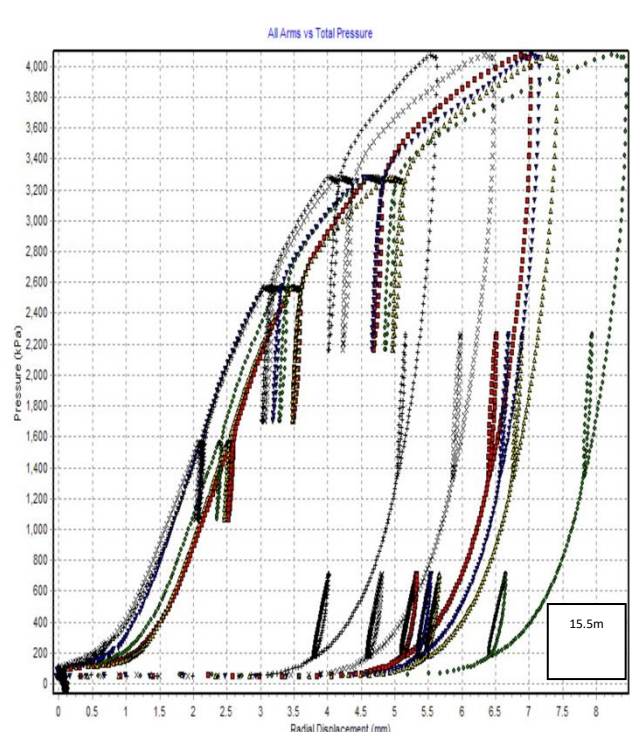
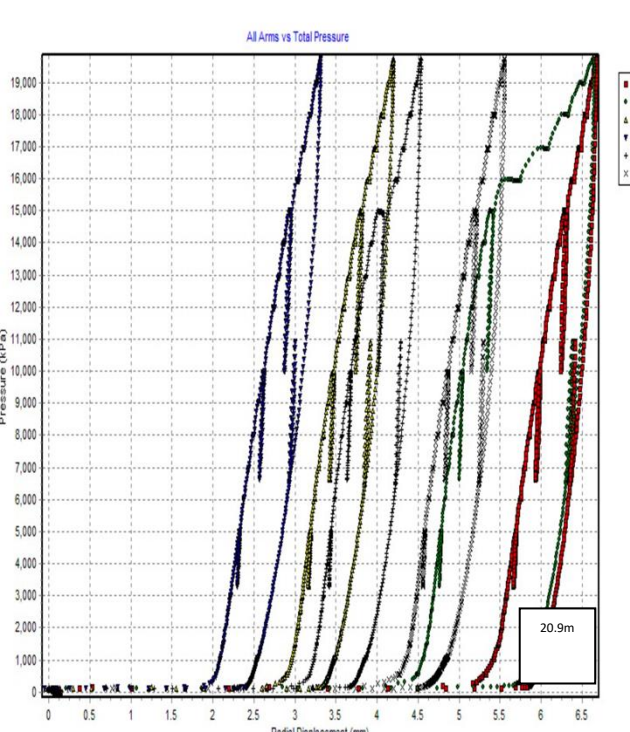
This High-Pressure Dilatometer (HPD) is a medium diameter pressuremeter at Ø73mm OD. This probe has 20MPa maximum working pressure and as such can be used in materials ranging from rock, such as mudstone or chalk, to very weak clays.

The 73mm HPD is a pre-bored pressuremeter, so can only be inserted into 'pockets' of between 2.0 – 3.0m length, and nominally of between 76–83mm Diameter. A common choice for pre-boring (creating a 'pocket' for the instrument) is by utilising a 3m NX core barrel (76mm).

High Pressure Dilatometer (HPD)	
Probe Diameter/Field Ready:	73mm / 75mm
Max Working Pressure	20MPa
Max Arm Radial Displacement:	15mm
Maximum Strain:	41.1%
No. of Direct Strain Arms:	6
Arm Spacing at Circumference:	60°
No. of Total Pressure Cells:	2
No. of Pore Pressure Cells:	0
Length of expanding section:	465mm
Assembled Length (No Subs):	1730mm
Umbilical Diameter:	14mm
Actuation:	Pneumatic/Hydraulic
Power Requirements:	12V
Pre-bored:	Yes
Self-bored	No
Pushed:	No
Thread Type From Probe:	EW





Example Data		Common Parameters	
 <p>HPD Test in Soil</p>	 <p>HPD Test in Rock</p>	Insitu Horizontal Stress	σ_{ho}
		Yield Stress	P_f
		Limit Pressure	P_{lm}
		Undrained Shear Strength	C_u
		Frictional Strength Properties	ϕ_{cv}, ϕ_{pk}, C'
		Initial Shear Modulus	G_i
		Shear Modulus	G_{ur}
		Young's Modulus	E