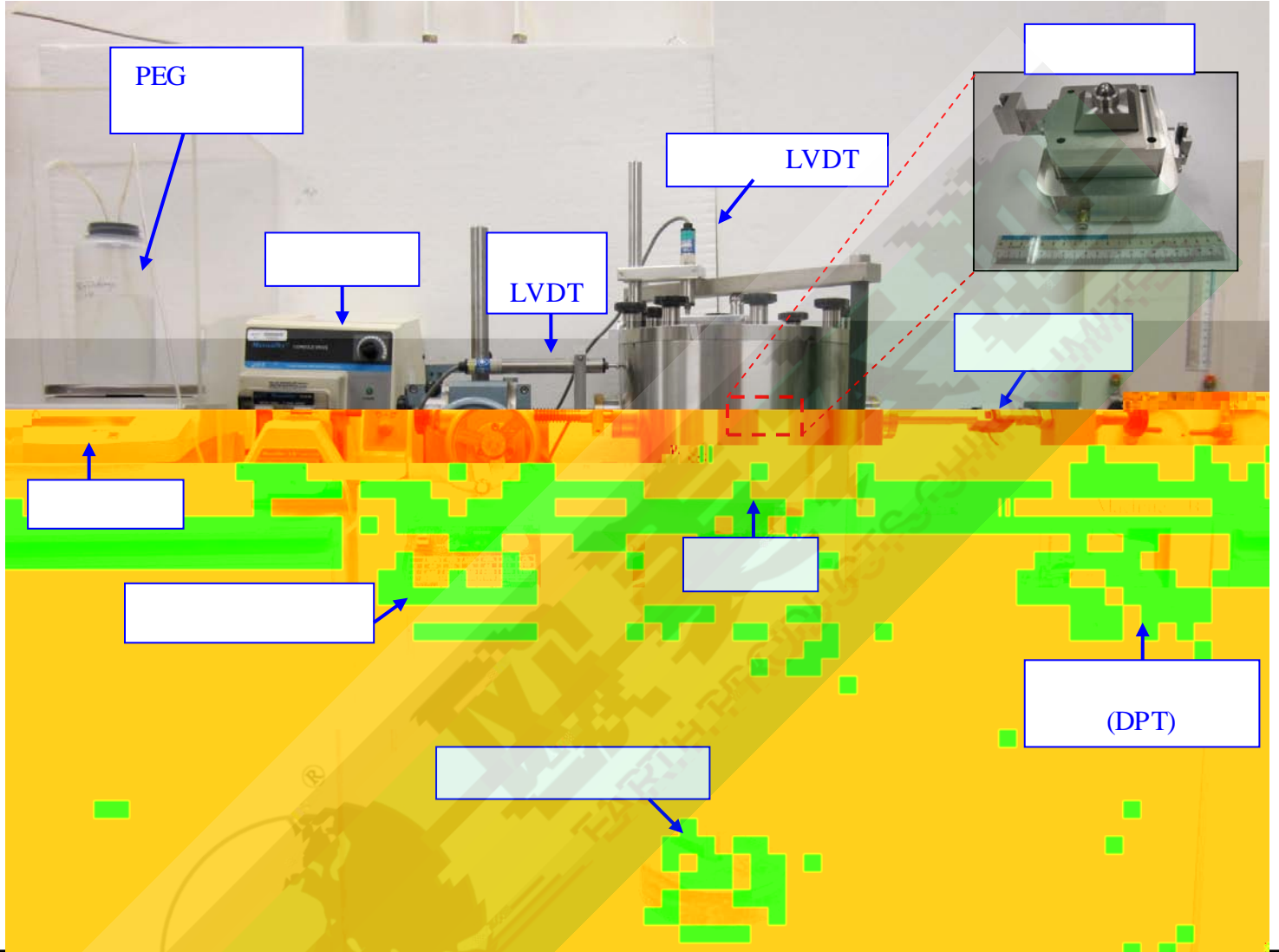




SDSWCC Measure

Humidity and Osmotic Suction-Controlled Box



- ◆ SDSWCC ;
- ◆ 300MPa 0.1kPa
- ◆ K_0 /

Geo-Experts
0.1kPa 300MPa

SDSWCC

Geo-Experts
K

0.1kPa to 10MPa.

/

3. (VET)

/

RH

LVDT

10 300MPa.

用途:

Geo-Experts

Geo-Experts

K_0

/

ATT OMT VET

1. (ATT)

SDSWCC

AEV

u_a

(u_w)

$u_a - u_w$

0.1kPa

AEV

2. (OMT)

PEG

PEG

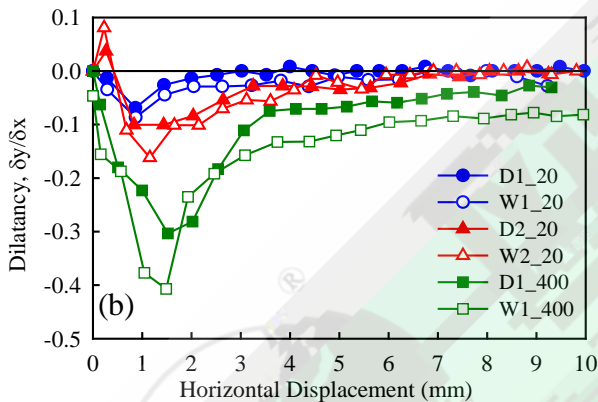
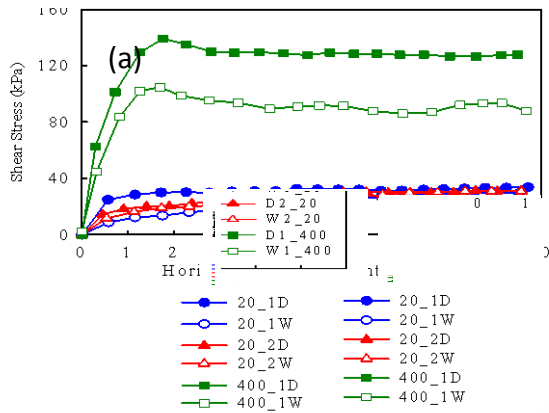
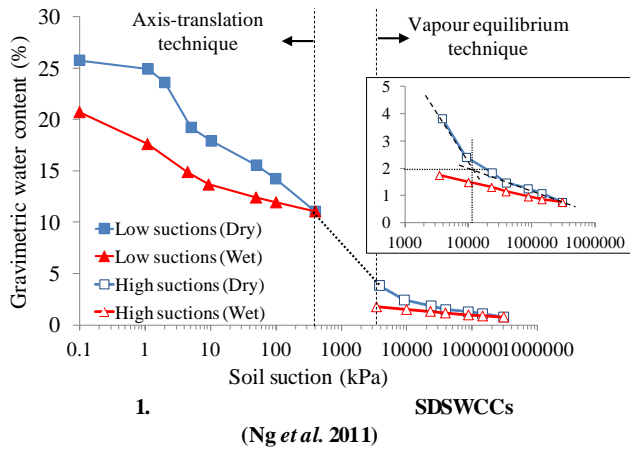
PEG

PEG

u_w

u_w

PEG



2. (Tse & Ng 2008)

		: 0 – 450 kPa
		: 0 – 1000 kPa
5	()	: 10 kN : 25 mm
6	()	: 2 MPa : 0.5mV/V : 2% RO : 1, 4
7		: 5 mm : 5 mV/V ± 0.3 % : 0.3 % RO : 1, 4
8	(DPT)	: -1 to +1 kPa : ±8 to ±15 V DC : -5 to +5V

	(ATT)	
	*	: 500 kPa
	(OMT)	
1		: 12000-14000/ 3500
2	PEG	: 20000/6000
	(VET)	
		11 – 92% of RH : (i.e., 10 – 300MPa)
		1 2 3bar

Ng, C.W.W., Leung, A.K., Xu, J. (2011). Keynote lecture: The theory and application of unsaturated soil mechanics in slope engineering. *Indonesia National Geotechnical Conference*, 7 – 8 Dec 2011, Sahid Jaya Hotel, Jakarta, Indonesia

Tse, E. Y. M. & Ng, C. W. W. (2008). Effects of drying and wetting cycles on unsaturated shear strength. *Proc. of 1st European Conf. on Unsaturated Soils*, 2-4 July 2008. Durham, UK. 481-486.

1		: 50 x 50 x 20 mm
2		: 5 – 50 °C
3		: 3500 kPa : 68 m ³ /HR, 700 kPa : 3 – 200 kPa : 10 – 1100 kPa
4		: 10 kN : 50 mm