

In-situ Pavement Stress and Strain Measuring Transducers

History

Based on years of research, development and experience at the Technical University of Denmark, and in cooperation with FTC, Dynatest has introduced three series of precision transducers for the measurement of in-situ stresses and strains, primarily for highway and airfield pavements:

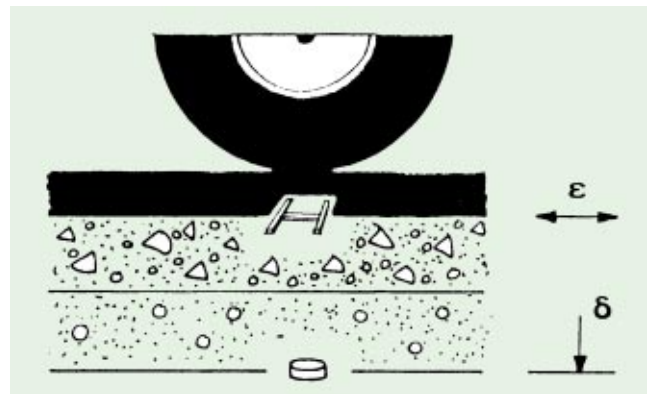
1. The **Dynatest PAST** Series: (**PA**vement **S**train **T**ransducers) for the measurement of strains in AC (Asphalt Concrete) or PCC (Portland Cement Concrete) pavements.
2. The **Dynatest SOPT** Series: (**SO**il **P**ressure **T**ransducers) for measurement of Pressure (stress) in unbound materials like gravels, sands or clays.
3. **Dynatest SSDT** Series: (**SO**il **S**train **D**eformation **T**ransducers) based on precision LVDT for deformation measurements in unbound materials.

The Need For Measurement of In-situ Stresses and Strains

Today, several computer programs based on elastic theory are available for the computation of stresses and strains in pavement structures. The **Dynatest PAST**, **SOPT** and **SSDT** series transducers may be used to verify these computed values. This is very important, as stress or strain in a certain layer of a road construction is normally used as the critical parameter for determining the performance of pavement sections, including the service life as a function of the number of imposed wheel loads.

Dynatest Transducers: Time Tested Reliability

Dynatest series **PAST**, **SOPT** and **SSDT** transducers are precision instruments that have been developed and constructed for their specific purpose based on more than a decade of in-situ experience. The latest technology and the highest quality materials have made these transducers especially resistant to the often tough environments in which they will be used. The end result is long service and fatigue lifetimes.



Dynatest PAST II AC, PAST II PCC, & SOPT Gauges Owners list

	Customer
U.S.A.:	Caltrans
	Cornell University
	CRREL
	Construction Technology Lab
	Des Moines Asphalt
	Gas Technology Institute
	Kansas State University
	Minnesota Dept. of Transportation
	Montana State University
	North Carolina Dept. of Transportation
	Ohio University
	PCS Law Engineering
	Pennsylvania State University
	Purdue University
	The Boeing Company
	University of California
University of Illinois	
University of New Hampshire	
Virginia Tech	
WES / US Army Corp of Engineers	
Worcester Polytechnic Institute	
Canada	National Research Council Pavmatec / John Emery Geotechnical
New Zealand	University of Canterbury
Korea	Saeyang Engineering Company
Hong Kong	Promat Ltd.
Denmark	Vejdirektoratet
Sweden	Lunds University
	Scandiaconsult
	VTI
	Vägverket region Väst
Ireland	Queens University Belfast

