

Normal Incidence Shear Wave Transducers

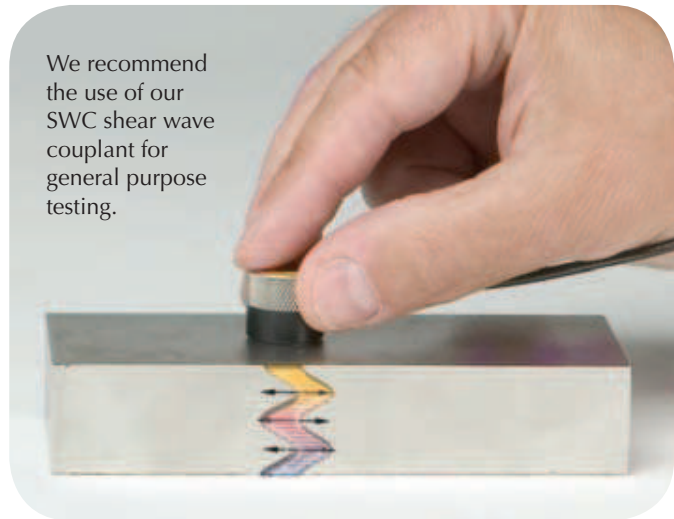
Single element contact transducers introduce shear waves directly into the test piece without the use of refracted wave mode conversion.

Advantages

- Generate shear waves which propagate perpendicular to the test surface
- For ease of alignment, the direction of the polarization of shear wave is nominally in line with the right angle connector.
- The ratio of the longitudinal to shear wave components is generally below -30 dB.

Applications

- Shear wave velocity measurements
- Calculation of Young's Modulus of elasticity and shear modulus (see Technical Notes, page 47)
- Characterization of material grain structure



Direct Contact Series

- WC-5 wear plate increases durability and wear resistance.
- Available in both the Standard and Fingertip case styles
- 303 stainless steel case

Frequency	Nominal Element Size		Transducer Part Numbers	
MHz	inches	mm	Standard Case	Fingertip Case
0.1	1.00	25	V1548	—
0.25	1.00	25	V150-RB	V150-RM
0.5	1.00	25	V151-RB	V151-RM
1.0	1.00	25	V152-RB	V152-RM
	0.50	13	V153-RB	V153-RM
2.25	0.50	13	V154-RB	V154-RM
5.0	0.50	13	V155-RB	V155-RM
	0.25	6	—	V156-RM
	0.125	3	—	V157-RM

For dimensions, see Contact Transducers on pages 6 and 7.

Delay Line Series

- Integral delay line permits measurements at higher frequencies.
- Fused silica delay line minimizes attenuation and provides physical protection to the crystal element.

Frequency	Nominal Element Size		Delay	Transducer Part Numbers
	MHz	inches	mm	μsec
5.0	0.25	6	7	V220-BA-RM
10	0.25	6	7	V221-BA-RM
20	0.25	6	7	V222-BA-RM
	0.25	6	7	V222-BB-RM
	0.25	6	4	V222-BC-RM

For dimensions, see High Frequency Transducers on page 26.

Shear Wave Couplant

SWC	4 oz. (0.12 liter)	Normal Incidence Shear Wave, non-toxic, water soluble organic substance of very high viscosity
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