

Materials List for:

The Measurement of Unsteady Surface Pressure Using a Remote Microphone Probe

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Materials

Name	Company	Catalog Number	Comments
Microphone	ACO Pacific (http:// www.acopacific.com/)	7016	Used to measure the sound pressure and calibrate the RMP as a reference.
Microphone	Knowles (http://www.knowles.com/eng)	FG-23629-C36	Used to measure the pressure fluctuation as a part of the RMP.
Microbore Tubing	Saint-gobain (http:// www.biopharm.saint-gobain.com/ en/index.asp)	Tygon ND 100-80	Used to dissipate the sound waves as a dissipation termination.
Hypodermic Tubing	MicroGroup (http:// www.microgroup.com/)	304H21RW	Used to connect the surface tap and allow the surface pressure fluctuation to convect to the microphone in the RMP in the form of sound.
Hypodermic Tubing	MicroGroup (http:// www.microgroup.com/)	304H14H	Used to reduce the dissipative effect and allow the surface pressure fluctuation to convect to the microphone in the RMP in the form of sound.
plexiglass	Plaskolite (http:// www.plaskolite.com/)	1X76204A	Used to make cradles which can connect the tubing and the microphone for the RMP.
Data acquisition chassis	National Instruments (http://www.ni.com/)	PXI-1006	For data acquisition.
Data acquisition channel	National Instruments (http://www.ni.com/)	PXI-4472	For data acquisiton.
Function generator	thinkSRS (http:// www.thinksrs.com/)	DS360	To generate white noise signal.
Pistonphone	B&K (http://www.bksv.com/)	4228	To generate sine waves with constant frequency which will be used to calibrate the reference microphone.
Loudspeaker	Mackie (http://www.mackie.com/index.html)	HD1531	Used to convert the electrical white noise signal into sound. It is the sound source for calibrating the RMP.
MatLab	Mathworks (http:// www.mathworks.com/)		Used to process experimental data.
LabVIEW	National Instruments (http://www.ni.com/)		Used control the hardware for data acquisition and record the data.