

ENGR 335

KEY WORDS FOR CH 13

flow visualization marker	hot-wire anemometer laser Doppler anemometer	bucket and stop watch method velocity profile integration rotometer
stagnation pressure Pitôt tube static pressure wall tap static tube	volume flow rate discharge mass flow rate multi-phase flow slurry	obstruction flow meter venturi orifice plate meter vena contracta flow coefficient ultrasonic flow meter turbine meter
cup anemometer propeller anemometer	Coriolis flow meter	
non-intrusive spatial resolution temporal resolution		

STUDY QUESTIONS

1. Describe one velocity measurement method that is non-intrusive.
2. Describe one flow rate measurement method that is non-intrusive.
3. Would a rotometer be a good choose for a coal slurry flow? Why or why not?
4. We need to measure air flow speed for a flow that is rapidly changing with time. Which method is a match?