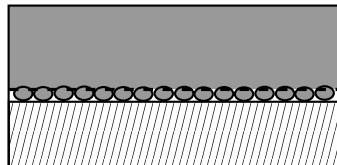
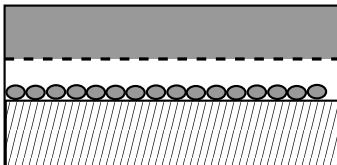
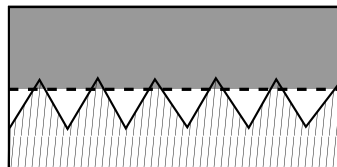
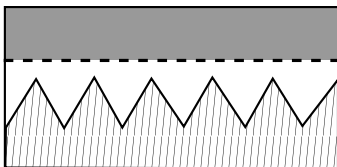


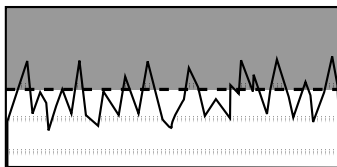
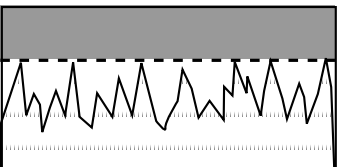
smooth-pipe



Sand roughness



Regular roughness



Irregular roughness

Moderate Reynolds

High Reynolds

Reynolds number