



# Operation & Maintenance of Fire Hydrants

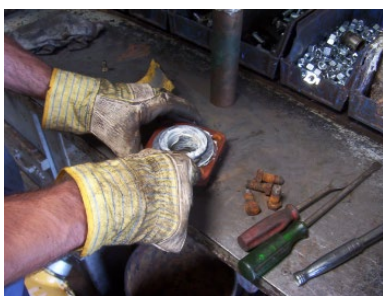
## Operation:

- Most hydrants open when the operating nut is turned in a counter clockwise direction
- Compression hydrants are the most common in the province; the hydrant valve opens downward against the flow of water
- Always open and close hydrants slowly**
  - opening a hydrant too quickly can cause a sudden decrease in pressure that could create vacuum in the distribution system; back-siphonage may occur
  - closing a hydrant too quickly can result in water hammer and may damage the distribution system
- When operating a hydrant, the valve should be fully open**
  - 18 to 22 turns of the hydrant valve will fully open or close the hydrant
- The hydrant valve must not be used to throttle the flow; a fire hose nozzle or a gate valve attached to the hydrant nozzle can be used



## Maintenance:

- Always close the valve on the hydrant lead to isolate the hydrant
- Remove a nozzle cap and slightly open the hydrant valve to relieve pressure
- Remove bonnet and retaining gland
- Remove and clean operating nut and bearing (may be a Delrin washer or a set of bearings)



- Replace any worn O-rings or gaskets on the operating nut assembly
- To remove valve seat assembly turn valve seat wrench counter clockwise (if removing the valve seat from a McAvity hydrant be sure to use the holding nut)
- Inspect and clean the valve disc and valve seat; replace any damaged O-rings or damaged valve disc; inspect the valve seat for scrapes and abrasions; damage to the valve seat must be sanded out or the valve seat should be replaced
- Always lubricate O-rings before reassembling the hydrant; **only use food grade grease on hydrants**
- Note:** The operating nut assembly on most hydrants can be greased from a grease screw in the operating nut or bonnet