

# DLC - Diamond Like Carbon coating for Oil and GAS Industry



IAI's DLC custom coating technology is unique in Canada. IAI initiated industrial development and commercial exploitation of this technology in Canada.

We have implemented continuous improvement of these technologies and processes, and gained a certain amount of customers in oil and gas industry.

DLC is an excellent coating for flow control devices, check and stop valves, including shut-off gate, choke, control, balancing, diaphragm, n-way, pneumatically actuated, knife gate, butterfly valves.

- Extremely low coefficient of friction
- Hard coating
- Chemically Inert

## Proven solution to the problems:

In the oil, gas and petrochemical industries different kind of valves and mating parts for wide range of applications are susceptible to a build-up of frictional forces in very aggressive chemical conditions, including H<sub>2</sub>S Hydrogen sulfide.

## DLC coating is a way to solve problems:

- Lowest attainable coefficient of friction for mating parts to increase trouble-free function drastically
- Elimination of adhesion of mating metal parts, cold welding and anti-galling to increase life time and precision
- Mechanical toughness and the highest possible hardness that resists abrasive or adhesive wear
- Corrosion protection and lubrication for extreme rub wear
- Chemical resistance to harsh medium including H<sub>2</sub>S due to chemically inert carbon content
- Inert surfaces do not support biological growth

DLC coated tools provide highest precision and uniform identity in any essential surfaces. Better quality of equipment and as a result increasing maintenance interval significantly.

