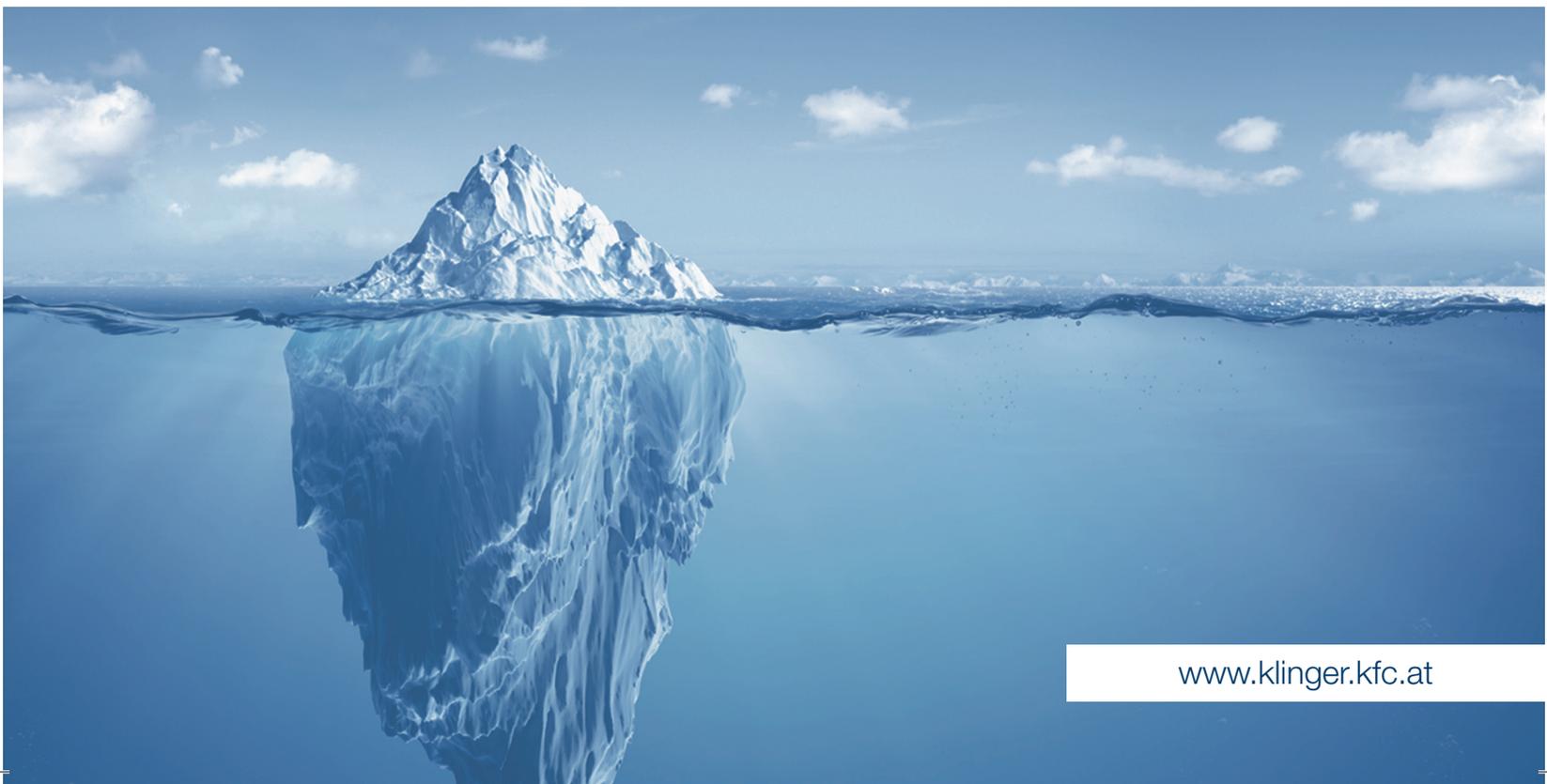




# KLINGER TCO & LCC

Your guarantee for reliability



[www.klinger.kfc.at](http://www.klinger.kfc.at)

# TOTAL COST OF OWNERSHIP

## What makes our ball valve stand out?

The real cost of a valve is not just the purchase price, but includes the expenses incurred during the entire life of the valve. The costs due to pressure drops, failures, blockages and leaks, which eventually lead to production shutdowns, are often significantly higher than the original purchase price of the valve.

**Do not determine the purchase price of a valve without considering all relevant costs along the product life cycle.**

KLINGER Fluid Control ball valves guarantee a perfect combination between technical performance and economic advantage. Initial costs, service-related costs, explicit and hidden costs that are incurred during the entire operating

life of the valve must be considered. This is how plant owners should assess the long-term value of a valve.

The life cycle phases are defined by the following variables.

### LIFE CYCLE COST

- » Initial cost (purchase price)
- » Installation & commissioning cost (pipe welding, crane, hoists etc.)
- » Operation costs (pressure losses)
- » Maintenance and repair costs
- » Down time costs (loss of production)
- » Decommissioning / disposal costs



# LIFE CYCLE COSTS (LCC)

Cost efficiency and reliability at its best

An approach on how to maximize the return on investment for managed physical assets can be found below. It considers all known and estimated costs, including initial and recurring purchases, renewal / replacement as well as end of useful life costs. Furthermore, it has been adapted to support asset management decisions for the corresponding life cycle phases.

① **Cic** = Initial cost + **Cin** = Installation costs

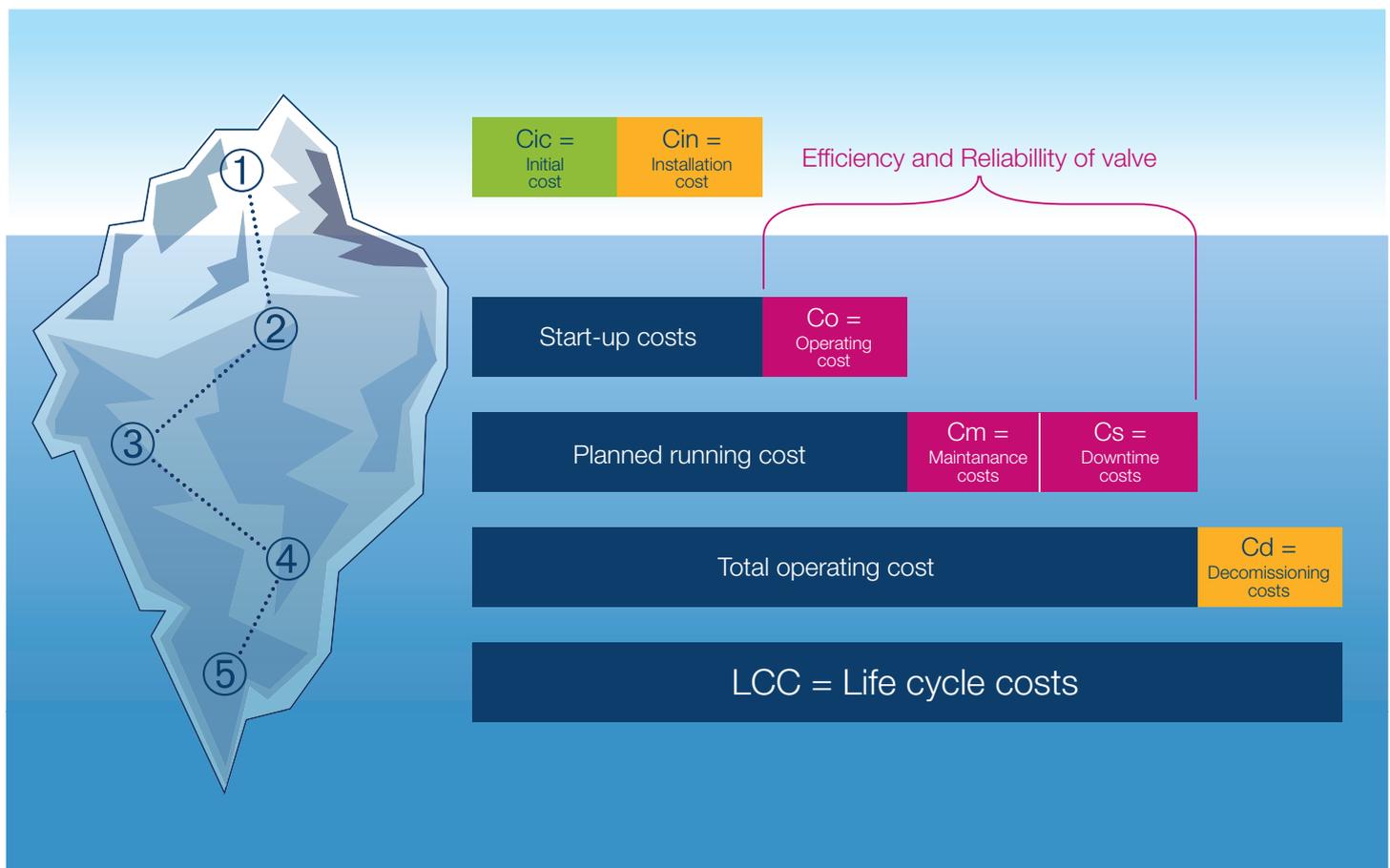
② Start-up costs + **Co** (Operating costs (Co) are costs associated with keeping the plant running (more specifically energy costs associated with pressure loss).

③ Planned running costs + **Cm** + **Cs**

**Cm** = Maintenance costs for KLINGER Fluid Control ball valves are very low due to the avoidance of the following: Operating and checking the valve on a regular basis. Dismantling the valve to change the sealing element. Installation of the repaired or a new valve in the line

**Cs** = Downtime costs can be very high. To empty the pipe, repair the valve as well as refill and test the network section can generate 20 to 30 % additional costs on top of the cost for the downtime.

④ Total operating Costs + **Cd** (Decommissioning cost, which is the cost incurred by companies in reversing the modifications made to landscape when a fixed asset is used up).



Definition of KLINGER Fluid Control Total Cost of Ownership



Your KLINGER distribution partner

---

KLINGER Fluid Control GmbH  
Am Kanal 8-10 » 2352 Gumpoldskirchen » Austria  
Tel: +43 2252 600-0 » Fax: +43 2252 600-100  
office@klinger.kfc.at

[www.klinger.kfc.at](http://www.klinger.kfc.at)