

# M-LANCE

The missing link  
in tubular catalyst handling



M-Lance in action

**Meet M-Lance, the newest addition to the Mourik tubular catalyst change system. Unloading spent catalyst from a tubular reactor was previously a labor-intensive job.**

Using M-Lance, a Mourik patented technology, the unloading process is automated, resulting in a safer work environment, and a more efficient and predictable tubular catalyst change-out.

### **Our time-saving answer to manual airlancing**

The patented M-Lance works according to the same principle as manual airlancing. However the speed of unloading the reactor tubes is no longer determined by the skills of the operator, but by the constant working force of a machine. One single operator on top of the tube sheet of the reactor can operate the M-Lance, which is equipped with three airlances that empty three reactor pipes simultaneously. Therefore, fewer people and less equipment are needed in the confined space, leading to a safer and more controlled working environment. Moreover, with M-Lance the process of catalyst removal is significantly shortened, minimizing your downtime and reducing your total cost of ownership.



Tube inspector, part of M-Lance



(QR-code links to movie about M-Lance on YouTube)



**Information**

Mourik Industry  
 Nieuwesluisweg 110  
 3197KV Botlek-Rotterdam  
 www.mourik.com

**Contact details**

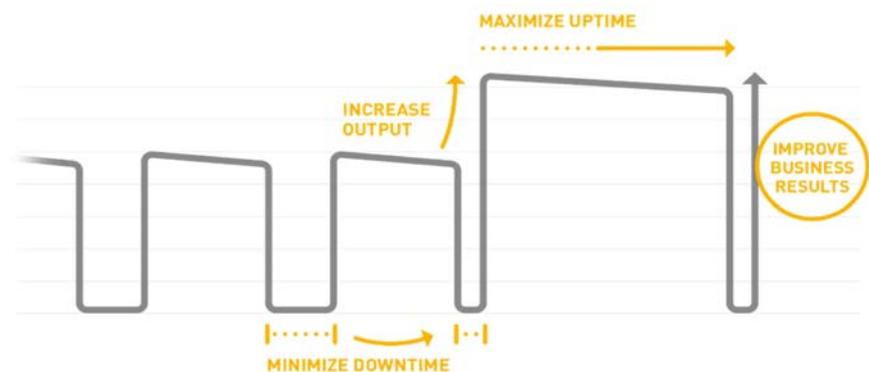
Cok Luijendijk  
 Business Unit Manager  
 Catalyst Handling  
 cluijendijk@mourik.com

**Learn more at:**

Mourik.com/tubularcatalyst

**Discover how Mourik Industry helps you to improve your business results**

Charging and discharging reactors is a critical job that demands the highest levels of safety and efficiency. Mourik is one of the few companies in the world that have mastered this task. For vertical arranged tubular reactors we offer our Tubular Catalyst Change System, an integrated solution to make your catalyst change-out more efficient, safe and predictable. And to enable you to deliver superior products, using efficient and sustainable developing and manufacturing processes.



**Measurable and predictable performance increases**

At Mourik Industry we work with an experienced team and the best equipment to deliver maximum equipment reliability and process uptime. Our insights and optimizations make for measurable and predictable performance increases of your process. The result? A maintenance strategy that helps you reduce your total cost of ownership.

**An integrated package of services for your catalyst change-out**

Mourik's Tubular Catalyst Change System delivers an efficient and effectively geared change-out for all stages of the process. From unloading and cleaning to reloading and performing final checks. By aligning and integrating all activities into one total solution, we make your change-out more efficient and more predictable in term of maintenance costs and timings.



**Your catalyst change-out is in safe hands with Mourik Industry**

The Mourik Tubular Catalyst Change System helps our clients achieve the shortest downtime and longest uptime of their production processes, all to improve their business results.