



## Safer lowering-in process by using the refurbished Pipelayer



2023 IPLOCA Health & Safety Award

Among all the Pipe layers in this industry **Komatsu Pipelayer D355C** is one of the most popular machines in the field due to its safe high workload during the lowering-in process and stability!

**BUT**

- Procurement of spare parts was becoming more and more difficult **because KOMATSU has stopped supplying spare parts.**

- The **available KOMATSU Pipe layers at STREICHER were not implementable anymore as they had to be modernised for safety standards.**

Furthermore sustainability is a long-term Company goal for STREICHER and **putting an old pipe layer out of operation which can still be in use** is not an effective solution. Our goal is to prolong the life cycle.

→ Therefore it was time for significant changes by the lowering-in team.



# Solution

## Goal:

Developing a pipe layer, that **satisfies all requirements of the HSE concept** up to the compliance with **all current standards such as the Machinery Directive.** (directive 2006/42/ec).





# Achievements

## 1. Overload warning device:

Alerts the operator when reaching max. lifting capacity  
→ adjusting operations to prevent accidents or damage.



**2. Acoustic and visual warning device:** Signal light at ROPS for lowering-in coordinator.  
And visualisation of actual workload (green, orange, red) on dashboard for operator.



**3. Fail-safe limit switches:** for winch operations „Hook-Up“ and „Boom Up“

**The lowering-in process is one of the riskiest processes in pipeline construction, especially when moving and carrying the loads are happening at the same time.**

Fail-safe switch prevents equipment from operating outside of safe limits → reduces the risk of accidents or damage to the equipment.



**4. ROPS system with a climbing aid and a safety ladder:** This platform provides a safe and secure means of accessing the machine's working area without unnecessary contact to trackdrives.



## 5. Replacing the two old-fashioned and cumbersome levers with sensitive joysticks for a safe and intuitive operation of the winch system

- + Precise control over the winch movements → allowing the operator to make subtle adjustments to the winch speed and direction.
- + Allowing the operator to control the winch from a safe distance!
- ! Particularly important when working with heavy loads and longer hours that could pose a risk to the operator if the winch were to malfunction!



## 6. A fully adjustable operator seat with damping of vibrations and restraint system



### Additional Benefits:

**Retrofitting includes implementation of new engine**

Ecological footprint due to modern diesel engine (smaller displacement but same powercurve)

Komatsu D355 fullfills CE-requirements

Lower maintenance costs

Guaranteed spare parts supply

Increase of operating period for another 20 years.