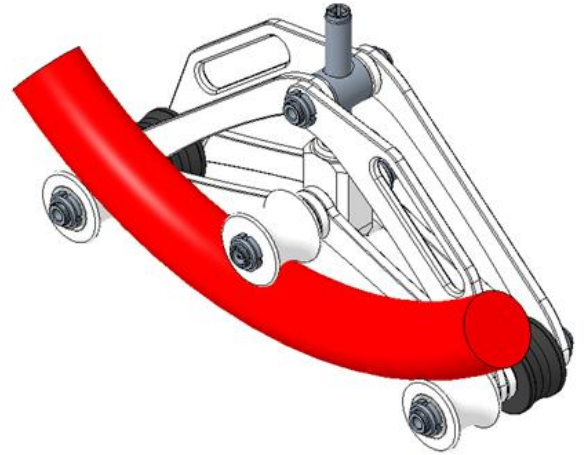


SUCCESS CASE 19.2025

Cable Bending Tool

KBW-01



INTRODUCTION

The Dutch DSO Enexis, together with DSOs Liander and Stedin, organised an innovation challenge to develop a new cable bending tool that technicians can use when installing a medium-voltage (MV) substation in order to prevent them from bending the cables manually.

The DSOs invited various companies to develop a tool aimed at enhancing the ergonomics and efficiency of the task of bending electrical cables when installing an MV substation. By making the work less physically demanding, the solution ensures that the work becomes more inclusive, reducing the heavy burden on technicians and thereby increasing the productivity of the available workforce. Most importantly, the DSOs can take better care of the health of their technicians.

THE SOLUTION

The new bending tool KBW-01 facilitates the bending of MV cables up to 1000 mm² (Ø78 mm), even for installation in confined spaces such as basements. The operation of the tool is as follows:

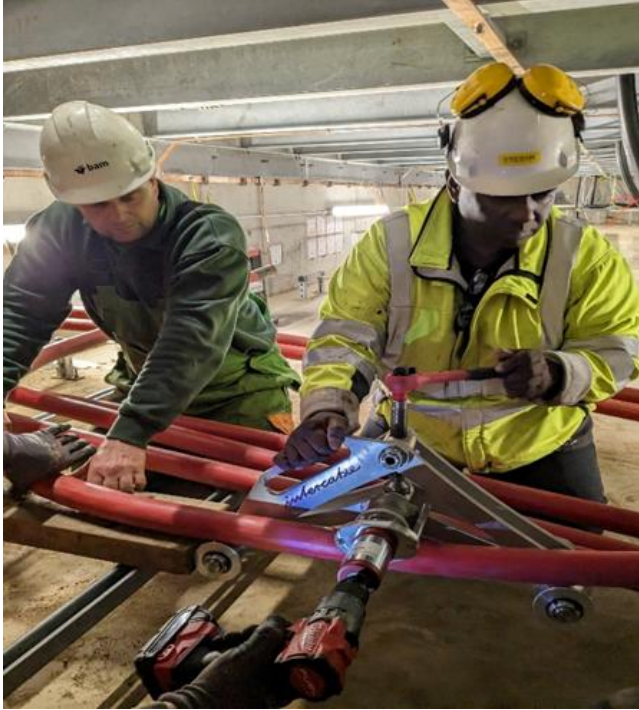
- The minimum bend radius is determined according to factory specifications.
- The technician marks two points on the cable where it needs to be bent (depending on the type of cable).
- The bending tool and a cordless screwdriver are used to bend between the marked points.
- The process is repeated until the desired 90° bend is achieved.

This process is very intuitive, resulting in a smooth bend without any cable damage.

RESULTS

The cable bending tool is currently being used on a small scale within the operational chains. The initial results are positive: the Dutch DSOs have observed that employees are quickly adapting to the new way of working, resulting in a more efficient installation of MV substations. Moreover,

the use of this new technique significantly reduces strain on technicians' backs, contributing to the **sustainable employability of operational staff**.



Technicians from Stedin and Enexis working with the cable bending tool during the testing phase of its development at the company training centre.

WAY FORWARD

The tender process for the tool has been completed and an initial order has been placed with the producer of the tool. The next step will be further scaling up the use of the cable bending tool so that it becomes widely known and used.