

# Synchronised Parallel Run – a practical application –



### The Problem

Everytime a flood alarm was issued in Wertheim its citizens were really on tenterhooks as to whether their 'Messbrueckle' pedestrian footbridge over the Tauber would be able to withstand the ordeal. So often in the past the bridge had been damaged, if not even almost destroyed, by the force of the passing flotsam and jetsam. The price they had to pay lay not only in the cost of repairs and maintenance to the bridge but also in the long treks they had to make on foot.

### The Challenge

A solution had to be found - no mean challenge in the light of the tightly-packed buildings nearby and a limited financial budget. The decision fell to the solution of constructing a mechanism which would temporarily lift the 31 metre/17 ton bridge during flood alerts.

### The Solution

The lifting of the bridge was effected by installing 'Sipos 5 Flash' electrical actuators which can raise the bridge 5.4 metres in the space of 45 minutes. As the bridge lifts the actuators at either end of the bridge communicate with one another to ensure that the bridge lifts evenly. The height discrepancy between both ends of the bridge as it is raised may not exceed +/- 30 cm.