

Automation of the  
set-up process to  
prevent collisions and  
to optimize the position  
of the table



for  
wire bending machines



Early detection and automatic prevention of collisions before the bending process is started

Shorter set-up time due to automatic calculation of the table position

Less rejects during set-up

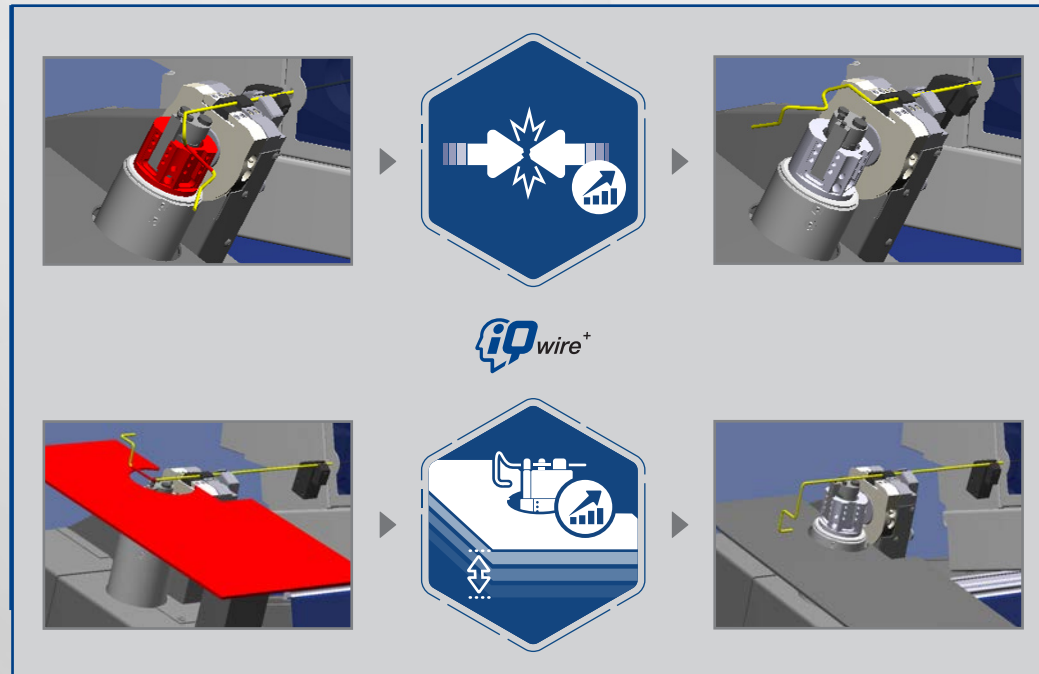
Determination of cycle times for accurate production planning

Feasibility simulation before bending process

## Situation

- When setting up complex bent parts, the operator has to test the production process slowly several times in order to make sure that the wire does not collide with the tool. However, the set-up process ought to be as fast as possible to minimize downtimes.

## Solution



- *iQwire+* enables the graphical visualization and optimization of the bending process while a part is being set up. If a collision is predicted, alternative bending sequences are generated automatically. Next, the maximum output of each collision-free bending sequence is displayed. Based on the simulation, the table position can be automatically calculated which reduces downtimes during set-up.

## Requirements

- Application of WAFIOS Tools
- Geometrical programming
- Displaceable table (X axis)