Simulation in metal forming

How to use it to support the process design work and to improve the process quality

Product drawing

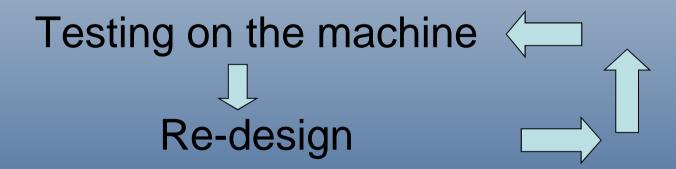
Empirical process design

Testing on the machine

Re-design

Development cycle

The development cycle is very cost intensive and covers a lot of uncertainties



Development cycle

The development cycle is very cost intensive and covers a lot of uncertainties





geometrical fault in the part

The development cycle is very cost intensive and covers a lot of uncertainties



breakage in the part

The development cycle is very cost intensive and covers a lot of uncertainties





tool failure (punch)

The development cycle is very cost intensive and covers a lot of uncertainties





tool failure (punch)

The development cycle is very cost intensive and covers a lot of uncertainties



tool failure (die)

The development cycle is very cost intensive and covers a lot of uncertainties



tool failure (die)

### All these failures (and therefore costs) can be avoided by using

## Simulation in der Umformtechnik Simulation in metal forming

Simulation in metal forming

How to use it:

Example application

Simulation of material flow

Simulation in metal forming

How to use it:

Example application

Tool design

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Simulation in metal forming

How to use it:

## Examples of complex industrial applications

Examples in co-operation with Nedschroef, Belgium
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