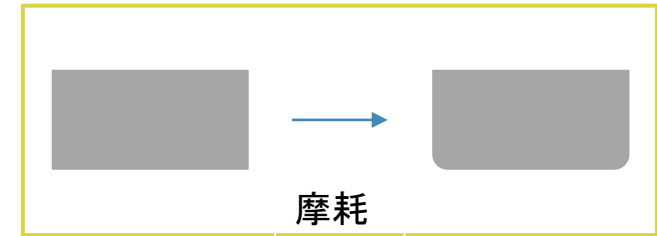


# 機械学習を利用した打抜きによる切口面判定並びに摩耗予知

## 背景

工具・金型が摩耗しているときと摩耗していない時では、  
製品の形状が異なる



工具や金型に異常が発生してからラインを全部止めて交換作業に入るため効率が悪い



製造中に摩耗状態を知りたい

異常を予知できれば交換作業の時間を短縮でき効率を良くできる

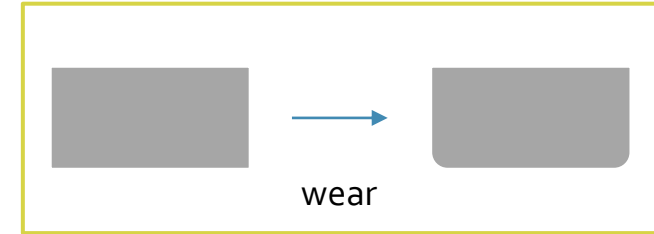
## 目的

製造中に工具・金型の摩耗状態を監視するシステムの開発

# Cutting surface judgment and wear prediction by punching using machine learning

## Background

When tools and dies are worn and when they are not worn, product shape is different.



The current production line is inefficient because the entire line has to be stopped after a tool or die malfunction occurs before replacement work can begin.



The detection of the wear condition during production is needed

If malfunctions can be predicted, replacement time can be reduced and efficiency can be improved.

## Objective

Development of a system to monitor tool and die wear conditions during manufacturing