

---

Case Study

# Coated Wear Parts Meat Processing



*CERAMICSPEED*

# Coated Wear Parts - Meat Processing

In a Danish meat processing plant, hundreds of knives need sharpening each day. To accomplish this task a robotic cell is installed. Inside the cell, stainless steel spring leafs fixate the knives in big cassettes for the robot to retrieve them and re-insert them after sharpening.

## Problem

When inserting the pointy knives into each set of spring leafs, the knife would often “bite” into the softer stainless steel. This would cause a collision bending both spring leafs and knives, in some cases causing defects on the robotic arm.

This problem lead the tema to a monthly replacement of the spring leafs, which would bind up one engineer in two hours per cassette. Even under this maintenance regimes, however, collisions would still happen.

## Solution

The team approached CeramicSpeed with a request to deliver a harder and lower-friction surface on the springs and a test was set up. The same spring leafs as always were used, simply coated by CeramicSpeed, with the same HardCoat solution often used on CeramicSpeed bearing parts.

## Result

Now two years after the test was set up, the same set of spring leafs has been through more than 700.000 knives and are still spotless.

This led to a notable decrease in maintenance cost as well as downtime cost for the Danish customer, proving that Coated Wear Parts provide an ideal solution.

## Technical Highlights

- Temp. regime: Ambient -20 to 25°C
- LongLife HardCoat

