

# HOW TO CLEAN FLEXI SOLDERING FRAMES



Our customer struggled to find a company, which would be able to find a solution to remove unknown contaminants from their Flexi soldering frames.

The production with the usage of Flexi soldering frames is very unique and technically challenging. The customer struggled to remove plastic contaminants, which were heavily baked to the frames. As we know, we are the only company, which is able to provide a complete cleaning solution for such a specific request.



### WHAT WE TESTED?

First, we tested the cleaning ability of our cleaning agent

Decotron® ACW 117 at the customer, using their current

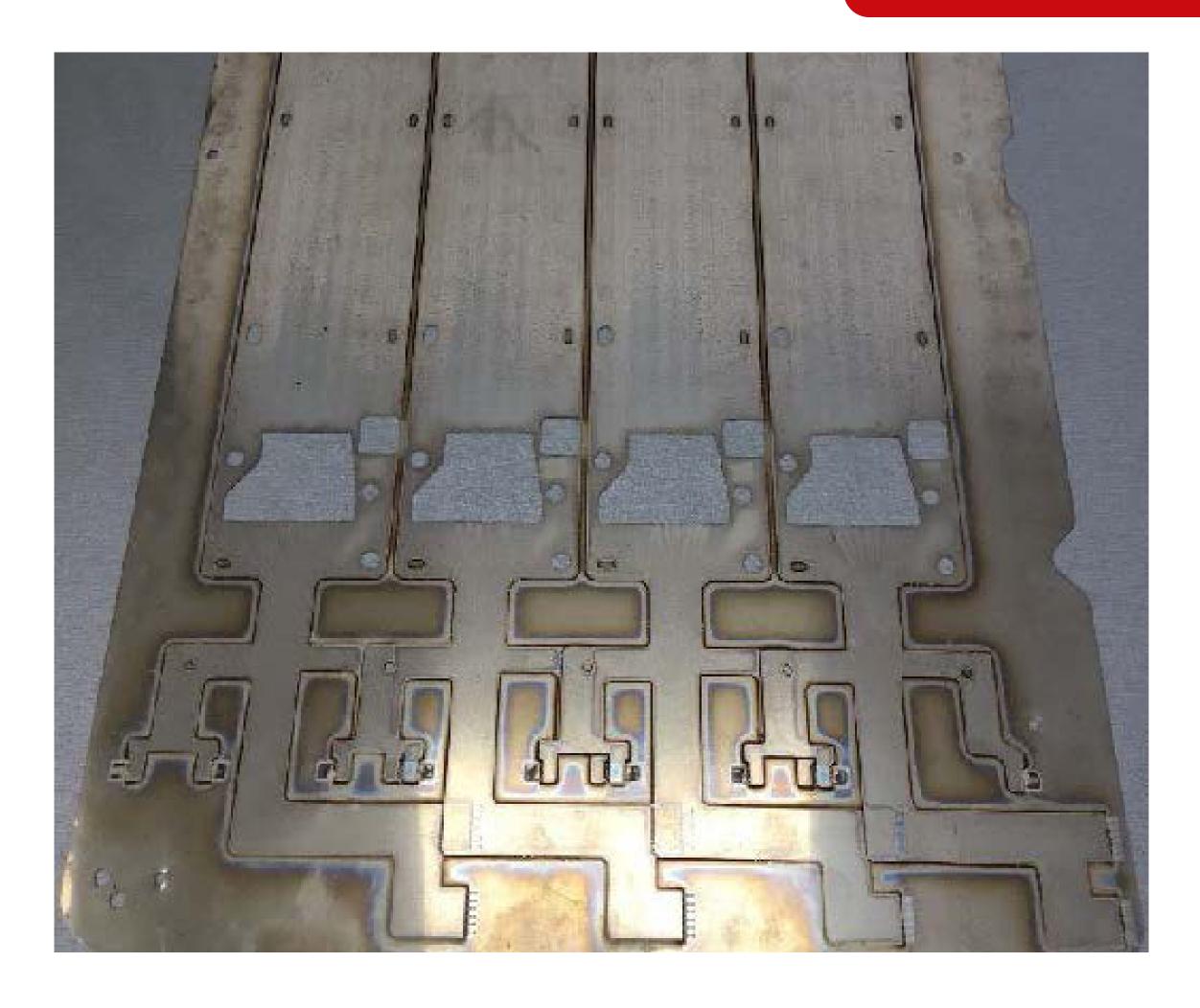
Sonix® type of cleaning machine to remove unknown contaminants from the Flexi soldering frames.

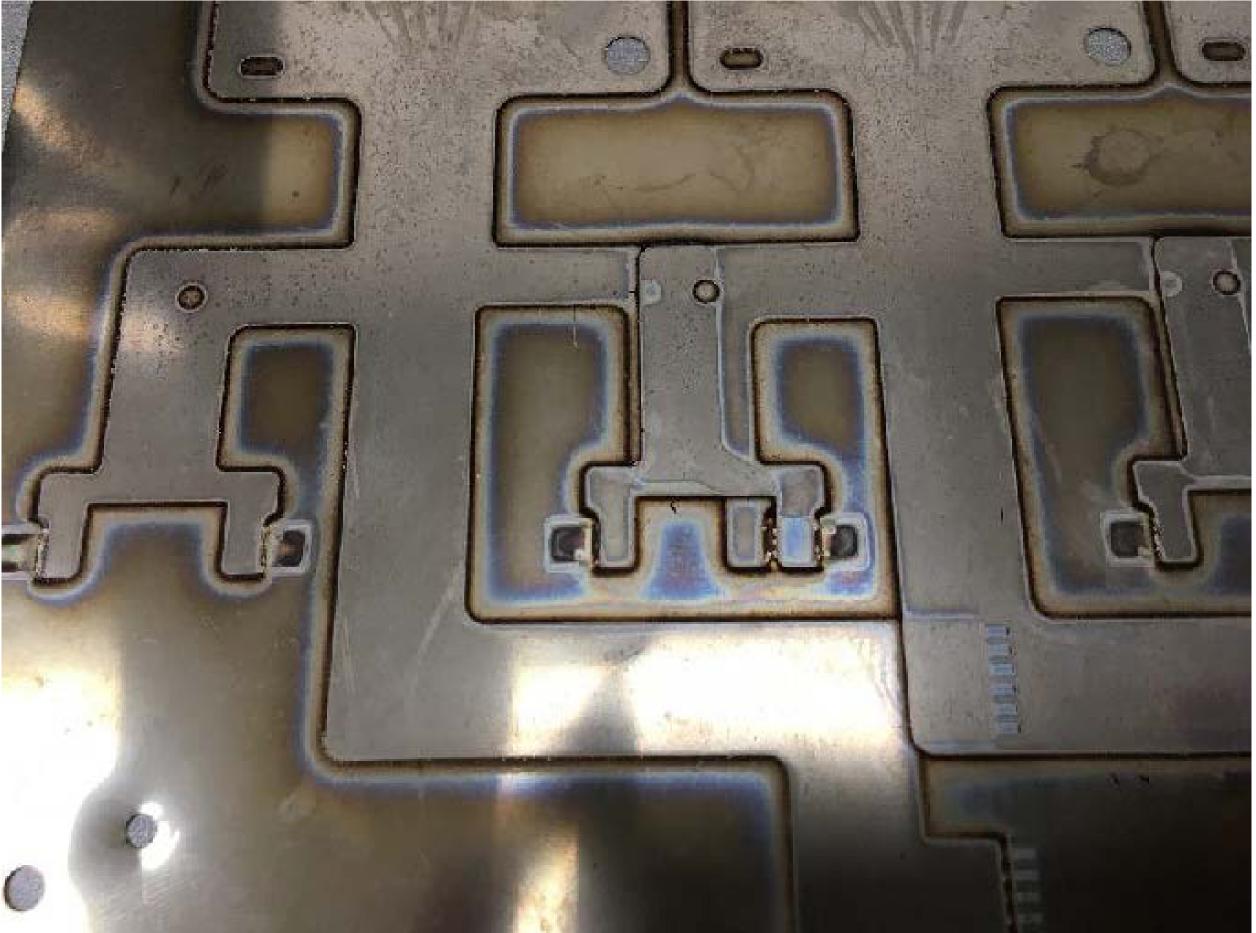
The first testing was satisfying as the residues were completely removed from the frames. However, the cleaning process

took a longer time. Because of that, we decided to perform another test in our laboratory.

For the second test, we obtained four Flexi metal sheets, which our R&D team tested in a DEMO center. We improved and customized Decotron® ACW 117 according to the customer's need and we chose AirJet® type of cleaning machine with air-bubbling technology.

#### **Components Before Cleaning**







### COMPLETE CLEANING SOLUTION BY DCT



Water-based cleaning agent Decotron® ACW 117



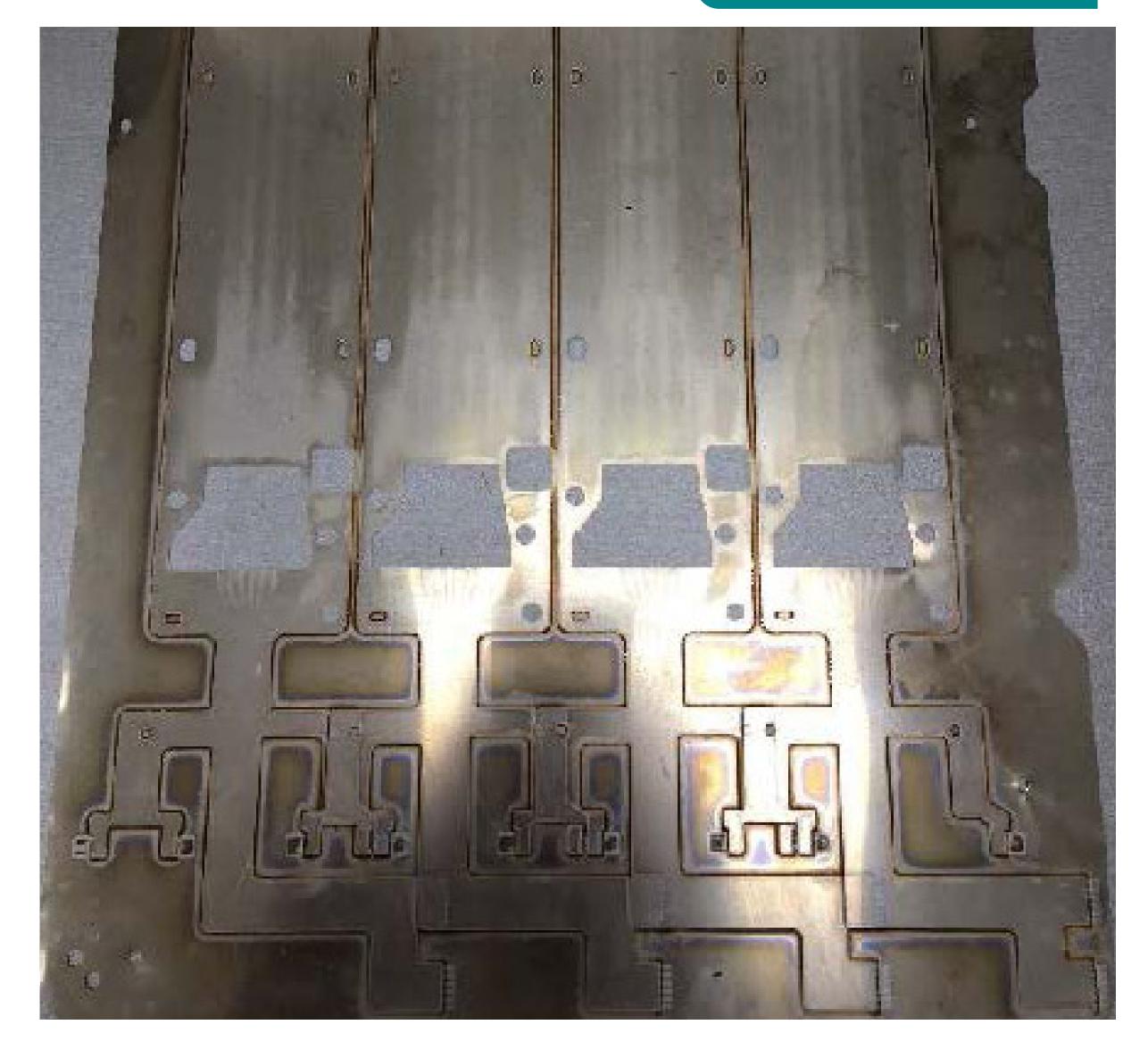


Cleaning system Airjet® 486 CRD with Air-bubbling technology



Please note that the excellent results are achieved due to a combination of Decotron® ACW 117 and air-bubbling technology / AirJet type of cleaning systems.

#### Flexi Sheets BEFORE Cleaning -> AFTER Cleaning

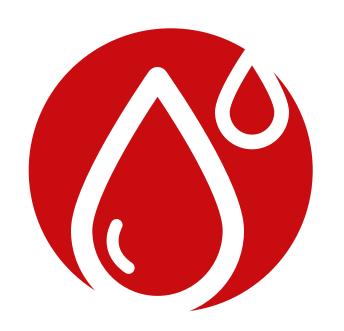




#### Flexi Sheets BEFORE Cleaning -> AFTER Cleaning







## RECOMMENDED CLEANING PROCESS

Cleaning machine: AirJet® 486 CRD

Technology: Air-bubbling

Cleaning: Decotron® ACW 117 / 45°C immersion overnight followed by 3–6 hours of bubbling and manual removal with a brush

Rinsing: DI Water / 10 min / 45°C

Drying: hot air / 10 min / 80°C



Increased temperature is important for the achievement of brilliant cleaning results

#### Flexi Soldering Frames BEFORE Cleaning ->

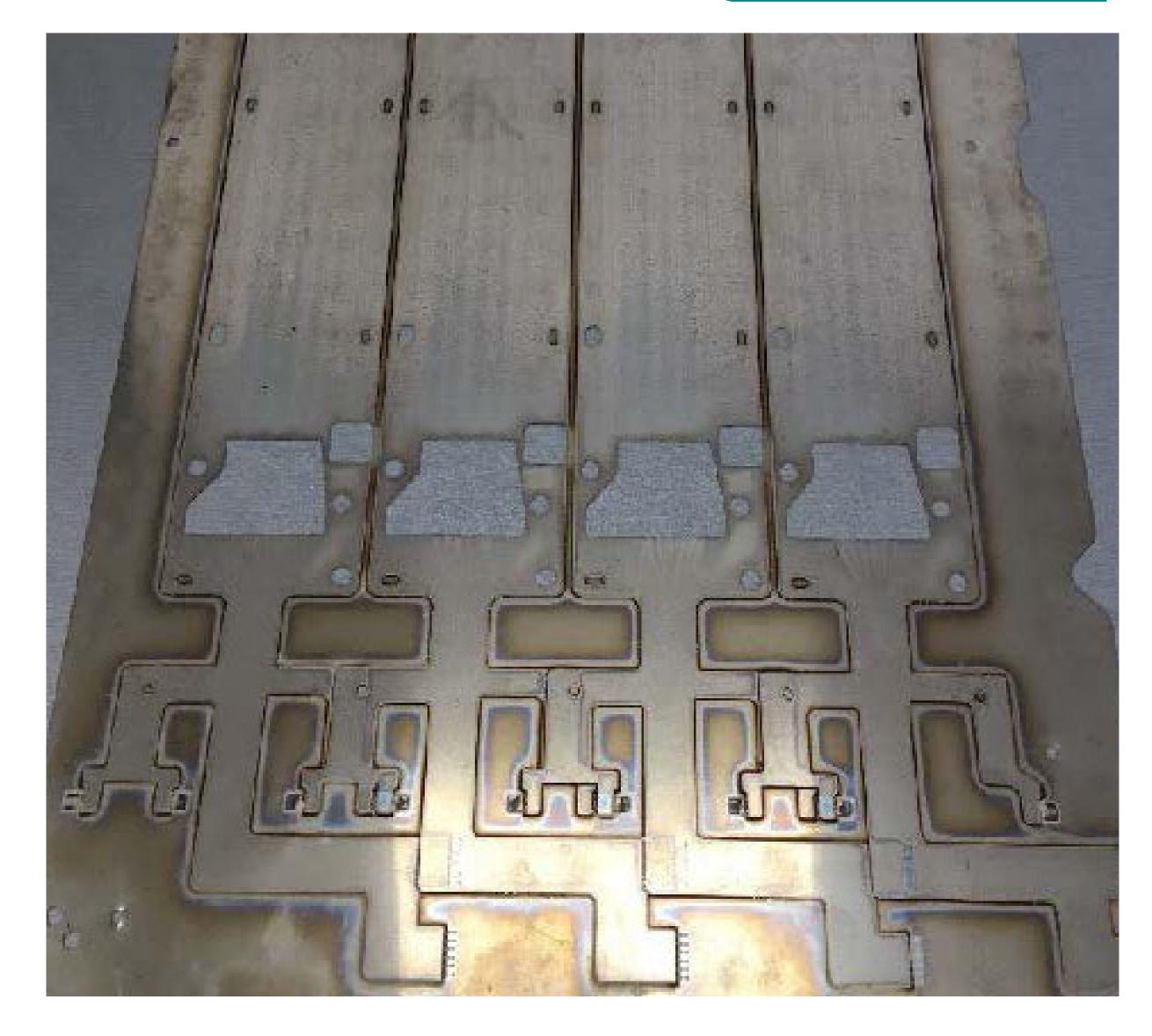
#### **AFTER Cleaning**





#### Flexi Soldering Frames BEFORE Cleaning ->









### RECOMMENDED CLEANING AGENT

#### **Decotron® ACW 117**



Technical data sheet

- Water-based cleaning agent
- Determined to remove:
   dust particles + grease from aluminium parts and polymer residues from flexible soldering frames
- May be used as rinsing agent after Proton® 703



## RECOMMENDED CLEANING SYSTEM

It can be stated that the airbubbling technology of our AirJet® 486 CRD with the usage of Decotron® ACW 117 is a key for such perfect cleaning results of Flexi soldering frames.

#### AirJet® 486 CRD

with Air-bubbling technology



Technical data sheet

The customer tried to analyze the type of contaminants, however, they have found only superficial information that **the contaminants are plastics.** So the intensive testing in our laboratory was essential to find a functional solution.

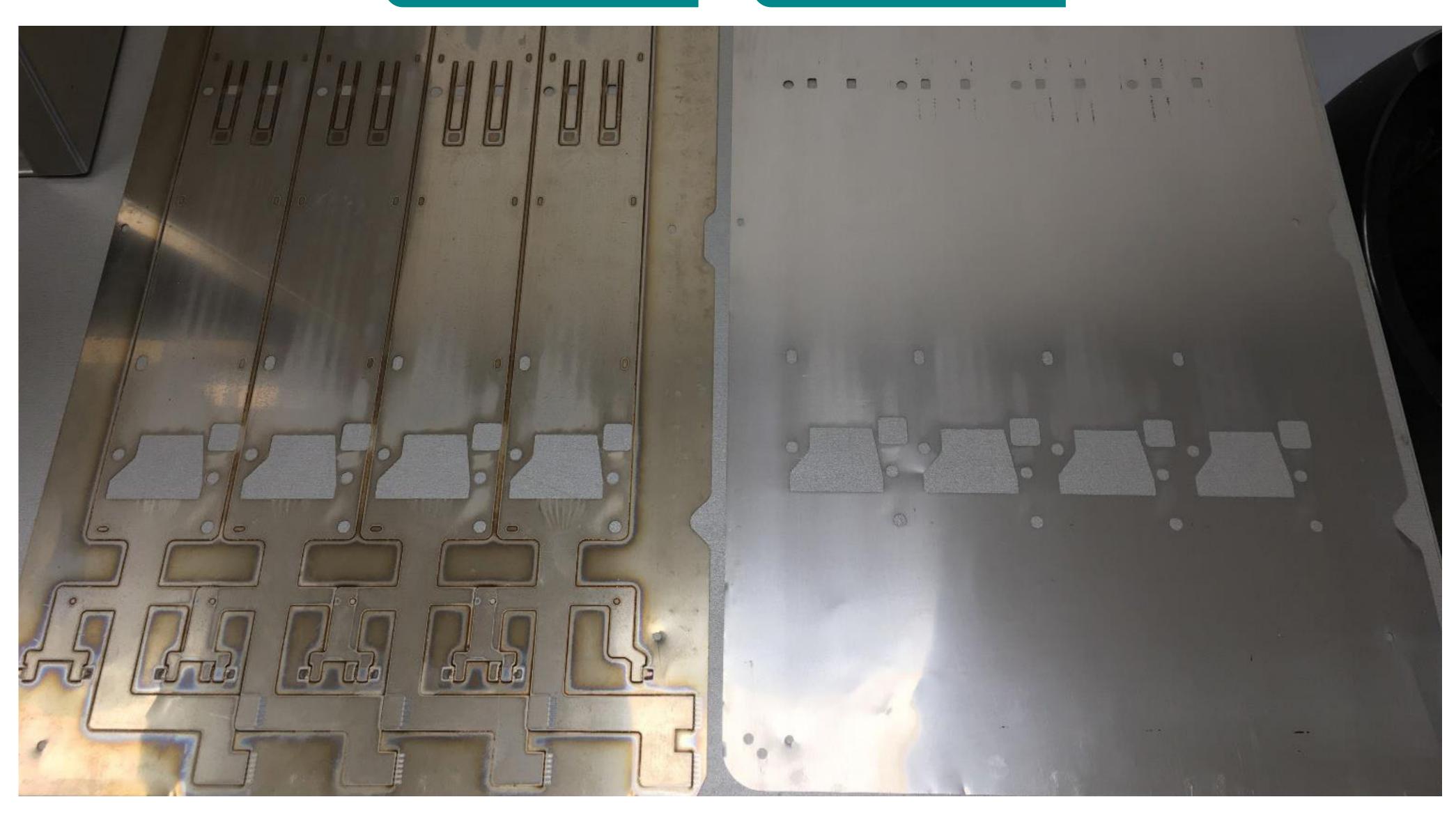


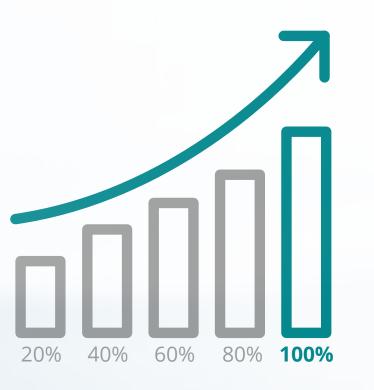
### BEFORE Cleaning -> AFTER Cleaning





#### BEFORE Cleaning -> AFTER Cleaning





### TEST RESULTS

Success rate: 100%

The customer was extremely pleased we found a functional solution for cleaning of Flexi soldering frames from unknown plastic residues. As a result, they bought our complete cleaning solution. Due to our second laboratory testing, we were able to shorten the cleaning time from 20 to 12 hours. Moreover, we suppose with regular maintenance, the cleaning process will take even less time, and probably manual cleaning will not be necessary.