



HOW TO EFFECTIVELY CLEAN REFLOW OVEN PARTS



WHAT IS THE CUSTOMER'S STORY?

The customer has been using our cleaning system **InJet® 388 CRD** in combination with **Decotron® 281** for the cleaning of stencils since 2004. As they have been very satisfied with our cleaning solution, they contacted us again, asking for a functional solution for the **maintenance cleaning of REHM reflow oven parts**. The reason is mainly economical as the **customer used an external company** to clean their components, which is extremely demanding in terms of logistics as all 13 reflow oven parts had to have spare parts to be able to send the original parts to the cleaning company, and it is **extremely expensive** as well. The cost of external cleaning is several thousand euros per month.



WHAT WE TESTED?

Our R&D team tested the most effective way of how to clean reflow oven parts, which are contaminated by solder pastes and other impurities.

Solder Pastes Were of These Types:

ALPHA[®] CVP-390 InnoLot

Indium 5.8LS

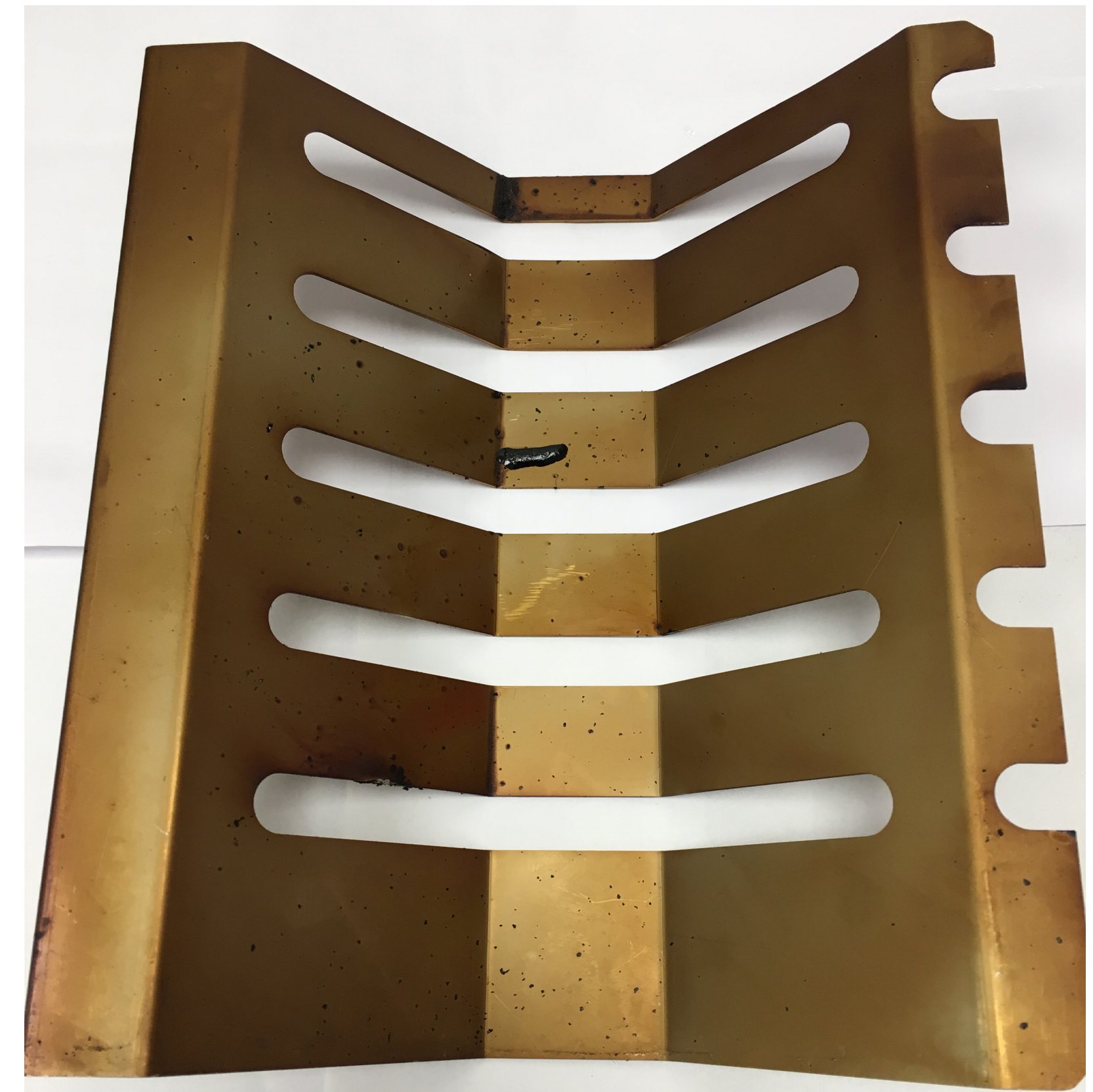
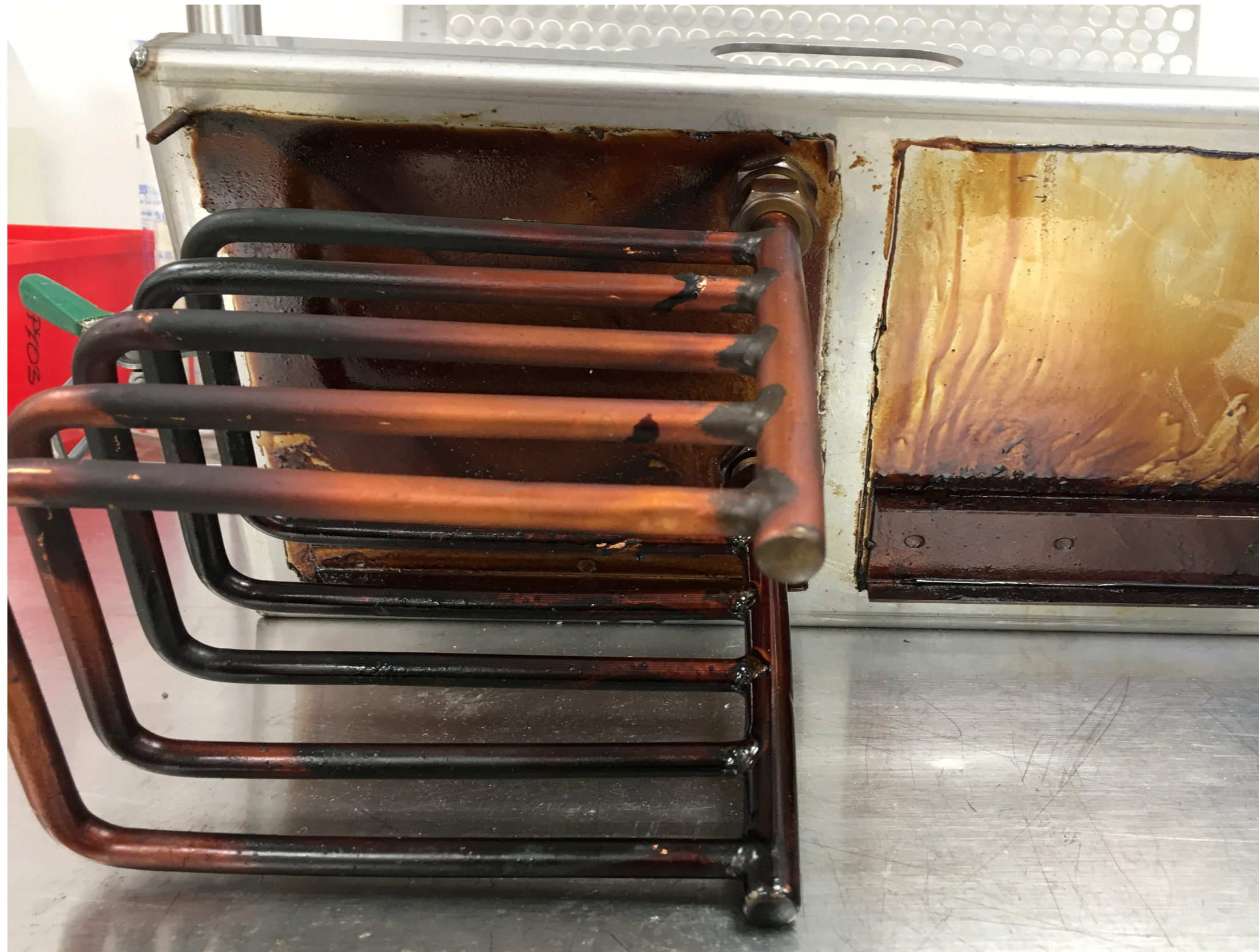
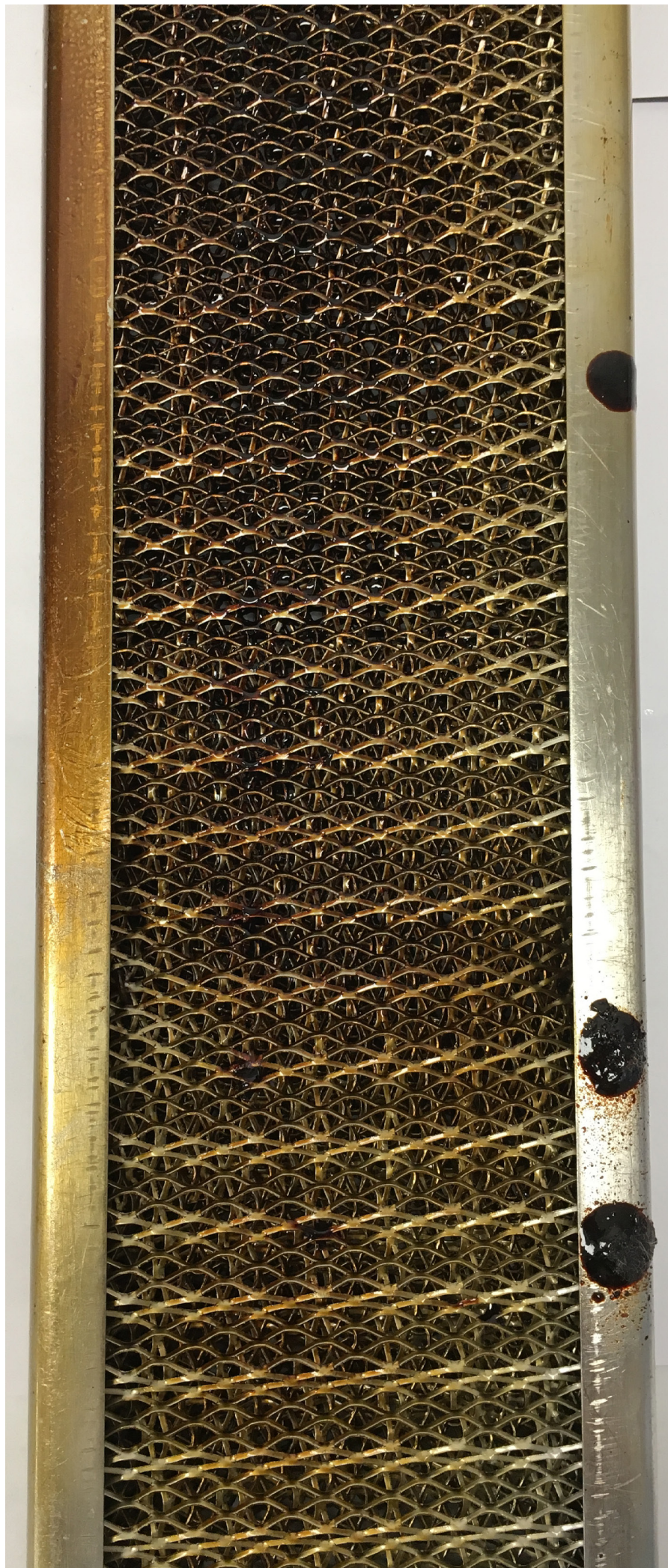
Indium 8.9HF

NC-SMQ[®] 92

Type of Reflow Oven:

REHM

Components Before Cleaning





COMPLETE CLEANING SOLUTION BY DCT

Water-based cleaning agent
Decotron® T391



Technical data sheet

Cleaning system **AirJet® 594 CRD**
with Air Bubbling Technology



Technical data sheet





RECOMMENDED CLEANING PROCESS

Cleaning: Decotron T391 / 15 min / 45°C

Rinsing: DI water / 10 min / 25°C

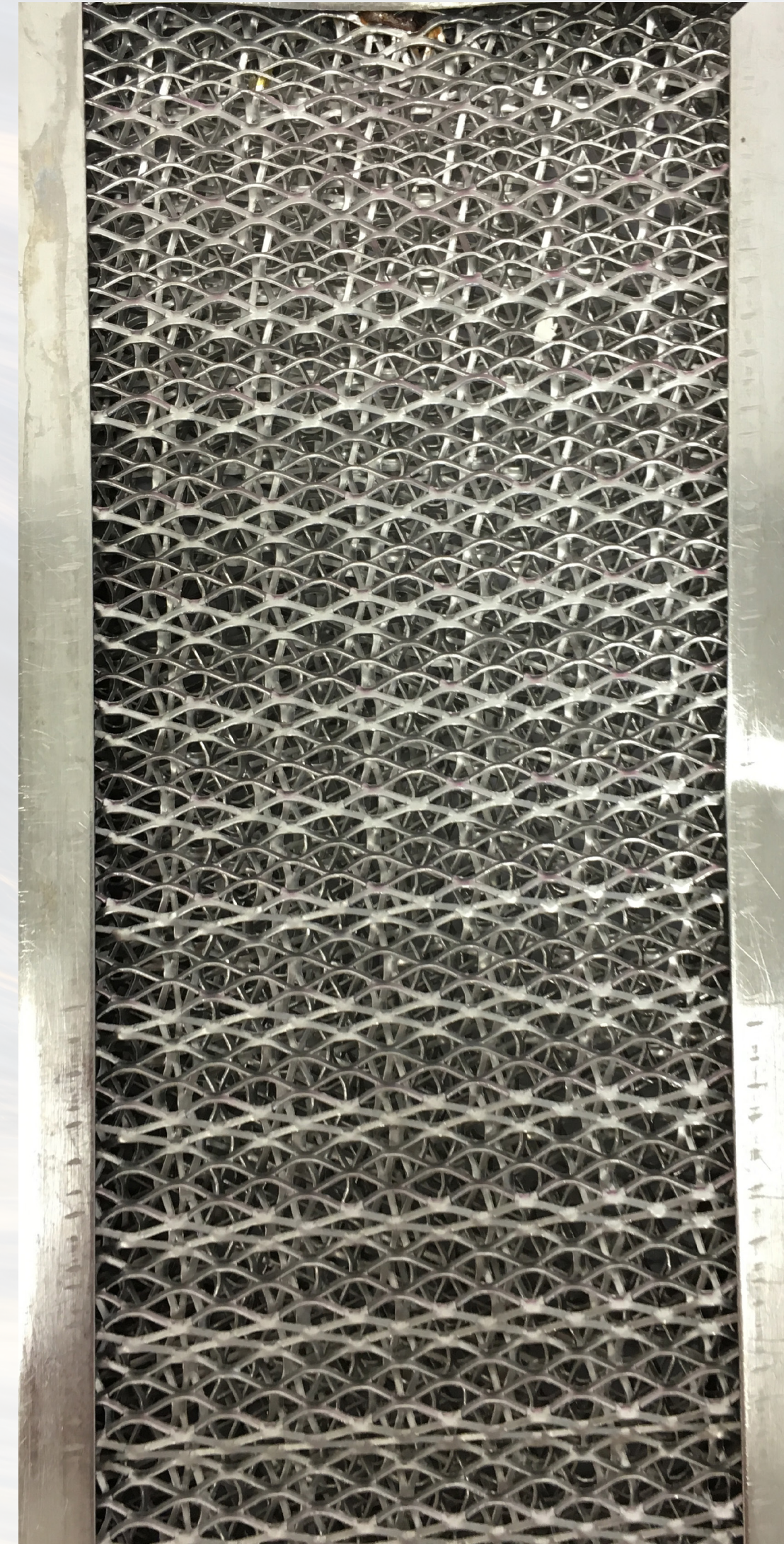
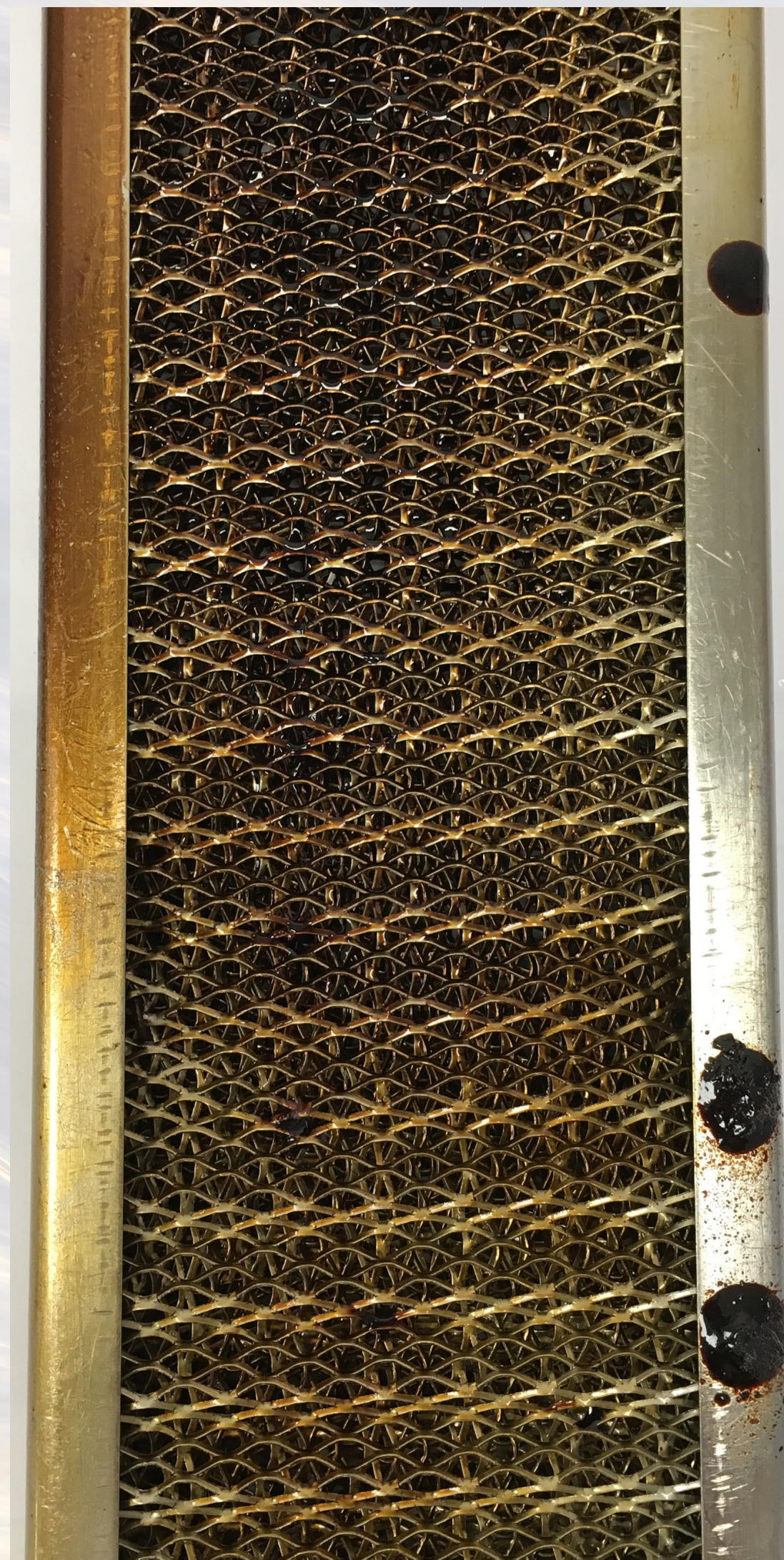
Drying: 15 min / 80°C / hot air



BEFORE Cleaning



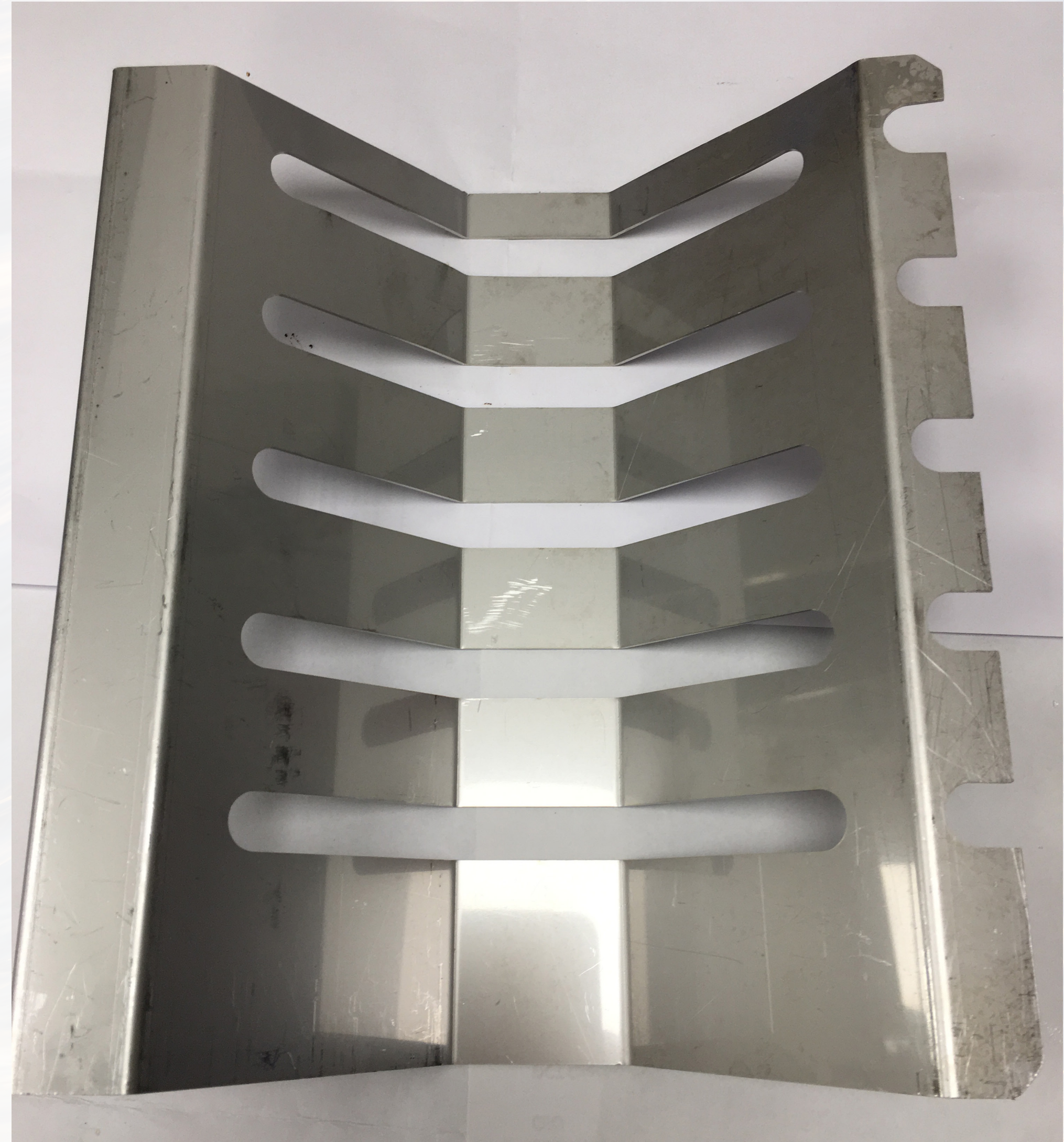
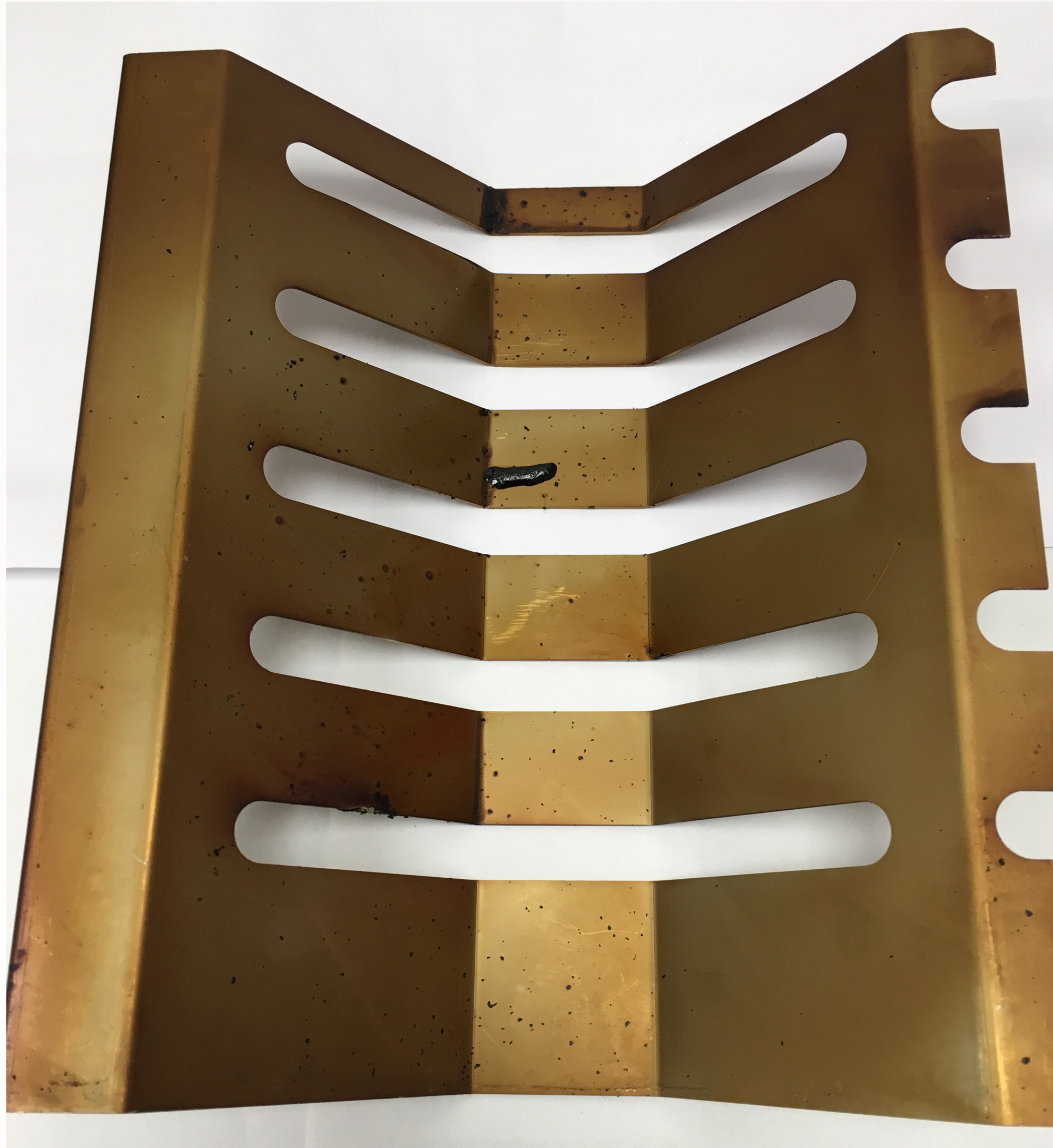
AFTER Cleaning



BEFORE Cleaning



AFTER Cleaning





RECOMMENDED CLEANING AGENT

Decotron® T391

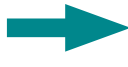


Technical data sheet

We started the test using **Decotron® T300SA**, which is a cleaning agent developed for the cleaning of flux residues and reflow oven parts. Most parts were perfectly cleaned in only 10 minutes due to double power of air bubbling technology performed by our **AirJet® 594 CRD** and by the usage of **Decotron® T300SA**. However, the copper surfaces of tested components remained covered by a white powder.

As we always struggle for a perfect solution, we continued in our test with another cleaning agent **Decotron® T391 to remove the white powder from copper surfaces**. With the usage of **Decotron® T391 we reached excellent cleaning results!**

BEFORE Cleaning



**AFTER Cleaning
with Decotron® T300SA**



**AFTER Second Cleaning
with Decotron® T391**





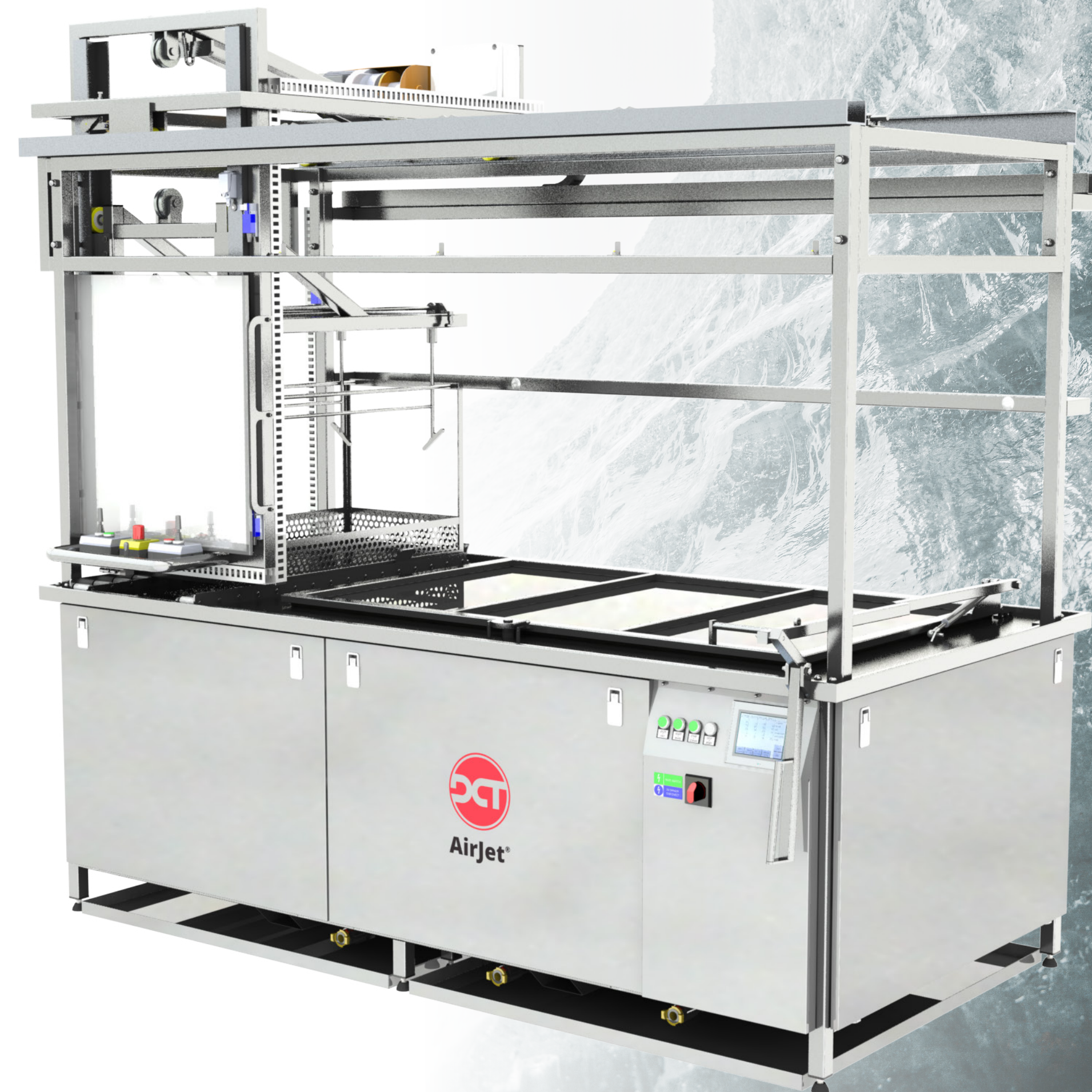
RECOMMENDED CLEANING SYSTEM

[AirJet 594[®] CRD](#)

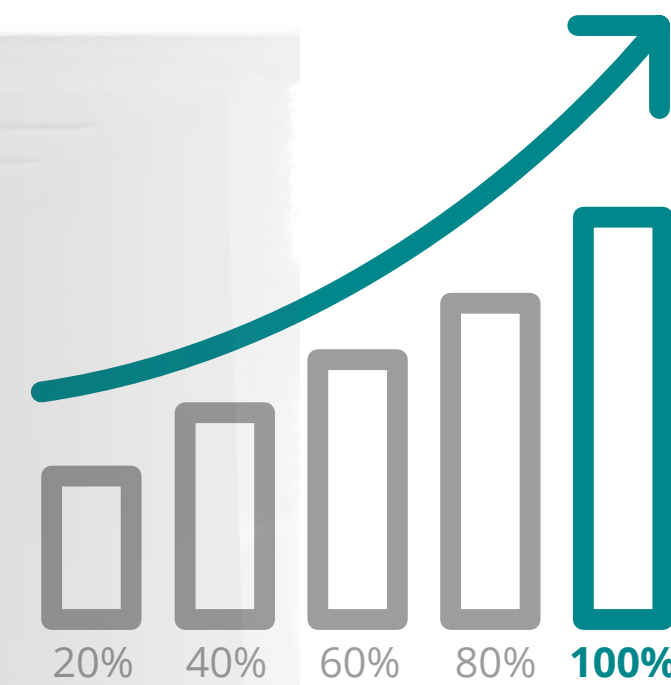
with Air Bubbling Technology



Technical data sheet



RESULTS OF TESTING



Success rate: 100%

The customer has been excited as we provided him with a functional and complete cleaning solution. Our **AirJet® 594 CRD** has **massive capacity**, which is necessary for cleaning reflow oven parts. It represents also a **fully-automatic cleaning process**. Moreover, the investment in the cleaning system will **pay for itself in one year** in comparison with the price of regular external cleaning.

