

watttron

The benchmark of efficiency

The Digital Sealing Solution

HFFS Pouch Making Application

cera2seal 

Challenges

We face the HFFS challenges

for mono material processing with conventional sealing systems



Deformed and shrunk seals and packaging due to excessive thermal treatment in the machine



Start-up losses due to slow heating and/or overheated sealing tools



Higher costs:
Monomaterials can only be processed at lower machine speeds or when using more expensive films.



Leakers in the triple point due to the layer step

Our Solution

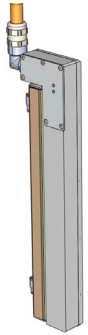
The complete HFFS solution

for mono material processing

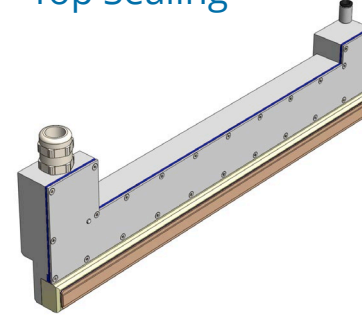
with conventional sealing systems

Also available for products
with **Spout Sealing**

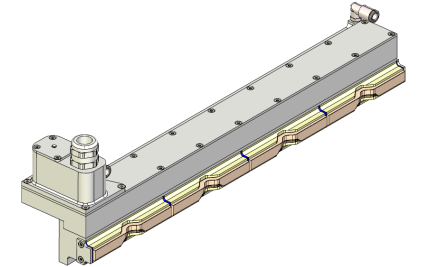
Vertical Sealing



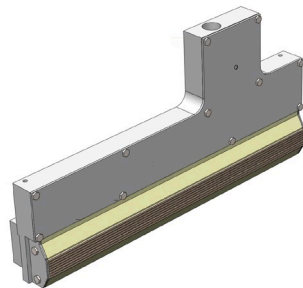
Top Sealing



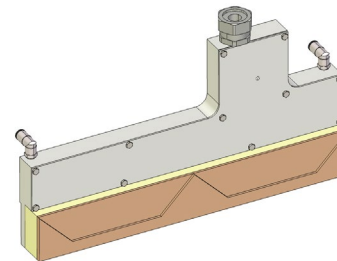
Top Spout Sealing



Bottom Sealing

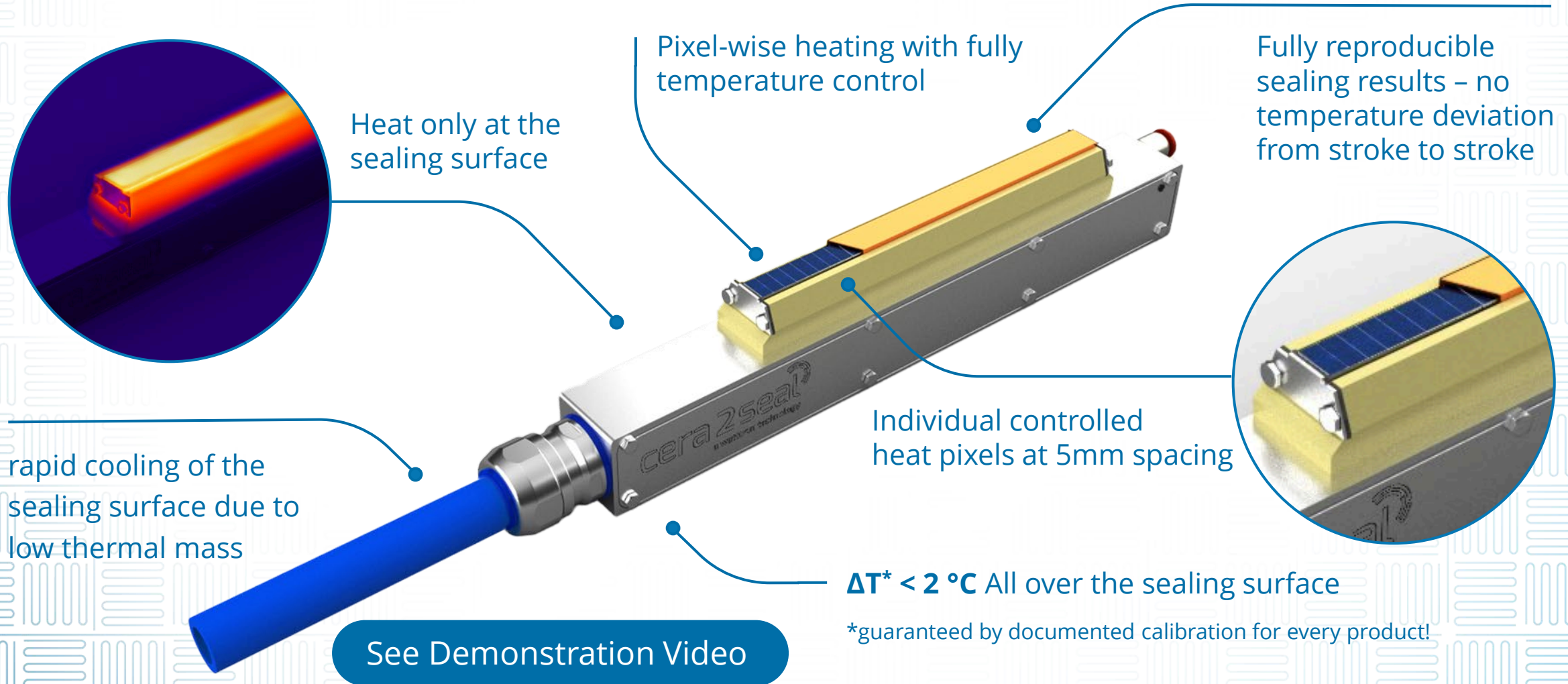


Bottom Format Sealing



Technology explained

How it works



USPs

General USPs

Mono-Material Processing



The accurate sealing temperatures enables processing of mono-materials with small processing windows (small sealing temperature window)

Inline-Quality-Control & Monitoring



Recording and analysis of power usage of each heat pixel enables identification of seal anomalies that may lead to quality issues, such as:

- Product residues
- Wrong positioned lids
- Doubled lids

Energy Saving



Up to
-50 %

watttron technology reduces energy consumption by up to 50% during continuous operation and by up to 90% during ramp-up. This also minimizes the thermal impact on the machine, ensuring more efficient and gentle operation.

Fast Ramp-Up and Cool-Down



Typ. 10 to
20 °C/s

Due to the low thermal mass and the high power density watttron sealing tools can quickly heat up and cool down. The system is ready for operation within seconds and can be fast turned-off in production stops for energy saving or safety reasons.

Easy Machine Integration

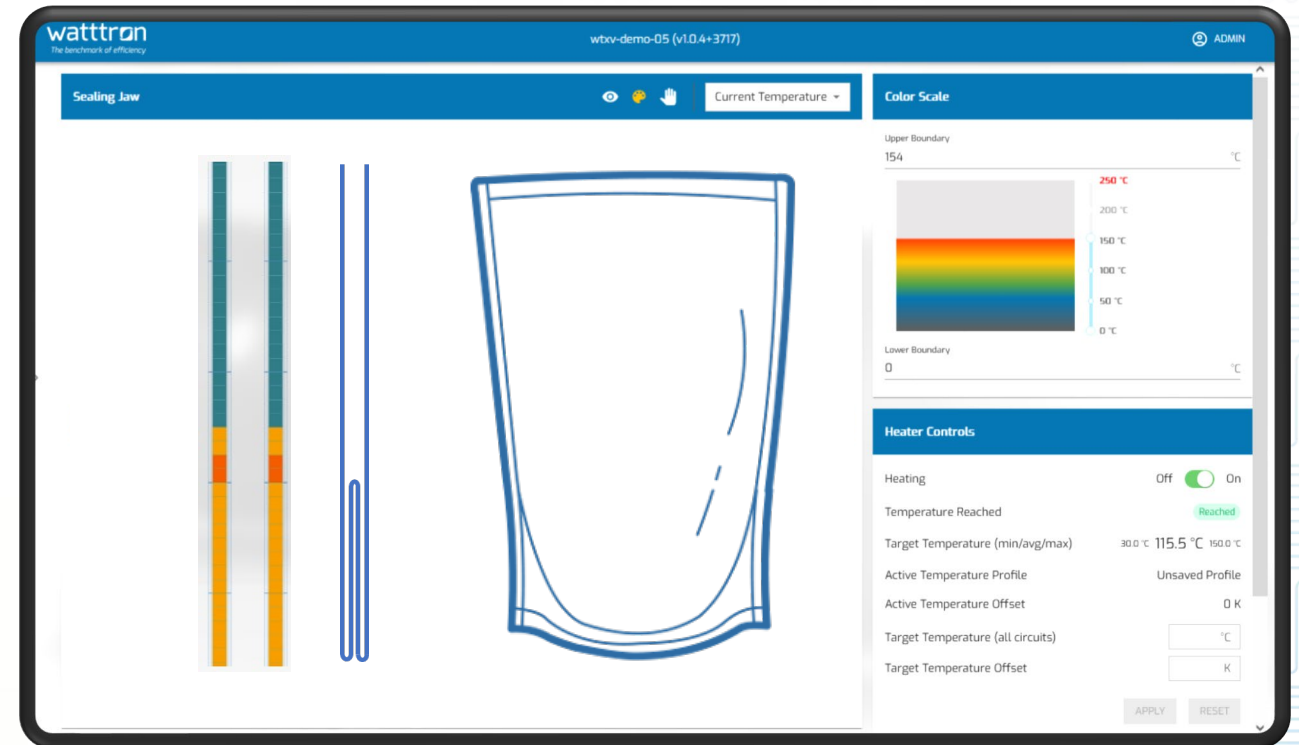
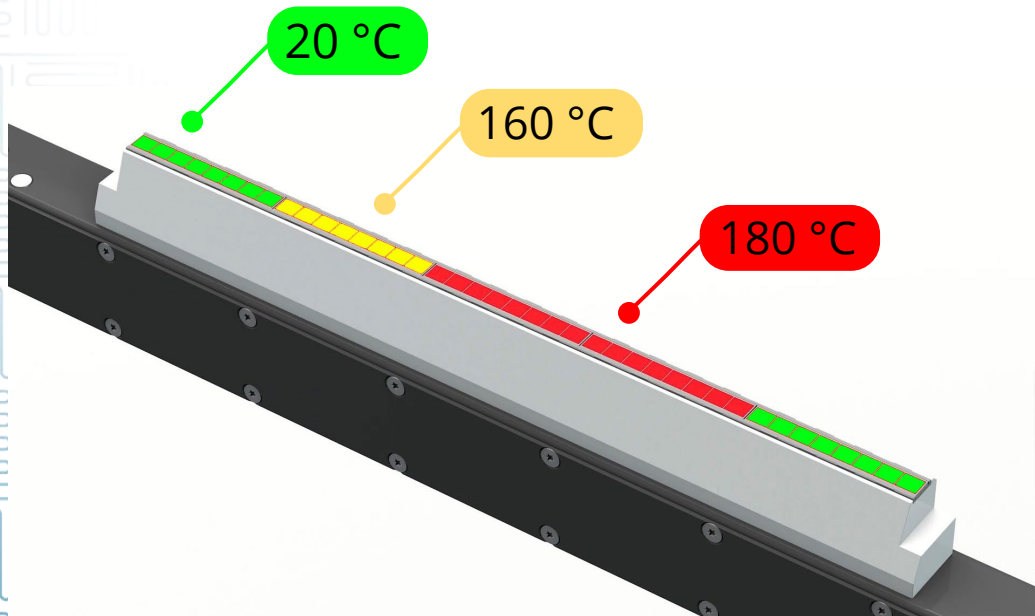


The fully-integrated design and the small components makes it possible to design sealing tools for every kind of machine and application to perfectly fit into the existing space.

cera2seal USPs

Temperature control

- Adapted temperature profiling: setting of temperature zones
- Gain sealing quality on critical areas such as tripple-points and layer jumps
- Differentiated heat supply between 2- and 4-layer



Calculation

Explore your saving potential

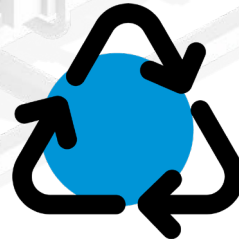
For mono material processing

with conventional sealing systems

Machine speed: 240 ppm
Machine output: 16 hours/day
7 days/week
OEE: 80 %
Revenue: € 0.50/pouch

Revenue potential of:
~ € 1.6 mio / year

assuming **5 % productivity loss**
due to harder processable mono-films,
less machine speed, start-stop etc.



Calculation

Explore your saving potential

In Energy Saving

with conventional sealing systems

Machine output: 16 hours/day
5 days/week
OEE: 85 %
Price/kWh: € 0.15/kWh
Curr. Power usage: 10 kW
Energy usage: 35,000 kWh

50 % Energy Saving
(also 50 % less thermal input)

Saving potential of:
~ € 8,000 / year



Contact

See you soon!



watttron GmbH (Headquarter)

Dresdner Str. 172c

01705 Freital

Germany



watttron Inc.

150 North Michigan Avenue

Chicago, Illinois 60601

USA



www.watttron.com

info@watttron.com

+49 351 271808 00

