

# watttron

*The benchmark of efficiency*

cera2seal  
Flexible Sealing Head  
SRHF

Flexible Sealing Head

## Application Range and USPs

### Glass Cans

- Can have un-even sealing surface
- Current flexible solutions do not provide an appropriate temperature control or are wearing down very fast
- very wide format ranges for glass cans

Cosmetics/Pharmaceuticals



AI generated

cera2seal USPs

## USPs

### Mono-Material Processing



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

### Money Saving



More cost-effective materials can be processed, achieving the same or even higher machine output with mono-materials

### Energy Saving



Up to  
-50 %

watttron technology saves up to 50% during continuous operation and up to 90% during ramp-up.

means: lower thermal load in the machine and therefore lower thermal stress and deformation of the packaging material

### 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 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.

### Increase of productivity

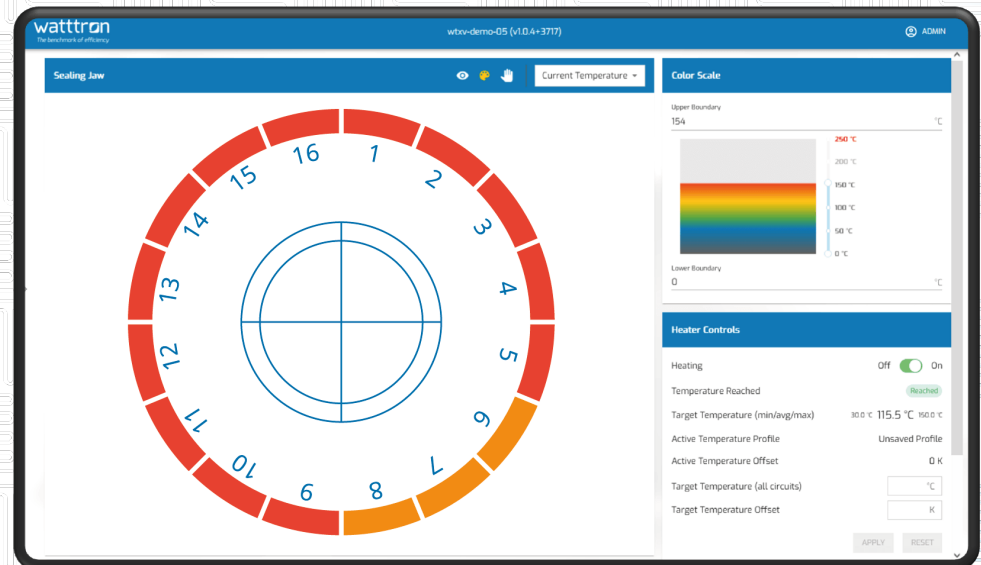
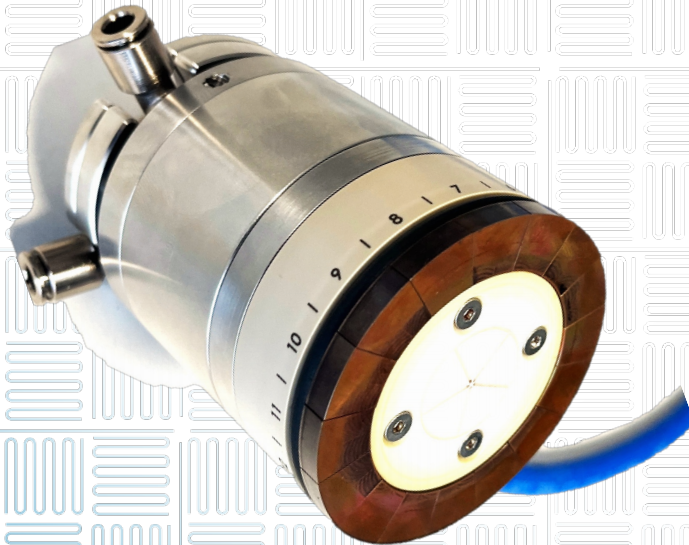


The reduction of incorrectly sealed parts increases the total quantity of good parts.

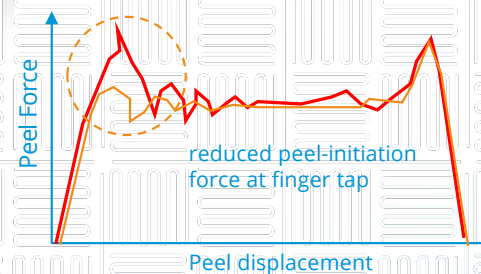
## Core USPs

# Full Temperature Control

- **Pixel-wise heating**
- The set temperature is kept very precisely ( $\pm 1^{\circ}\text{C}$ )
- Temperature profiling may assist easier to open the packaging by lowering seal temperature at the finger tab



Peel force peak reduced by lower temperature at finger tab



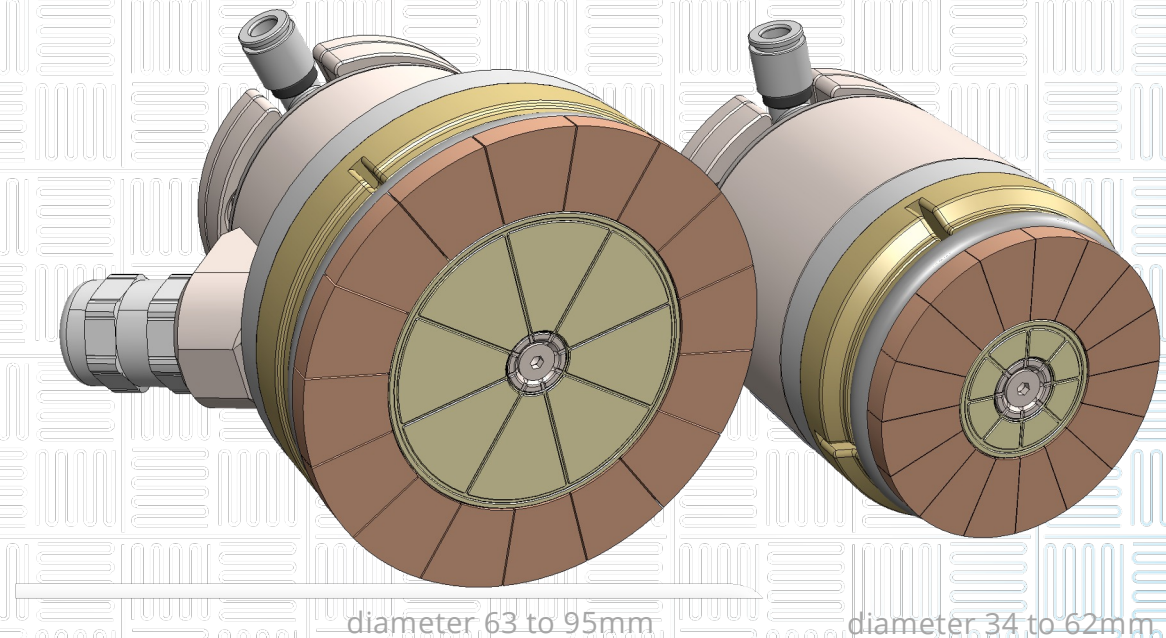


Technology explained

## Flexible Sealing Head SRHF

### Flexible Sealing Head

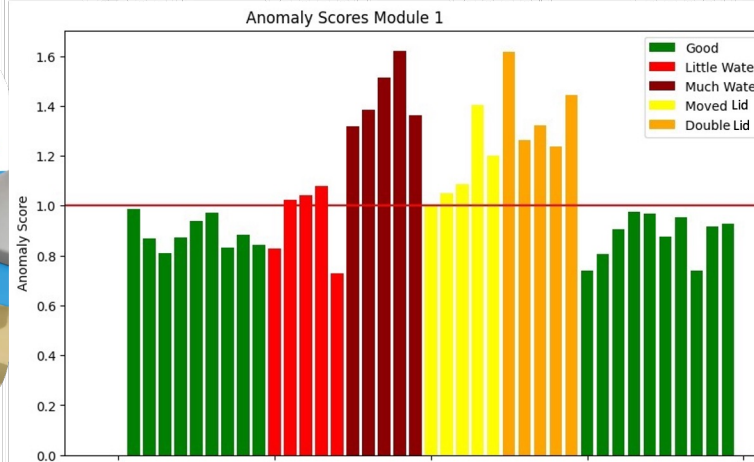
- 16 individual temperature controlled, spring loaded sealing area segments
- multi-format-Range:
  - from 34 to 62mm sealing diameter
  - from 63 to 95mm sealing diameter
- Angle-compensation
- Interchange-able long-lasting elastomer ring
- Vacuum functionality for lid holding and placement



USPs

# Temperature and Power Monitoring

- Lots of temperature data and power-usage (seal power) recorded as base for **Inline-Quality-Control**



## Principle:

- Measuring power/heat flow for every single heat pixel – approx. every 100ms
- Contamination (fluid) means more heat needed to hold temperature (enthalpy of vaporization)
- Displaced or doubled lids also affect the heat flow (more/less heat)

