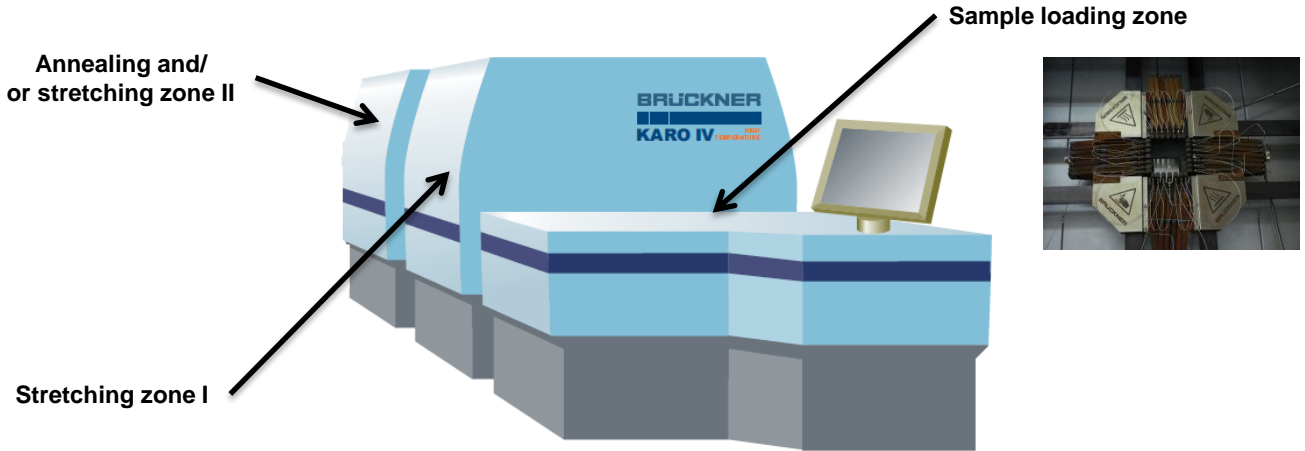


Stretching the limits...

## Description

### two oven design



## Features

- Easy and comfortable operation by advanced PC control panel
- Sample easy to load
- Symmetrical stretching
- Free programmable test sequences, parameters for each direction
- Pneumatic sample support
- Heating by air circulation, with independent and separated oven zones for accurate and close to production conditions
- State of the art measurement equipment for stretching forces, displacement, sample surface temperature, clip temperature & oven temperatures

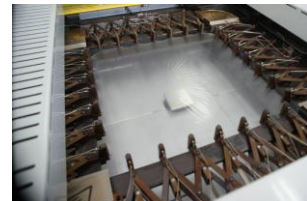
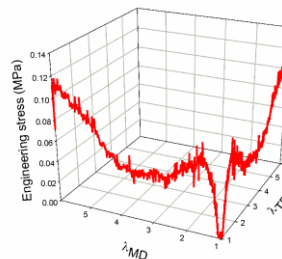
## Technical data

- **Max. sample thickness:** 2 mm
- **Min. sample dimensions:** 115 x 115 mm<sup>2</sup>
- **Max. stretching ratio:**  $\lambda = 7 \times 7$
- **Drawing modes:** Simultaneous and Sequential
- **Stretching speed:**
  - 1mm/s to 500mm/s (constant speed mode)
  - 0.1%/s to 100%/s (constant rate mode)
- **Stretching speed profiles :**
  - Constant speed
  - Constant rate
  - User-defined
- **Operating temperature:** up to 250°C
- **Stretching force per axis** 1500 N

## Benefits

- Compare a large number of different materials in a very short time
- Correlate process window and stretching ratios to determine the optimum film properties
- Transfer process conditions to pilot or industrial lines and get comparable film properties
- Test the film properties (i.e. co-efficient of friction) or mechanical properties in the laboratory scale

## Data example



Td = 120°C  
 $\epsilon = 100\%/sec$  (constant rate)

## Acknowledgments