

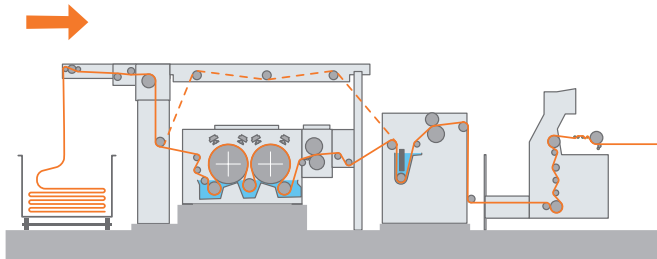


**BENNINGER**

Technical  
Textiles

# An optimal solution for every application

## Deoiling Range

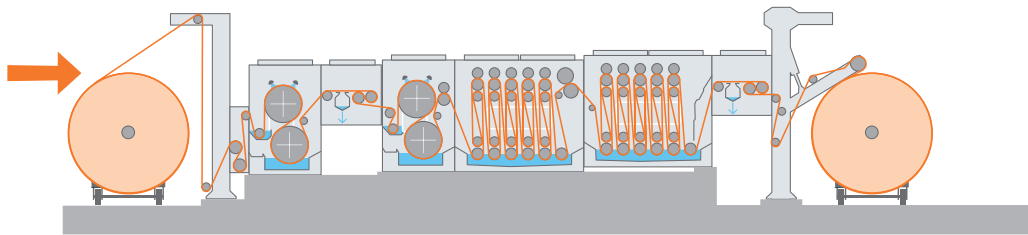


Pre-washing  
Preparation washing  
Relaxing of elastane



Reduced quantity of oil residuals  
Controlled shrinkage of synthetic fibers  
(separate or in line with dryer)

## Washing Range for Technical Filament Fabrics

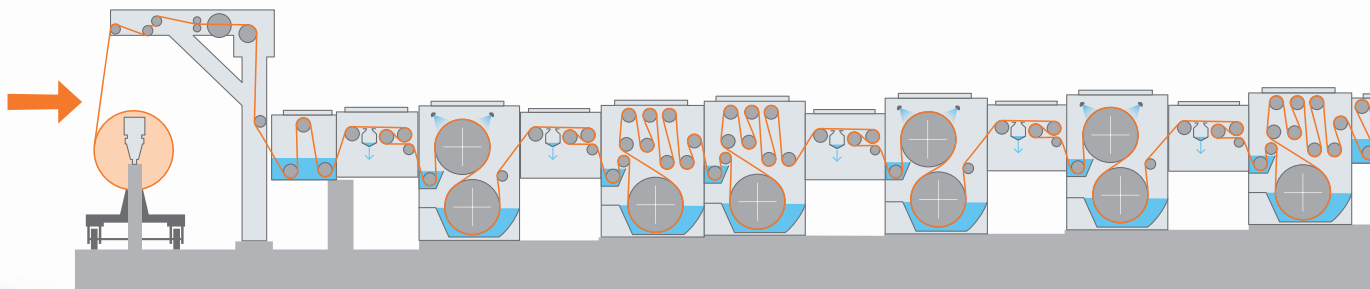


Continuous shrinking  
Desizing  
Washing



Shrinking at lowest fabric tension  
High washing effect

## Trikoflex Wide Width Washing Range for Technical Textiles

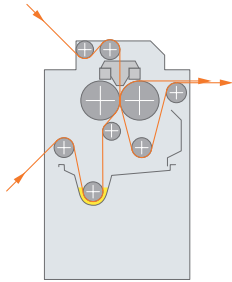


Multi purpose washing range



Flexible washing range for all  
technological demands of technical textiles

## Stand Alone Application Unit with S-Roll Padders

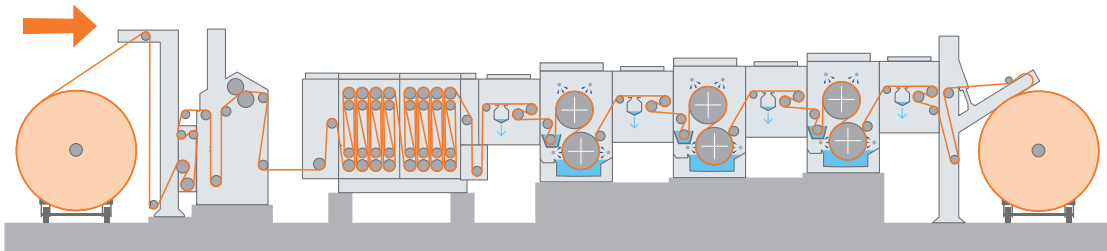


Combination of through and nip dyeing



Controlled pick-up  
High reproducibility  
Crease-free  
Even dyeing results

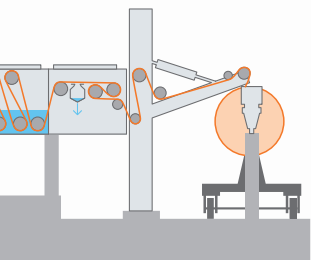
## Pad Steam Range



Dewighting  
and splitting



High degree and uniform dewighting  
Crease-free fabric run

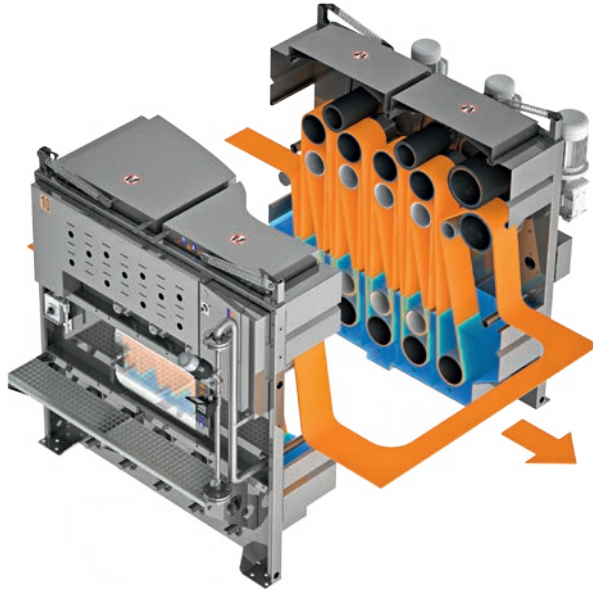


## FACTS

- Up to 5400 mm fabric width
- Crease-free
- Suitable for woven, knit and non-woven
- Controlled fabric shrinkage
- Excellent washing effect

## BEN-WASH

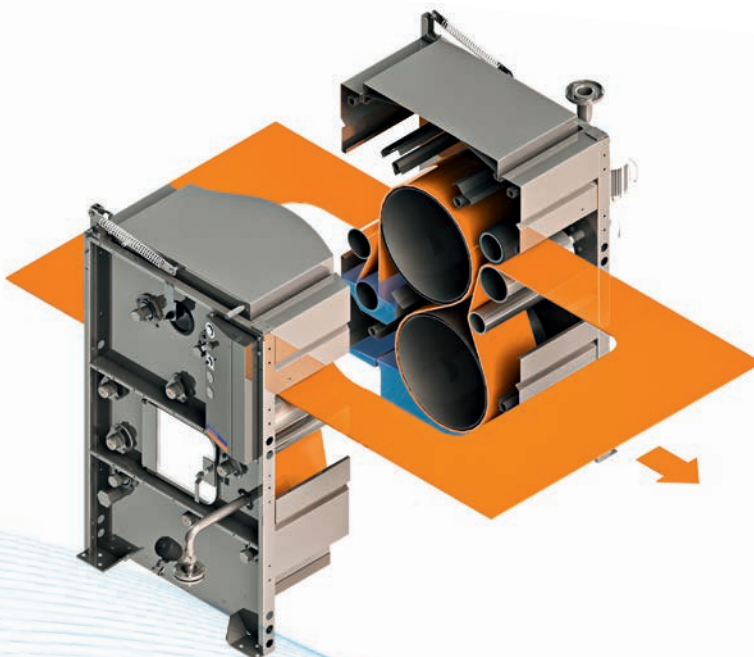
Extracta – High washing efficiency due to the multi-chamber system



## FACTS

- Washing in several small steps with liquor separation
- Calculable washing effect
- Low water and energy consumption
- Crease-free fabric run
- Steamtight
- Can be used for all high-performance washing tasks and also combined with waste water recycling or partial flow disposal
- Can be combined with all Benninger washing units

Trikoflex – Efficient washing for tension-sensitive textiles

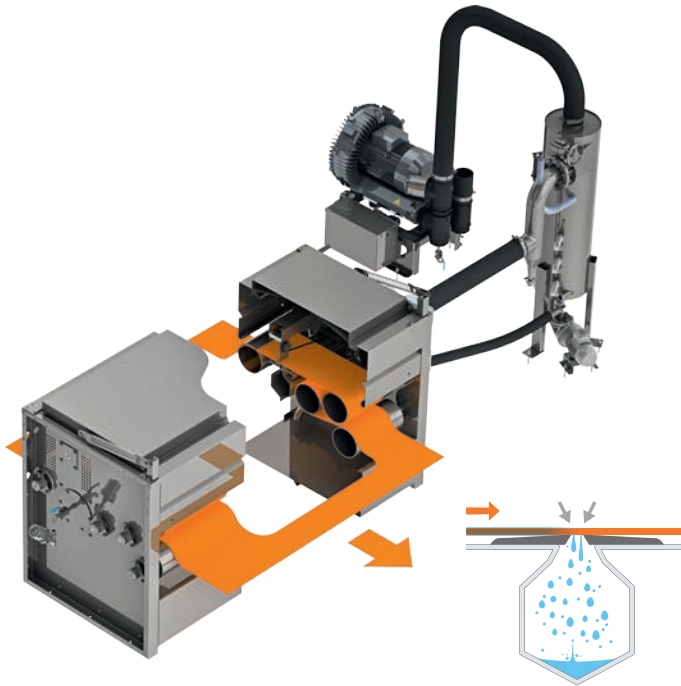


## FACTS

- Very high mechanical washing effect due to the leading washing drum with "front and back washing" technology.
- Very low, controlled fabric tension
- Very low water and steam consumption thanks to counter-flow washing technology
- Crease-free fabric transport, also with sensitive fabrics
- Controlled relaxation of synthetic and elastane fibres
- Specially developed overflow blade for flushing out oil and grease during the preparation wash
- Can be combined with all Benninger washing units

## APPLICATION SYSTEMS

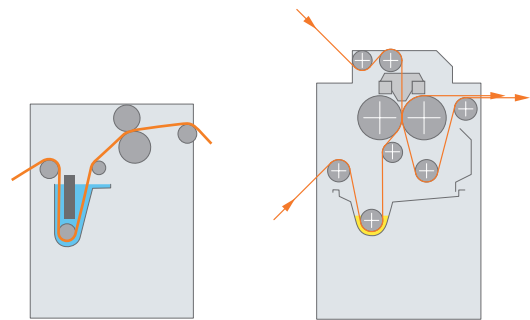
Hydrovac – Economical water extraction or chemical applications wet-in-wet



### FACTS

- High-efficiency vacuum unit with very low energy consumption
- High water extraction rates on synthetic fibers
- Controlled chemical add-on
- Very high degree of regularity over the width of the fabric due to air routing technology that is suitable for any width
- Automatic slot sealing
- Ideal for partial flow disposal
- Leading in vacuum technology for more than 40 years
- Can be combined with all Benninger washing units

KÜSTERS Finishing Padder – Pick-up control without compromise



For woven fabric and knitwear

For nip and through application



### FACTS

- High reproducibility thanks to S-Roll technology
- Lower waste water contamination due to low liquor content
- Even, linear liquor application due to two deflection-controlled rollers
- Very low energy consumption
- Minimum liquor content thanks to nip application
- Low investment costs

# WHAT ARE THE BENNINGER ADVANTAGES?

## Benninger – your partner for textile finishing!

### Technological competence

Benninger is distinguished by its comprehensive process know-how in both application consulting and project planning as well as by its close communication with customers throughout the entire life cycle of the installed plants. With its focus on engineering and a high standard of technical competence, Benninger is a recognized global pioneer in technology.

- High technology and application expertise
- Process consulting and project planning
- Sustainable resource management
- Carbon footprint
- Best available techniques (BAT)

### System solutions

As the leader in its line of technology, Benninger provides competent advice and supplies innovative and effective product solutions to the required quality standard by the agreed deadline for a fair market price, backed by reliable, first class customer service.

- Complete product range (woven and knit)
- High process reliability and lower operating costs
- Performance guarantee / Payback calculation
- Technology trends and product innovation
- Premium-quality OEM components



### After-sales service – full service

With Benninger you are always in good hands. Specialists are always at your disposal at the Benninger service centers and provide competent, prompt customer service. Regular maintenance by expert technicians minimizes unexpected downtimes and, as experienced instructors, they pass on their know-how. In addition, the specialized spare parts service team guarantees fast and reliable supply of original Benninger spare parts, rounding off the range of Benninger services.

- Customer-oriented service solutions
- Preventative maintenance (service contracts)
- Fast on-site service
- Competent help desk (software and hardware)
- Technical audits
- Customized modernization solutions
- Original Benninger spare parts (warranty)
- Customer training

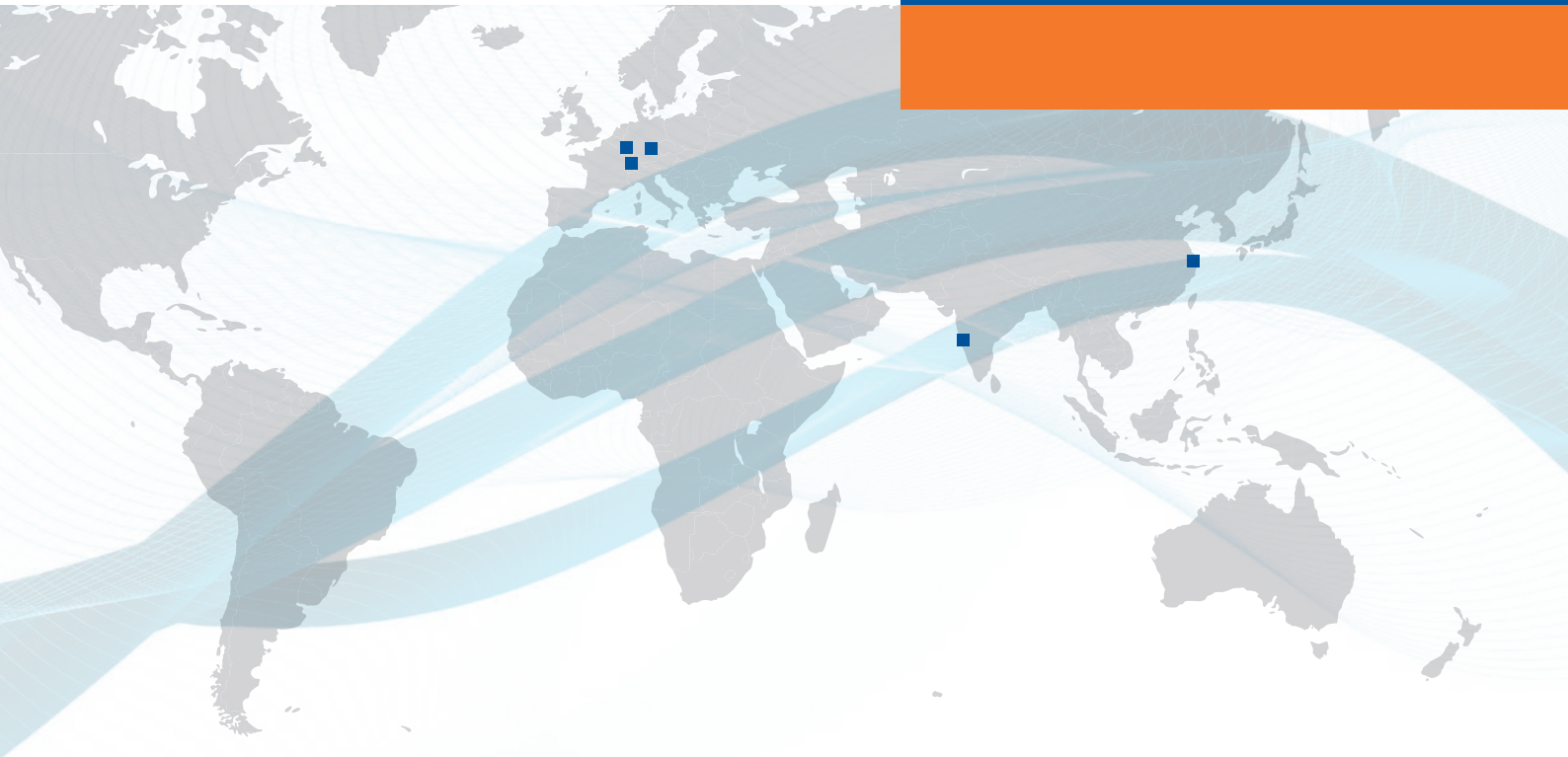
### Development cooperation and partnerships

Benninger is distinguished by its process and customer orientation, focus on the demands of the market and its customers, as well as continuous and systematic improvement. All this ensures customer confidence and satisfaction. Benninger – your partner for textile finishing!

- High specialist competence
- Consistent customer orientation
- Reliability and integrity
- Local representation in strategic markets
- Large number of reference installations
- Excellent reputation and long-standing customer relationships
- Goal-oriented development cooperation



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