



# ZJ

Modular Jacquard



Universal - Compact - Flexibility - Simplicity

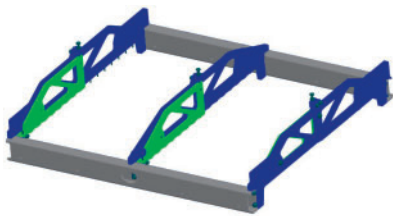
 **BONAS**  
ELECTRONIC JACQUARDS

# ZJ Mechanism

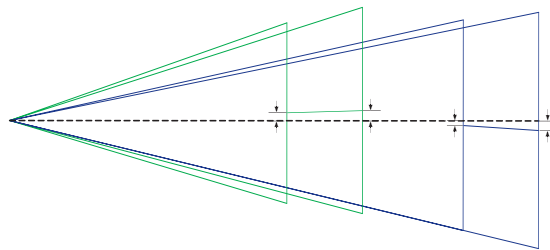
Simplified, high – performance drive mechanism designed for rapier-, airjet- and high speed applications from flat fabrics to terry.

## SPLIT ADJUSTABLE TERRY HECK

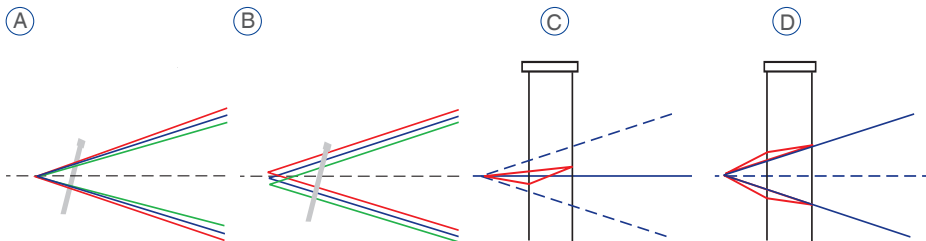
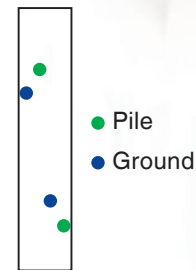
- Separation of ground and pile



Split shed



Reed dent



## EASY MAINTENANCE, EASY ACCESSIBILITY

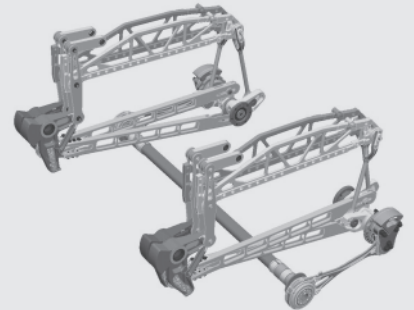
- One easy to clean filter per module
- Low machine improves accessibility
- Lightweight covers for ease of handling

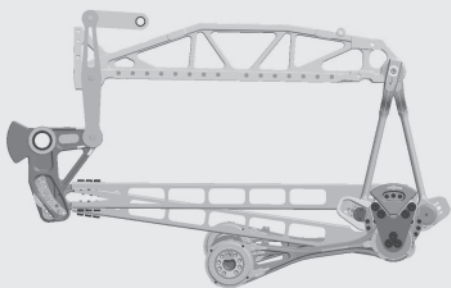
## EASY SHED ADJUSTMENT OFFERING MAXIMUM FLEXIBILITY

- Adjustments available:
  - (A) - Shed size
  - (B) - Level height
  - (C) - Warp separation at crossing
  - (D) - Warp separation, front to back
- **All settings can be made without tilting the Jacquard machine.**
- Shed size selectable by choice of pin positions, reducing downtime
- >140 possible shed settings for all applications

## DRIVE MECHANISM

- Simplified, compact design whilst retaining the strength of the Bonas and Van de Wiele jacquards
- Central driven
- Direct drive for high speed accuracy
- Completely balanced, low forces on cranks





- Low friction and low vibration movement extremely suitable for high speed weaving
- Low centre of gravity resulting in low vibration on jacquard and gantry
- Membrane coupling isolates gearbox motion from the machine
- Build-in structure



New pleated filter, resulting in less cleaning.

**BONAS** **ZJ** for every application



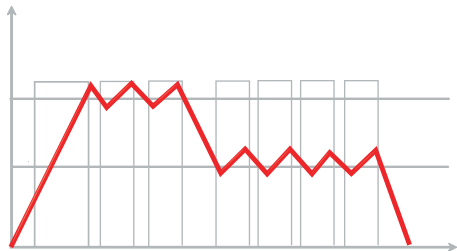
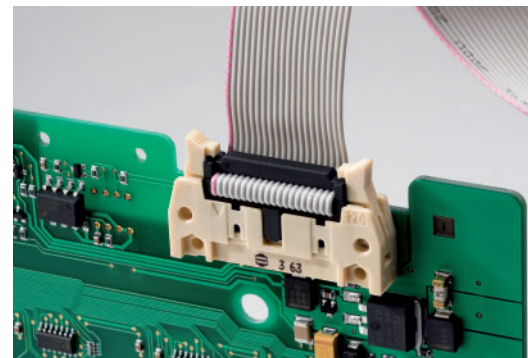


# ZJ Selection

Robust electronic selection offering complete control.

## SELECTION 100% ELECTRONIC

- Magnetical and electronical optimised single coil solenoid based on the unique Bonas patent
- Compatible throughout the whole range
- Minimal current is required for perfect selection
- Only two moving selection parts
- Easy individual part exchange
- Practical and easy exchange of self-locating solenoid boards without special tools
- No cold start problem



## CURRENT DRIVE

- Current drive provides consistent solenoid selection for all conditions such as speed, temperature and voltage
- Wide voltage range input accepted
- Integrated power supply
- Low power consumption saving direct costs

## QUICK CONNECT

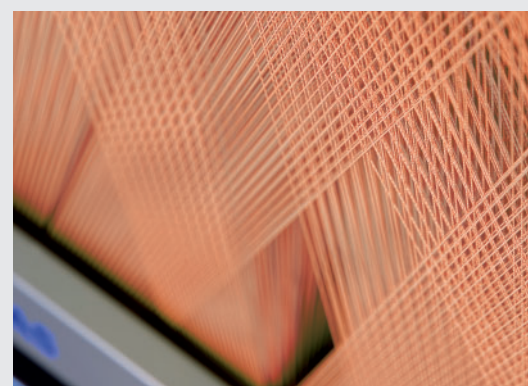
- Easy in use, compact harness connector
- Reduced harness changing time

## HOOKS

- Lightweight nickel plated flexible steel hooks

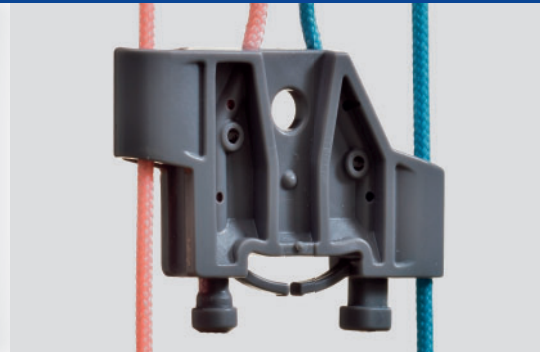
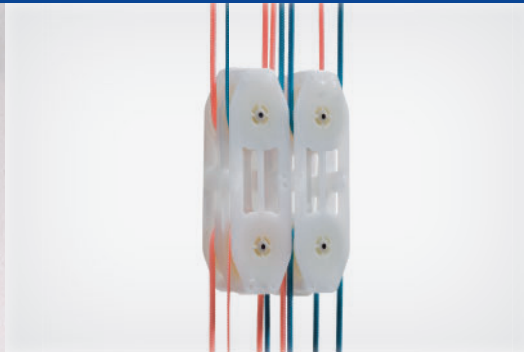
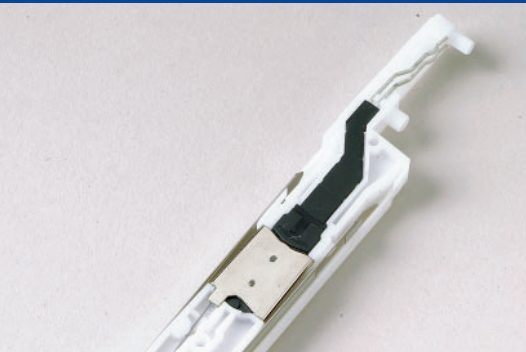
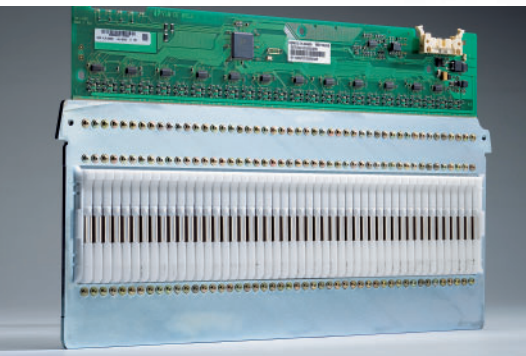
## HARNESS

- Bonas delivers harnesses of the highest quality customised for all applications; i.e. from high speed to heavy duty
- Quick connect is standard



## FULL DIAGNOSTICS

- On board intelligence with microprocessor monitoring current drive, data transfer, temperature, selection, etc ...
- Elimination of jacquard weaving errors
- Real-time monitoring
- On pick control
- Error indication displayed on large controller screen and solenoid board
- Flat cable



## PULLEY

- Compact lightweight pulley with large diameter wheel and high-tech self-lubricating material for long lifetime

## BELTS

- High tenacity belts with strong wear resist coating
- Antistatic coating
- Longer lifetime and less harness force needed
- Colour coded to aid installation and maintenance

## ANCHOR CLICK SYSTEM

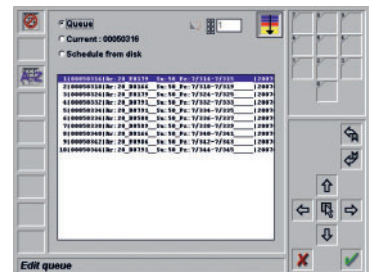
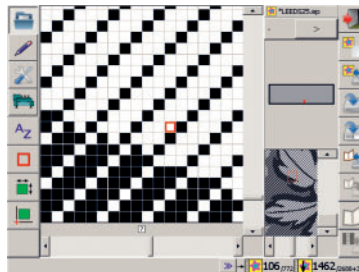
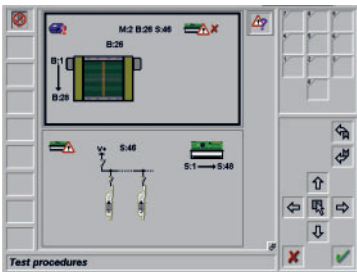
- Designed for optimal cord guidance
- Single part exchange
- Easy access





# ZJ Software & network

Bonas controller and software offer solutions for every weaving application.



## CONTROLLER

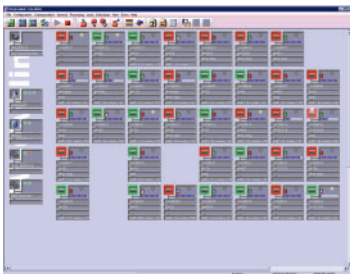
- Practical and efficient interface between user and jacquard
- Large colour touch screen (10.4")
- Clear display of information with icons and easy navigation between functions
- Monitoring production data
- Patterns can be loaded on hard disk  $\geq 40$  GB
- Pattern transfer
  - floppy drive
  - USB
  - network
- Ethernet communication

## EP EDIT

- Integrated feature for all controllers
- Reading, storing, on-line editing and other design modifications on the controller with user-friendly multilingual software with on-screen help
- Multiple views of the design can be viewed simultaneously
- Warp and weft colours are displayed enabling both sides of the fabric to be seen
- Increased productivity by reducing downtime
- System can be used on PC

## PC WEAVE

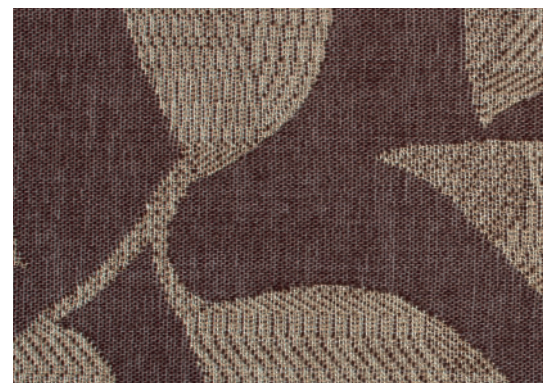
- Must be used in conjunction with PC edit externally
- Apply weaves to colours and convert the design to PC weave format
- Creation of single or double layer fabrics
- Re-scaling in both weft and warp direction



## WE@VELINK: PRODUCTION MANAGEMENT SOLUTIONS FOR WEAVERS

- Production data is stored in a database and can be accessed through intranet
- Control the weaving machines from a central office – continuously monitoring loom status
- Creating weave schedules and queues
- Generates production orders from a commercial order book
- Report manager: calculation of yarn consumption, calculation of efficiencies
- Post-processing of designs according to loom type and quality – visualisation of schedules, designs, ...
- Planning
- Interface to external systems
- ...

**BONAS** State of the art electronics





# ZJ Applications

Innovative,  
Creative,  
High tech,  
Endless opportunities,  
Multi purpose.

Think ahead! Create the future!

## MATTRESS TICKING

2080 hooks

35 e/cm



## SILK APPLICATION

2688 hooks

84 e/cm



## APPAREL

2650 hooks

60 e/cm



## CURTAINS

2576 hooks

45 e/cm





## TERRY

2488 hooks

24 e/cm

ZJ



## FURNISHING FABRIC

2688 hooks

70 e/cm

ZJ

## AUTOMOTIVE

2400 hooks

66 e/cm

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## LINING

1344 hooks

48 e/cm

ZJ

Indications are for reference use only.

▶ **BONAS** ZJ flat fabrics to terry



# ZJ Series

Advanced modular system  
provides maximum flexibility  
throughout the whole range.

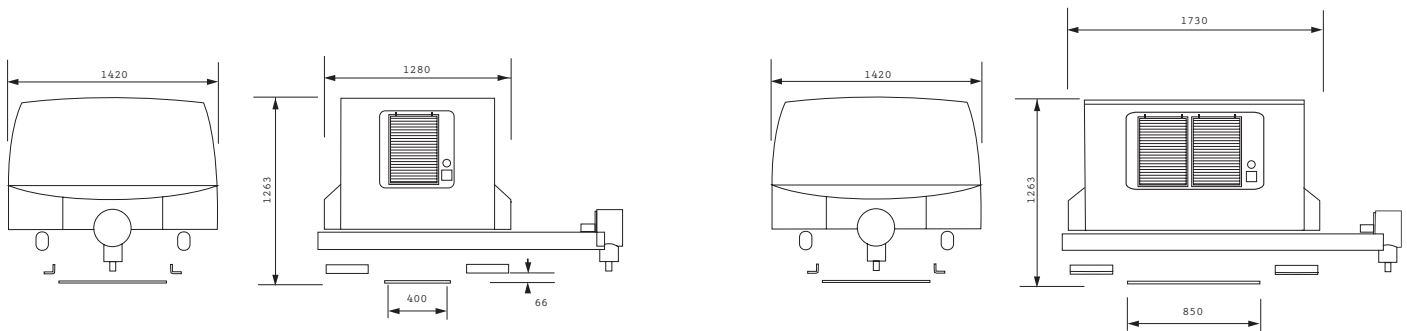


## ZJ



**RAPIER APPLICATIONS**





ZJ1/ZJS1	
Depth	n° of hooks
16	768
20	960
24	1152
28	1344

ZJ2/ZJS2	
Depth	n° of hooks
16	1536
20	1920
24	2304
28	2688



**ZJ**



#### AIRJET AND HIGH SPEED APPLICATIONS

- High tech lasered knife
- Antiflutter to stabilize hook movement
- Optimized lightweight moving parts
- Optimum balanced resulting in low vibration and inertia for the highest speeds

**BONAS ZJ** Small, smaller, smallest



◀ **VAN DE WIELE**  
CARPET AND VELVET WEAVING MACHINES



◀ **BONAS**  
ELECTRONIC JACQUARDS



◀ **TITAN**  
FINISHING MACHINERY



# innovation through creativity

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v a n d e w i e l e g r o u p . c o m

**iro**  
FEEDERS



**ROJ**  
FEEDERS/CONTROLLERS



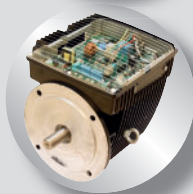
**iro**  
KNITTING TECHNOLOGY



**PROTECHNA**  
QUALITY ASSURANCE FOR TEXTILES



**Aros electronics AB**  
DRIVES



We share our knowledge and expertise  
in the broad area of textile technology.

Due to research and development,  
in a close relationship with our customers,  
the Van de Wiele group offers  
a comprehensive range of equipment  
designed to meet the ever growing demands  
of the textile industry such as the knitting  
industry, pile and flat weaving, weaving and  
knitting accessories, finishing equipment,  
frame weaving, control systems, ...

◀ **BONAS**  
MEMBER OF THE VAN DE WIELE GROUP

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