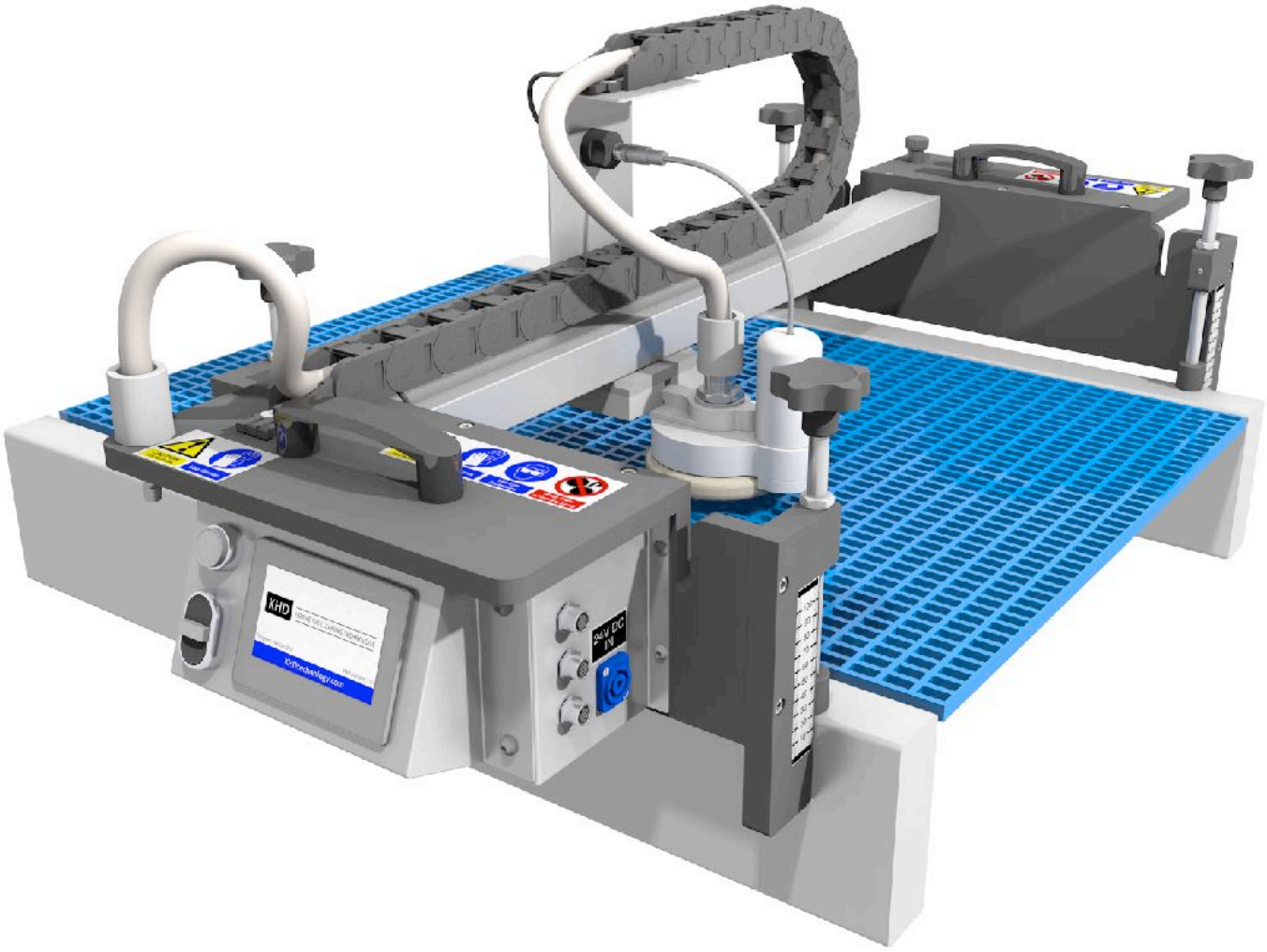
Jet System 4 for Mesh Conveyor Belts



Intelligent Mesh Belt Cleaning

Debris removal and mould reduction in dry bakery environments. Powerful steam jets clean deep into the structure of mesh belts without resorting to chemicals.

The Jet System 4 is portable and quickly adjusts to a wide range of sizes of conveyor for maximum utilisation in a factory.

A touch screen gives quick access to simple controls, stored programs and advanced features for highly productive cleaning.

SPINNERS for JET SYSTEM 4 - Optional Accessory

Turbo-Charged Mesh Cleaning

A specialised accessory for the Jet System to further speed up cleaning. Quickly interchangeable with any Jet System manifold. Running on 24VDC power provided by the Jet System KHD Spinners sweep around 1,000 jets per minute over the surface of conveyors. Coupled with the Jet System's sweeping action these Spinners turbo-charge the cleaning of conveyors.

The Spinner's lightweight technical plastic discs remain cool and easy to clean. The smooth rounded rotating profile avoids the safety hazards that other rotating spray arms present.

The 180mm model has a large impact area for easier to remove debris, and the 110mm model provides a concentrated steam force for more stubborn debris.

Technical Specifications - JET SYSTEM 4 Cleaning Head

	JET SYSTEM 4
Power supply (cleaning head)	24 VDC - Available via output socket on the boiler
Conveyor widths (structure)	Virtually any size from 300mm upwards
Cleaning characteristics	Cumulative cleaning action. Manifold with multiple steam jets move across the conveyor surface using a hygienic linear motor. Built-in safety using predetermined 'slip under load' motor design.
Touchscreen with multi-function access:	Simple start and advanced feature selection Auto-calculation of optimum set up to give total coverage Steam on/off control and external stop control Sectors and scrub function Save programs for instant recall (20 programs) Timers and repeat option Configurable park position
Recessed belt	Standard up to 70mm (2.75"). Other recess depths available
Variable speed	0 - 1500mm per sec (approx) in 20 steps
Weight	19.5kg for 1150mm model
Manifolds	Straight (standard), Angled (option), Spinners (option) Quick release for rapid interchangeability.
Steam hose	Silicone insulated stainless steel reinforced PTFE High temperature Hansen quick release collars
Compatible steam boilers (minimum specification)	Doman KHD18 or KHD36 18kw - 36kW or larger Other steam supply can be used but will not have the same features as the KHD spec boilers
Boiler power supply	Depends on model and country Europe 32A - 63A three-phase (5 x wire)
Water usage	Doman KHD18 - 26 L/hr (dry steam setting) Doman KHD36 - 52 L/hr (dry steam setting)
Steam characteristics	9-10 Bar operating pressure

* KHD Belt Cleaning Specification for Doman boilers preserves the general cleaning functionality of the boiler, but adds additional performance and functionality.

Benefits in more detail

Improves line productivity (availability)

- Improved belt condition with fewer breakdowns
- Quicker more frequent cleaning cycles
- Opportunity for extended production
- Dry cleaning action leaves belts ready for use
- Reduces risk of shutdown due to quality and sanitation issues
- Eliminate cross-contamination, allowing faster product changeover

Saves on maintenance and labor costs

- Cleaning in place
- Portable and easy to set-up on multiple belts
- Device works tirelessly without supervision
- Significant reduction in labor to clean belts
- Visually clean belts gives greater confidence in cleaning progress
- Technology designed for unskilled staff

Frees-up maintenance staff

- Belt removal by qualified technicians less frequent
- Time-slots for belt removal are at a premium and lower priority compared to production demands

Frees-up sanitation staff

- Staff deployable to other sanitation duties
- Manual belt cleaning normally requires multiple staff at the same time, not required for automated cleaning

Improves sterility – kills mould spores and microorganisms

- Proven in mould reduction programs
- Steam kills microorganisms
- Does not require chemicals
- Environmentally attractive technology

Maintains or increases product shelf life

- A powerful tool for maintaining environmental quality especially on high risk side of production
- Targeted cleaning of contact surfaces eliminates transfer of mould spores to product

Extends life of conveyor belts

- Less stress on the belt
- Reduces energy for running belts
- Cleaner belts last longer; clean and trouble-free belts not on the radar for expensive replacement
- Belts benefit from regular cleaning for proper traction, especially spirals

Improved customer credibility

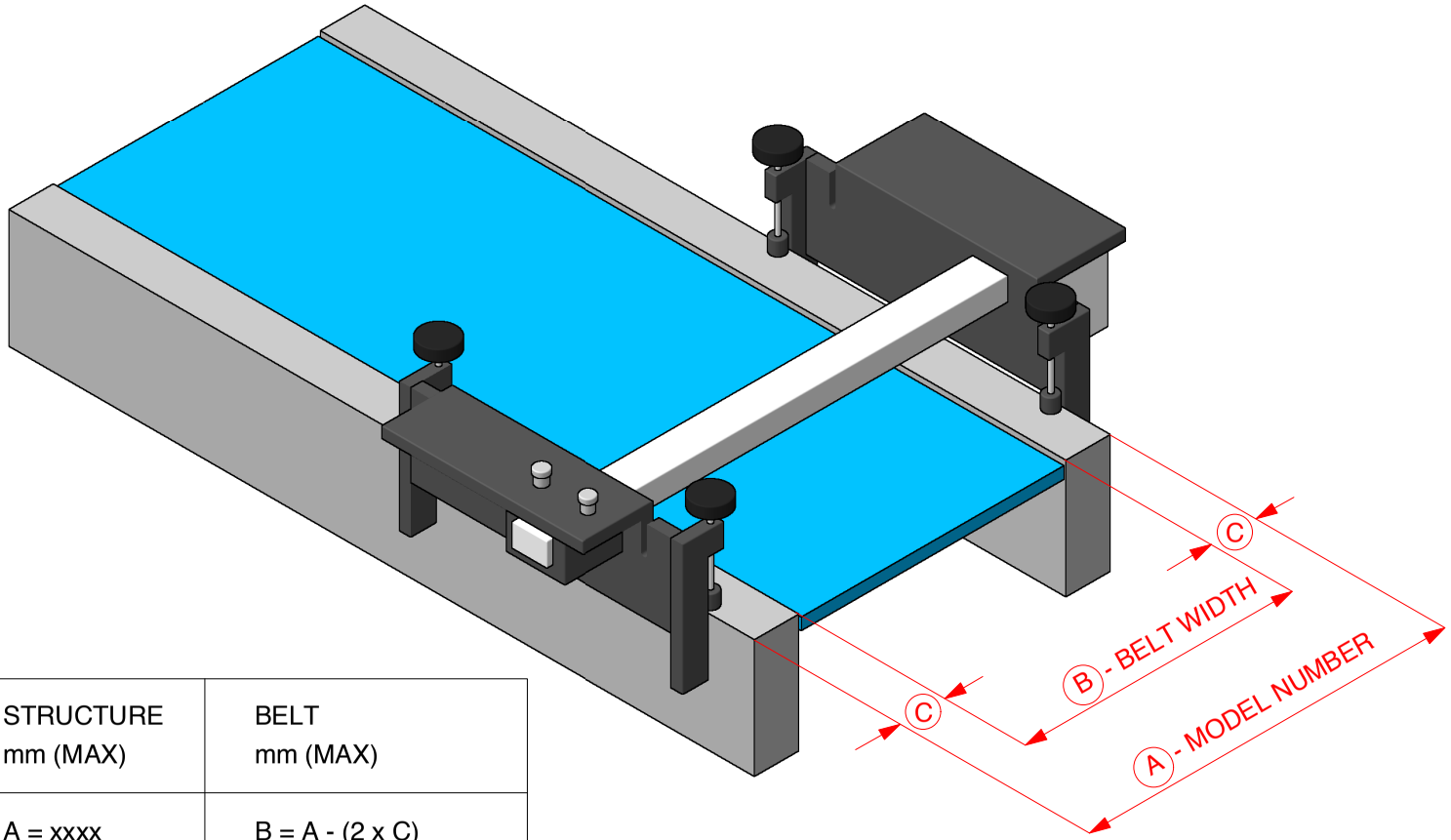
- Visually cleaner belts
- Visible use of new technology that directly benefits product quality
- Higher quality with fewer product returns
- Demonstrating commitment to improved quality, especially in difficult to clean dry environments

Design

- Robust high quality components and construction
- Easy to use, quick to set up
- Portable and adjustable to fit multiple belts
- Designed as a tool for consistent application of HACCP principles
- EHDG approach to design characteristics (European Hygienic Design Group)

Jet System

(various features removed for clarity)



MODEL	STRUCTURE mm (MAX)	BELT mm (MAX)
JET4 - xxxx	A = xxxx	B = A - (2 x C)
Max Sweep (centreline of jets) = A - 48mm If the belt is recessed, actual sweep = B - 20mm		

Applications		Suitability	Comments
Belt Type	Plastic Mesh - Fine	✔ Excellent	The Jet System was specifically designed to clean in this difficult environment.
	Plastic Mesh - Open	✔ Good-Excellent	The more open the structure the less opportunity there is for steam to impact on and bounce around the belt structure to dislodge debris, so steam appears to be wasted. Note that metal belts will see condensate.
	Metal Mesh	✔ Good-Excellent	
	Wire (ladder style)	~ Fair - Good	
	Modular Closed Flat-Top	✘ Use other models	Consider KHD Brush and Brushless belt cleaners.
	Continuous Flat	✘ Use other models	
Belt Speed	Slow	✔ Excellent	The greater the contact time for steam the better and faster the debris removal. The type of debris has a significant impact on clean-ability. Lightly adhered debris and dust type debris can be removed at higher belt speeds. As a rule the transverse speed of the Jet System does not need to be faster than the speed of the belt.
	Medium	✔ Good-Excellent	
	Fast	~ Fair	
Environment	Dry	✔ Excellent	The Jet System was specifically designed to clean in this difficult environment
	Damp	~ Fair - Good	As a general rule, if the cleaning regime is a factory wide foam clean and hose down there is limited potential. Using the system in this environment will not eliminate need for wet cleaning with chemical.
	Wet	~ Fair	
Markets	Bread	✔ Excellent	The Jet System was specifically designed to clean in this difficult environment.
	Bakeries	✔ Good-Excellent	
	Dry Goods	✔ Fair-Good	
	Confectionery	Unknown	As a general rule, if the cleaning regime is a factory wide foam clean and hose down there is limited potential. Using the system in this environment will not eliminate need for wet cleaning with chemical.
	Fruit and Vegetables	Unknown	
	Pharmaceutical	Unknown	
	Raw Meats and Fish	✘ Very Limited	

CONTACT US

KHD products are sold and serviced directly in the UK.
For other countries we operate through distributors, or direct if there is no local representation. Please call or send an email.

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