

### **Automotive references**

Detailing lines, car & people movers, external car wash, water test conveyors, inspection conveyors, skid conveyors

#### **Reference List**



- Audi Brussels, carwash application
- BMW Tiexi, China, people mover conveyors
- BMW Sindelfing, Germany, inspection conveyor
- BMW Nedcar, NL, Skid accumulation conveyor, Paintshop inspection conveyors, Wax conveyor, Water test conveyor
- BMW Spartanburg (SC), Skid handling conveyors
- Chrysler Warren (IL), USA, final inspection conveyor
- · Citroën Vigo, Spain, SKID handling paint shop
- Daimler Sindelfingen, Carwash application
- Daimler, Port Elizabeth, South Africa, water test
- FIAT, Italy, Logistical centre conveyors, dual lane
- Ford Kansas City, Tire & Rim conveyor
- Ford Valencia, Spain, Doortrim conveyor, Watertest & inspection conveyor
- GAC Toyota, China, Inspection conveyor
- Great Wall Automotive, finish line & inspection conveyor
- Hyundai Montgomery (AL), USA, people mover conveyors assembly area
- Hyundai Montgomery (AL), USA, Tire handling con
- · Hyundai Anapolis (Brasil), Inspection conveyor
- ICO / Mazda, Zeebrugge, Belgium, Madza terminal, Inspection conveyor
- Mr. Wash, Düsseldorf, Essen, Dortmund and Stuttgart, all in Germany, Detailing &Extrerior Wash
- Nissan Sunderland, UK. Bumper carrier overhead conveyor. Bumper assembly.
- Nissan Smyrna, USA, Final inspection conveyor
- Renault Tanger, Maroc, Skid handling in paint shop area
- Seat Barcelona, Spain. SKID handling in paint shop

- Skoda Aurangabad, India. Water test application
- Skoda Mlada Boleslav, People Mover Assembly Octavia
- Skoda Mlada Boleslav, Inspection conveyors Fabia
- Tesla Motors, Palo Alto, USA, Suspension subassembly conveyors
- · Volkswagen Emden, Rework conveyor
- Volkswagen Emden, People mover conveyors
- Volkswagen Hannover, Finish conveyors
- Volkswagen Taubaté, Brasil, Skid Handling application
- Volkswagen Taubaté, Brasil, People Mover application
- Volkswagen Hannover, carwash application
- Volkswagen Hannover, Water test application
- Volkswagen Hannover, Finish conveyors
- Volkswagen Pune, India, Final Inspection conveyors
- Volkswagen Pune India, Water Test conveyor
- Volkswagen Navarra, Spain, Skid Handling
- Volkswagen Navarra, Spain, ZP8 conveyor
- Volkswagen Changsha, China, BA7 & ZP8 conveyors (under construction)
- Volkswagen Ningbo, China, Skid handling conveyors
- Volvo Gent, Belgium, Skid Handling
- Volvo Gent, Belgium, Inspection conveyor
- Volvo Torslanda, Inspection conveyor

Note: This list is not complete. Several applications have been installed of which we do not have specific installation details



## **Application Press Shop**



#### Schuler Pressen, Germany

#### BMW Dingolfing:

 Modulflex torsional stiff disc coupling, diameter: 970mm

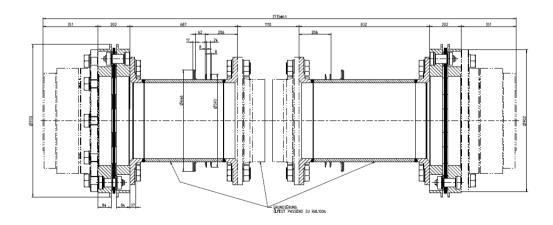


Nominal Torque: 400.000 Nm

Maximum Torque: 700.000 Nm

Max. axial misalignment: ± 10mm

• Max. radial misalignment: ± 37,4mm







Example picture

## **Application Press Shop**



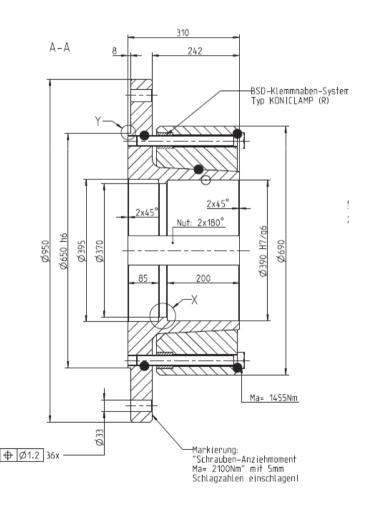
#### Schuler Pressen, Germany

- Servo pressen:
  - Koniclamp Hubs, diameter: 950mm
- Coupling parameters:
  - Max alternating torque: 580.000 Nm
  - Maximum torque: 820.000 Nm
  - Maximum speed: 200mm <sup>-1</sup>
  - Moment of inhertia: 69,8 Kgm<sup>2</sup>



Example picture





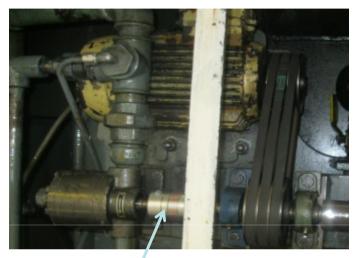
## **Application Press Shop**



#### **FIAT-Tofas Turkey**



- Falk Wrapflex 5R10 elastomeric coupling
  - Press hydraulic pump,
  - Previous : KTR Rotex GS24 difficult mounting problem,
  - New one: Elastomeric coupling, easy and faster installation, replace in place and reduced maintenance work,
  - Work efficiently,
  - November 2014



Previous ; Rotex



**New one: Wrapflex** 



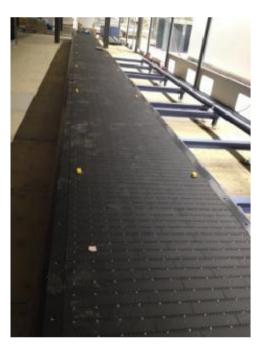
## **Application People Mover**

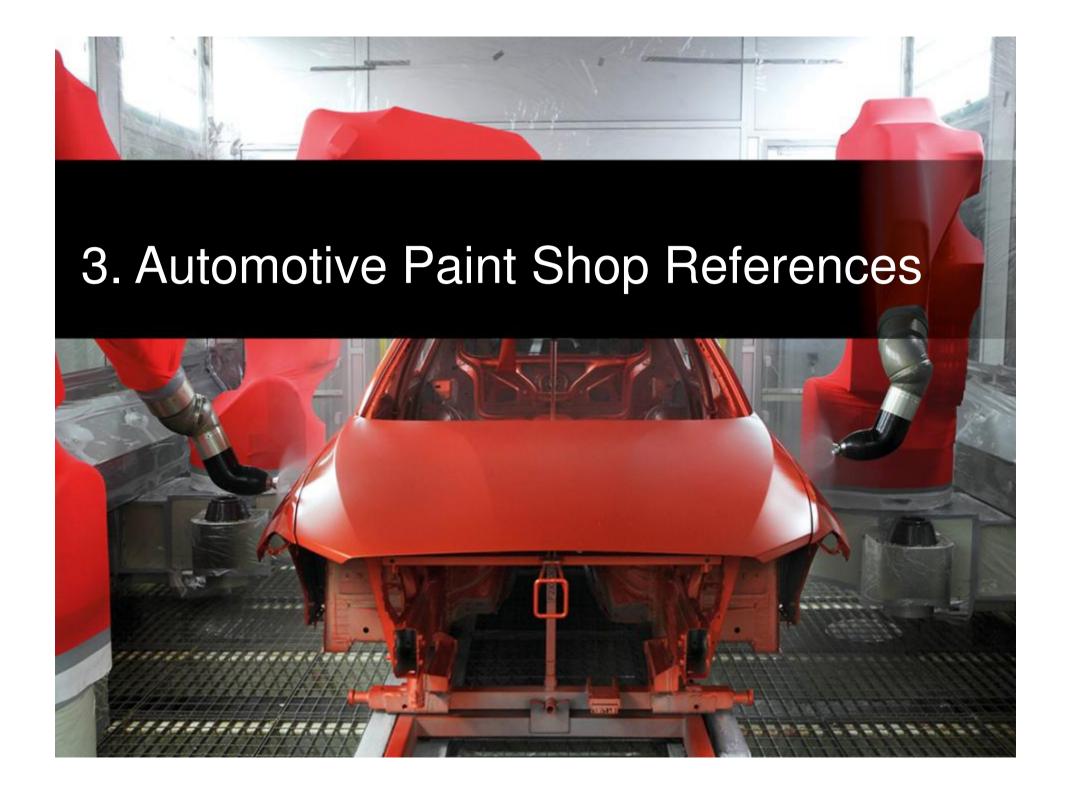


#### Volkswagen Bratislava, Slovak

- FR-PA6999H4-K36 Hybrid chain:
  - People movers in Body shop polish line
  - 4 x 7mtr, 8 x 14 mtr, 4 x 21 mtr, 4 x 35 mtr long conveyor, 36-inch wide
  - Skid & Car body in Body shop polish line
  - 2 x 42mtr, 2 x 49 mtr, long conveyor, 48inch wide
  - FR-PA6999H4 equipped, meeting DIN4102-B1
  - ESD specifications <10<sup>3</sup> Ohm/sq
  - Atex 92 zone 22 approved
- Start-up: July 2014







## **Application Paint shop**



# Ford Otosan Inonu Truck Plant Turkey



- Falk Wrapflex 10R10 elastomeric coupling
  - Water circulation pump,
  - KTR Rotex
     — mounting problem,
  - Elastomeric coupling, easy and faster installation, reduced maintenance work, replace in place
  - Works without problem
  - December 2014



# Application Report Skid Handling REXNORD



#### Volkswagen Navarra, Pamplona, **Spain**

- BSM3125-K4
  - 12 mtr long dry running dual lane 4inch (101mm) wide SKID conveyor.
  - · in conveying area painting department
  - Replacing Reinforced Rubber Belt due to drive and timing issues
  - Located in Navarra Spain
  - Equipped with BSM3125-4 chains in wear resistant plain acetal with plastic pins
  - Running in MCC3000 profiles
  - Start-up July 2009, 2<sup>nd</sup> phase executed end of 2009, 3rd executed end of 2010.





# Application Report Skid Handling REXNO



#### Volkswagen Ningbo, China

- BSM3125-K4
  - 10 mtr long dry running dual lane 4inch (101mm) wide SKID conveyor.
  - in conveying area painting department
  - Located in Ningbo factory, China
  - OEM: Suteng Manufaturing company
  - Equipped with BSM3125-4 chains in wear resistant plain acetal with plastic pins
  - Running in MCC3000 profiles
  - Start-up expected February 2013



# Application Report Skid Handling REXING



#### Renault Tanger Méditerranée, Morocco

- HCAS3125-K4
  - Various (K4 101mm) wide SKID conveyors up to 15 mtr long dry running dual lane 4-inch.
  - Longitudinal and cross conveyor applications in Paint Shop area
  - Newly installed project in 2010 by Dürr Paint and Assembly systems.
  - Located in Tanger, Maroc
  - Equipped with HCAS3125-4 chains in wear resistant Anti-Static acetal (10<sup>11</sup>-10<sup>13</sup>) with plastic pins



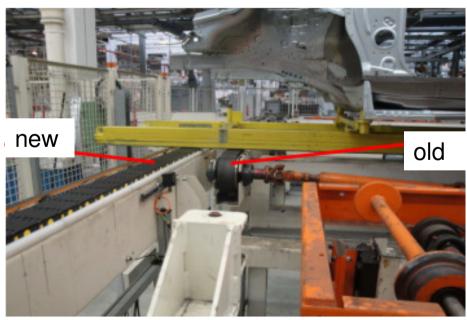
## Application Report Skid Handling REXNORD



#### Volkswagen Taubaté, São Paulo, Brasil

- BSM3125-K4 SKID chain
  - Three (3) 8 mtr long dry running dual lane 4-inch (101mm) wide longitudinal SKID conveyors.
  - in conveying area painting department
  - Replacing Reinforced Rubber Belt due to drive and timing issues
  - Equipped with BSM3125-4 chains in wear resistant plain acetal with plastic pins
  - Running in MCC3000 profiles
  - Start-up August 2010





# Application Report Skid Handling REXNORD



#### Citroen Vigo, Spain

- BSM3125-K4
  - Cross conveyor in paint shop (K4 -101mm) wide.
  - Handling SKIDs after the paint area
  - Conveyor 10 mtr long dry running dual lane 4-inch.
  - Installation date July 2011
  - Standard BSM acetal chain with Polyester pins
  - Located in Vigo, Spain

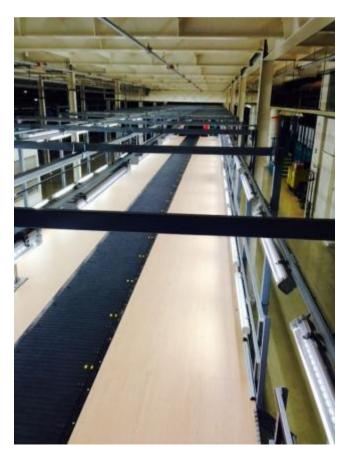


# Application Report Skid inspection Rex NORD

#### VDL Nedcar (BMW), Netherlands

- HCAS3125-K44
  - Inspection conveyor for car bodies on SKIDs in the paint area.
  - 2 conveyors of 40 mtr long
  - Using SKID guiding links and RubberTop link to secure the skid
  - Installation date August 2013, start up July 2014.





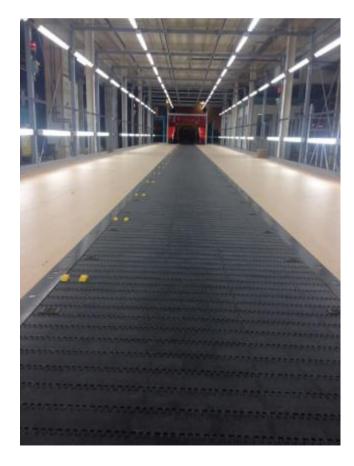
## **Application Report Skid Polish**



#### VDL Nedcar (BMW), Netherlands

- F60 polish line project
  - Polish conveyor for car bodies on SKIDs in the paint area.
  - Skid weight up to 600 Kg
- HCAS3125-K44 Spec
  - Conveyor length 35 mtr (115ft)
  - Chain width: 1118mm
  - Using SKID guiding links and RubberTop link to secure the skid
- Installation date August 2014





## **Application Report Paint Shop**



#### VDL Nedcar (BMW), Netherlands

- BSM3125-K3,2 & K4
  - Cross conveyors in paint shop.
     100mm (K4) and 80mm (K3,2) wide.
  - Handling SKIDs between the paint shop and assembly line.
  - Replacing 100mm and 80mm contitech rubber reinforced belt
  - Conveyors 12 mtr long dry running
  - Standard BSM acetal chain with Polyester pins
  - Start up date: June 2014
  - Located in Born, Netherlands





New conveyor set-up



Old conveyor set-up

# Application Report Skid Handling REXNORD



#### Seat Barcelona, Spain

- BSM3125-K4
  - Cross conveyor in paint shop (K4 -101mm) wide.
  - Handling SKIDs after the paint area
  - Conveyor 10 mtr long dry running dual lane 4-inch.
  - Installation date December 2011, second phase installed March 2012
  - Standard BSM acetal chain with Polyester pins
  - Located in Barcelona, Spain



## **Application Report Paint Shop**



#### **BMW** world wide

- Rex Carbon 12 B2 GL:
  - BMW world wide uses Rex Carbon chain as best practice in Body shop and paint shop Skid conveyors.
  - Rex Carbon chain offers maintenance free carbon bushing.
  - Locations
    - Various global plant use Rex Carbon roller chain:
      - BMW Germany (various plants)
      - BMW Spartanburg (USA)
      - BMW Tiexi (China)
      - BMW Oxford (UK)





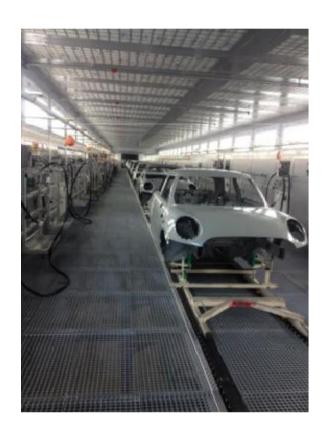
## **Application Report Paint Shop**



#### **VDL Nedcar (BMW), Netherlands**

- BSM3125-K4
  - Longitudinal conveyors in wax cabin (K4 - 101mm) wide. One side skid guiding.
  - Handling SKIDs during the waxing and undercoat process of the car bodies.
  - Conveyor 60 mtr long dry running dual lane 4-inch, using just a main drive (no brake drive)
  - Installation date December 2013,
  - Standard BSM acetal chain with Polyester pins
  - Located in Born, Netherlands





## **Application Report Skid Polish**



#### VDL Nedcar (BMW), Netherlands

- F60 polish line project
  - Polish conveyor for car bodies on SKIDs in the paint area.
  - Skid weight up to 600 Kg
- HCAS3125-K44 Spec
  - Conveyor length 35 mtr (115ft)
  - Chain width: 1118mm
  - Using SKID guiding links and RubberTop link to secure the skid
- Installation date August 2014





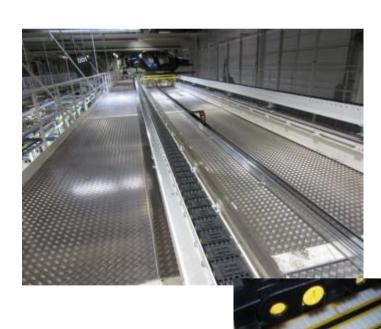
## **Application Report paint shop**



#### Volvo Gent, Belgium

- BSM3125RT-K4 SKID chain
  - 42 mtr long cross buffer conveyor for SKID handling.
  - Positioned in the final assembly area
  - Equipped with BSM3125RT-K4
  - RubberTop chain in wear resistant plain acetal with plastic pins.
  - RubberTop execution is securing the position of the SKIDs in stop-start operation.
  - RubberTop surface on each link.
  - Running on Denirug® low friction profiles.
  - Start-up: August 2011









#### Volvo Gent, Belgium, PT5

- BSM3125RT-K4 SKID chain
  - 80 mtr long dual lane conveyor for SKID handling.
  - PT 5 (Pre Trim 5) position
  - Equipped with BSM3125RT-K4 (two tracks) & BSM3125-K4.
  - RubberTop execution is securing the position of the SKIDs in stop-start operation.
  - Running on Denirug® low friction profiles.
  - Start-up: August 2014





# Application Report Skid Handling REXNORD



#### Seat Barcelona, Spain

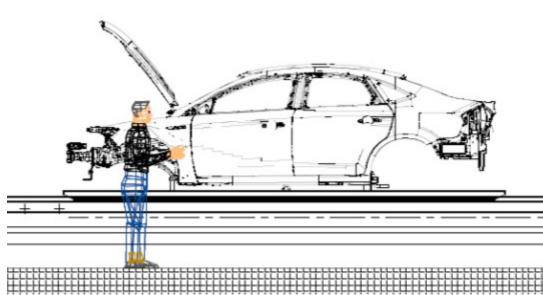
- BSM3125-K4
  - Longitudinal conveyors in assembly area (K4 - 101mm) wide.
  - Handling SKIDs to and from the warehouse.
  - Conveyor 7 mtr long dry running dual lane 4-inch.
  - Installation date December 2012,
  - Standard BSM acetal chain with Polyester pins
  - Located in Barcelona, Spain





#### Ford Valencia, Spain

- HCAS6995-K21 People Mover line:
  - 20 mtr long people mover
  - New doorline "A"+"B" & trim extension
  - HCAS antistatic material
  - In assembly pit
  - No brake drive being used
- Start-up: June 2014







#### Volkswagen Taubaté, Brasil

- HCAS6999-K39 People mover line:
  - 40 mtr people mover conveyor
  - 2 conveyors besides car conveyors
  - Standard plastic pins
  - Speed up to 2,2 m/min
  - Running on High Density plastic wearstrips
  - In final inspection area
- Final inspection conveyor
  - Conveying workers only
- Start-up: March 2013





### Skoda Mlada Boleslav, Czech Republic

- Project name: "Montage Octavia A0 hall M1"
  - Chain HCAS 6995-K126 PBT pin
  - Sprockets: NS 5996 T14 S90
- Information about conveyor:
  - People mover, final assembly of Fabia
  - Length of conveyor: 65 meters (210 ft)
  - Width: 3200 mm
  - Material antistatic HCAS
  - 1 tact = 6.5 meters (21 ft)
  - Load per tact = cca 500 kg
  - Speed: 8 m/min
  - Temperature: 20-30 °C
- Start-up: August 2013





## **Application Report Parts**



- Hyundai Montgomery (AL), USA
  - People mover conveyors in assembly line:
    - 113,5 mtr conveyor K90 (2,3 mtr)
    - Conveying workers only
    - Equipped with 6990 Hybrid chain
    - 21mtr, 27 mtr, 35mtr and 39 mtr support conveyors using HCAS6999
    - K120 and K78 wide
    - Conveying workers only
    - Start up date: January 2013







# Volkswagen Emden, Emden, Germany

- FRESD1005-KM3230 chain:
  - 2 x 30 mtr (100 ft) long conveyors,3230mm wide (nominal)
  - 1-inch, 12,7mm thick MatTop chain
  - FRESD1005 equipped, meeting DIN4201-B1
  - ESD specifications <10<sup>6</sup> Ohm/sq
- Information about conveyor:
  - Assembly people mover conveyor
  - Conveyor for Volkswagen Passat and Passat Hybrid
- Start-up: August 2014





## **Suspension Assembly**



#### Tesla Motors, Palo Alto, CA. USA

- BSM6999H4-27
  - Suspension sub-assembly conveyors
  - Low profile floor mounted
  - 1 Conveyor length 125 ft
  - 2 Conveyors length 75 ft
  - 6999 infeed and discharge conveyors length 15 ft
  - Robot loaded and unloaded
  - Application requirements Low noise and zero pulsation
- Start-up July 2014





#### **Application People Mover**



# GAC Toyota Plant II, Guangzhou, China

- HCAS6999-K114.
  - 18mtr long, 2.9mtr wide People Mover
  - Antistatic chain material
  - AS specifications 10<sup>11</sup>— 10<sup>13</sup> Ohm/s.
- Application information:
  - 6.0 mtr takt length
  - 400 Kg takt (max 4 workers)
- Start-up Mar 2015



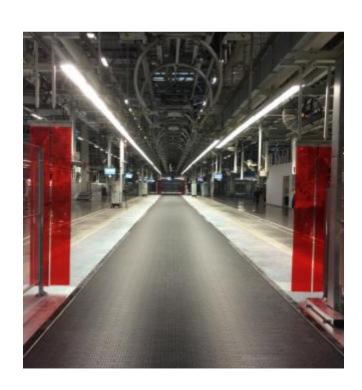




#### BMW Tiexi (Shengyang), China

- Project name: People mover conveyors B51
  - Chain BSM6995H4-K126
  - Sprockets: KU6990H-14T
- Information about conveyor:
  - People mover, final assembly area
  - Length of conveyor: 61m (195ft)
  - Width: 3200 mm
  - Material antistatic BSM
  - Surface resitivity chain: <10<sup>3</sup> Ohm/sq
  - 1 tact = 6,5 meters (21 ft)
  - Load per tact = cca 500 kg
  - Wax residue can be present on the chain
  - Speed: 8 m/min
  - Temperature: 20-30 ℃
- Start-up: February 2015



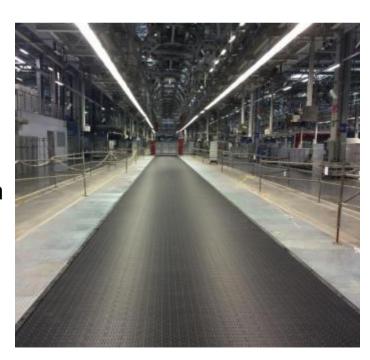




#### BMW Tiexi (Shengyang), China

- Project name: People mover conveyors B30 / B32-33
  - Chain BSM6999H4-K126
  - Sprockets: KU6990H-14T
- Information about conveyor:
  - People mover, final assembly area
  - Length of conveyor: 90m (295ft)
  - Width: 3200 mm
  - Material antistatic BSM
  - Surface resitivity chain: <10<sup>3</sup> Ohm/sq
  - 1 tact = 6,5 meters (21 ft)
  - Load per tact = cca 500 kg
  - Wax residue can be present on the chain
  - Speed: 8 m/min
  - Temperature: 20-30 ℃
- Start-up: February 2015



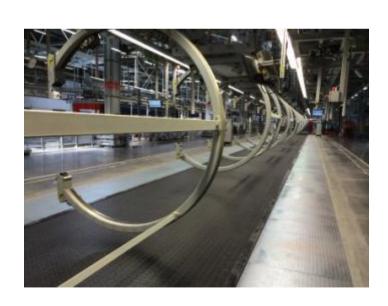


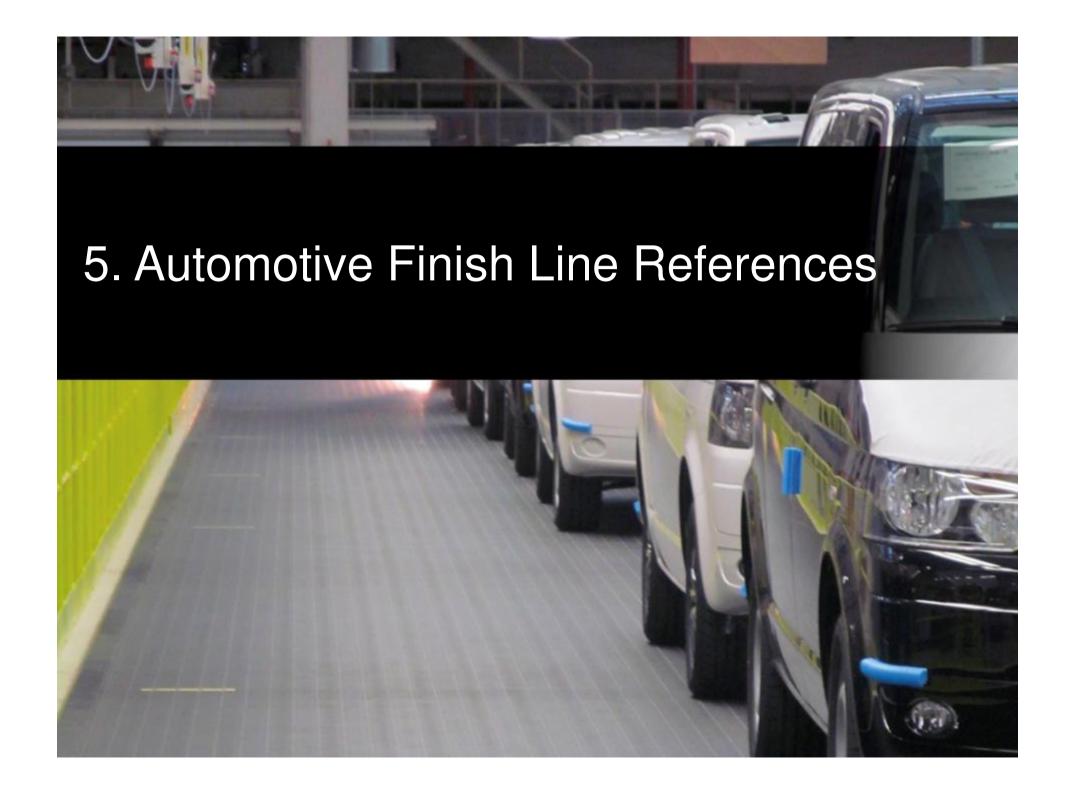


#### BMW Tiexi (Shengyang), China

- Project name: People mover conveyors B53-54 / B55 / B57-59
  - Chain BSM6995H4-K126
  - Sprockets: KU6990H-14T
- Information about conveyor:
  - People mover, final assembly area
  - Length of conveyor: 160m (525ft)
  - Width: 3200 mm
  - Material antistatic BSM
  - Surface resitivity chain: <10<sup>3</sup> Ohm/sq
  - 1 tact = 6,5 meters (21 ft)
  - Load per tact = cca 500 kg
  - Speed: 8 m/min
  - Temperature: 20-30 ℃
- Start-up: February 2015









#### Volkswagen Hannover, Germany

- FR-PA6995-K18 chain:
  - BA5 position towards the finish line
  - 70mtr dual lane conveyors, 6-8 mtr long
  - FR-PA6995 equipped, meaning DIN4102-B1
- Application information
  - For Transport
  - Max car wight 3000Kg
  - Takt length 6.5 mtr
- Start-up: Mai 2015







## Volkswagen Nutzfahrzeugen, Hannover, Germany

- FRESD6995-K174:
  - 2x65 mtr conveyors (210 ft)
  - 4500mm wide
  - FRESD material, meeting DIN4102-B1
     & ESD specifications
  - Standard plastic pins
  - Speed up to 2,2 m/min
  - For Volkswagen Amarok and T5 Transporter
- In finish line area (BA8)
  - Conveying workers and vehicles only
  - Followed by Water Test equipped with Bexnord 3120-series
- Start-up: April 2012







# Volkswagen Nutzfahrzeugen, Hannover, Germany

- FRESD6995-K174:
  - 2x40 conveyors
  - 4500mm wide
  - FRESD material, meeting DIN4102-B1
     & ESD specifications
  - Standard plastic pins
  - Speed up to 2,2 m/min
  - For Volkswagen Amarok and T5 Transporter
- In finish line area (BA7b)
  - Conveying workers and vehicles only
  - Followed by BA8 and Water Test
- Start-up: April 2012







### Volkswagen Nutzfahrzeugen, Hannover, Germany

- FR6995H4-K174 & K222 Hybrid chain:
  - 2x40mtr long conveyors,4500mm wide
  - 4x80mtr long conveyors,5700mm wide
  - 2x43 mtr long dual lane conveyor, 2x
     500mm wide
  - FR6995H4 equipped, meeting DIN4102-B1
  - ESD specifications <10<sup>3</sup> Ohm/sq
  - For Volkswagen Amarok and T5 Transporter
- Start-up: July 2013







#### Volkswagen Changsha, China

- FR-PA6999H4-K138 Hybrid chain:
  - BA7 position in the assembly line
  - 1x20mtr long conveyor, 2 mtr wide
  - 1x60mtr long conveyors, 3.5 mtr wide
  - 1x70mtr long conveyors, 3.5 mtr wide
  - Transfer conveyor dual lane using FRESD1029-KM510 chain
  - FR-PA6999H4 equipped, meeting DIN4102-B1
  - ESD specifications <10<sup>3</sup> Ohm/sq
- Application information
  - For VW Polo / Golf / Audi A3
  - Max car weight 2000Kg
  - Takt length 5.2 mtr
- Start-up: July 2014





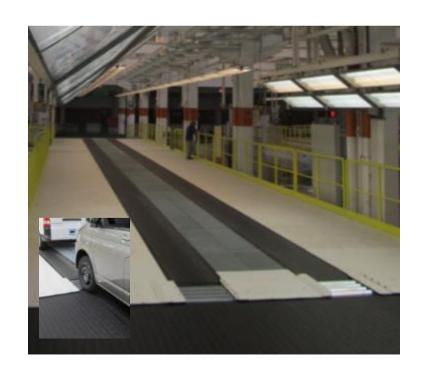
## **Application Report Fluid Fill**



# Volkswagen Nutzfahrzeugen, Hannover, Germany

- FR6995H4-K21 Hybrid chain:
  - 2x40mtr long conveyors, dual lane,
     533mm wide
  - Grid with spillage collection between the tracks
  - FR6995H4 equipped, meeting DIN4102-B1
  - ESD specifications <10<sup>3</sup> Ohm/sq
  - Conveyor lanes connected using Rexnord Thomas XTSR style disc coupling
  - For Volkswagen Amarok and T5 Transporter
- Start-up: July 2013





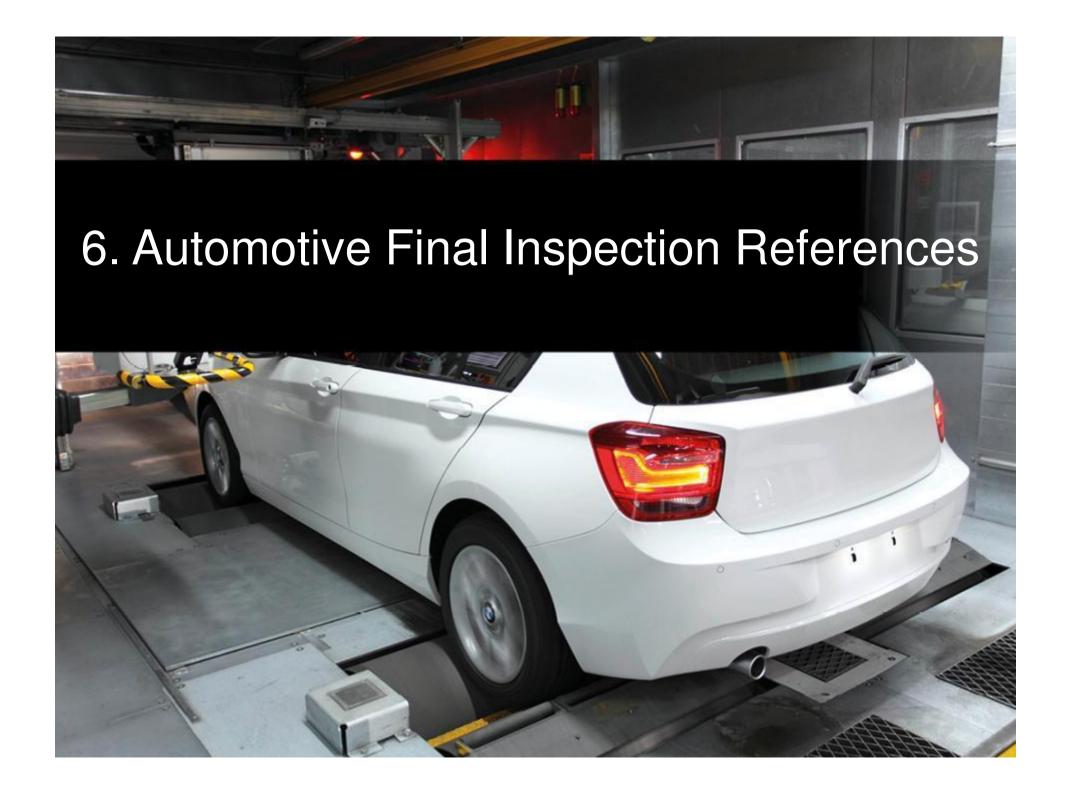


# Volkswagen Osnabrück, Germany

- FR-PA6999H4-K84 Hybrid chain:
  - BA7 position in the assembly line
  - 1x37mtr long conveyors, 2,1 mtr wide
  - First conveyor after EHB
  - FR-PA6999H4 equipped, meeting DIN4102-B1
  - ESD specifications <10<sup>3</sup> Ohm/sq
  - Equipped with pushers and side plates
- Application information
  - For Porsche Cayman
  - Max car weight 3000Kg
  - Takt length 6.2 mtr
- Start-up: Mai 2015







## **Application Report Water Test**



#### Volkswagen (VWI), Pune, India

- BYSM6999-K16 Water test line:
  - 24 mtr water test conveyor
  - 1 tracks, 16-inch wide
  - Holes in the sprocket pockets
  - Standard plastic pins
  - Speed up to 2,2 m/min
  - Running on High Density plastic wearstrips
  - In final inspection area
- Final inspection conveyor
  - Conveying vehicles only
- Start-up: June 2011





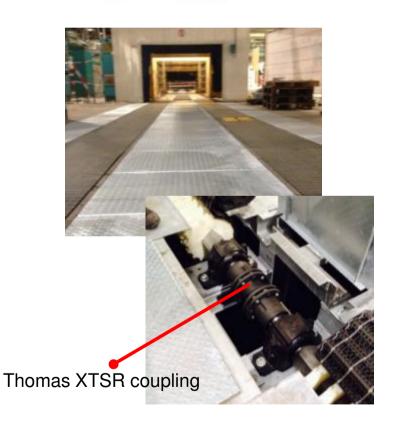
## **Application Report Water test**



#### **VDL Nedcar (BMW), Netherlands**

- BSM6995H4-K21
  - Dual lane water test conveyor.
  - Using Rexnord 6990 Hybrid chain, K21 with machined pushers.
  - Conveyor 60 mtr long dual lane
  - Running on MCC3000 plastic wear plates
  - Using Rexnord XTSR coupling to connect the individual drive shafts
  - Installation date December 2013
  - Located in Born, Netherlands





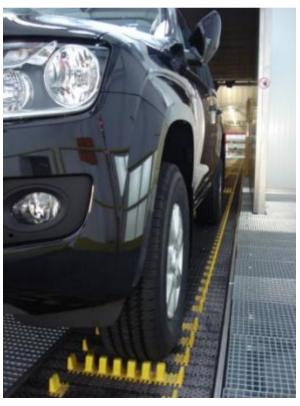
## **Application Report Water Test**



## Volkswagen Nutzfahrzeugen, Hannover Germany

- BYSM3129-K24 Water test line:
  - 2 similar 60 mtr long water test installations
  - 1 tracks, 24-inch wide
  - Equipped with molded pushers and sideguards
  - Standard plastic pins
  - Speed up to 2,2 m/min
  - Running on High Density plastic MCC3000 wearstrips
  - In final inspection area
  - Final inspection conveyor
    - Conveying Transporter T5 and Volkswagen Amarok
  - Start-up: April 2012





## **Application Report Water Test**



#### Skoda Aurangabad, India

- BYSM3129-K16 Water test line:
  - 30 mtr long water test installations
  - 1 tracks, 16-inch wide
  - Equipped with T2 molded pushers
  - Standard plastic pins
  - Running on High Density plastic MCC3000 wearstrips
  - In final inspection area
- Final inspection conveyor
  - Conveying vehicles only
- Start-up: exp. December 2011



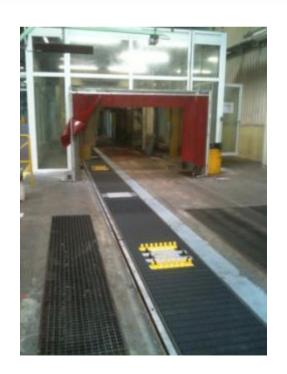




#### Ford Valencia, Spain

- BYSM3129-K24 Water test line:
  - 75 mtr long water test installations
  - 1 tracks, 24-inch wide
  - Equipped with T2 molded pushers
  - Standard plastic pins
  - TC tire position material
- HCAS3129-K24 Final inspection line:
  - 25mtr transfer conveyor &
     70 mtr inspection conveyor
  - 1 tracks, 24-inch wide
  - HCAS chain material
  - Equipped with T2 molded pushers
- Start-up: August 2012





## **Application Report Water Test**



## Mercedes Benz South Africa – East London

- BYSM3125-K12 Water test line:
  - 40 mtr long water test installations
  - 1 tracks, 12-inch wide
  - Equipped with molded pushers
  - Standard plastic pins
  - Speed up to 2,2 m/min
  - In final inspection area
- Final inspection conveyor
  - Mercedes C-Class production
- Start-up: March 2012







#### Volkswagen (VWI), Pune, India

- BYSM6999-K156 Inspection line:
  - 24 mtr people mover conveyor
  - 3962mm wide
  - Standard plastic pins
  - Speed up to 5 m/min
  - In final inspection area
- Final inspection conveyor
  - Conveying vehicles and workers
- Installation date: December 2010







Maruti Suzuki Car Company (Gurgaon, India)

#### HCAS6999-K27 Inspection line:

- 20 mtr people mover conveyor
- 685 mm wide (27-inch)
- Standard plastic pins
- Speed up to 4 m/min
- Sidewalk conveyor
  - Conveying workers only
  - In final inspection area
  - 4 conveyors in total (2 inspection lines)
- Start-Up
  - September 2011



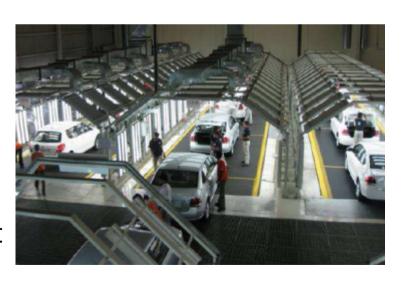




#### Volkswagen (VWI), Pune, India

- BYSM6999-K156 Inspection line:
  - 24 mtr people mover conveyor
  - 3962mm wide
  - Standard plastic pins
  - Speed up to 5 m/min
  - In final inspection area
- Final inspection conveyor
  - Conveying vehicles and workers
  - CP 8 position
- Conveyor 2 and 3 Dec 2011
  - Replacing UNI CPB due to sprocket wear, pins getting out and chain pulsation.







## Volkswagen Pamplona (Navarra) Spain

- HCAS6999-K156 Inspection line:
  - 45 mtr conveyor
  - HCAS Anti-Static material
  - Standard plastic pins
  - 3962mm wide
  - Speed up to 5 m/min
- In final inspection area
  - Conveying vehicles and workers
  - Equipped with T1 automotive pushers for vehicle positioning
  - With perforated area for fumes discharge
- Installation date: December 2010



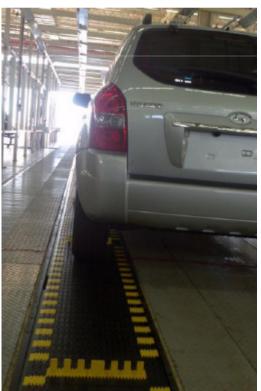




#### Hyundai Anapolis, Brasil

- HCAS6999-K21 Inspection conveyor:
  - 37 mtr single lane car conveyor
  - Equipped with molded pushers
  - Standard plastic pins
  - Speed up to 5 m/min
  - Running on High Density plastic wearstrips
  - In final inspection area
- Final inspection conveyor
- Start-up: July 2013





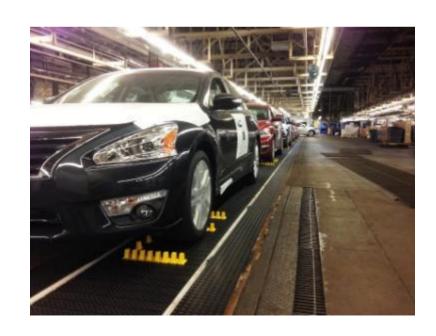
### **Inspection Conveyor**



#### Nissan, Smyrna, TN. USA

- BSM3125-K24 T2 SG.
  - 60mtr (195ft) long dry running 24-inch (610 mm) wide inspection conveyor after shower conveyor.
  - Running on High density PE wear plates
  - Equipped with BSM3125-24 chains with T2 (2-inch / 50,8mm) pushers, and T2 side guard arrangement to securely position the vehicle.
  - Equipped with Rexnord Power Transmission components: Planetgear, Link-Belt bearings, roller chain
  - Start-up July 2014







#### Ford Valencia, Spain

- HCAS3129-K32 Inspection conveyor:
  - 93 mtr long inspection conveyor
  - 1 tracks, 32-inch wide
  - Equipped with T2 molded pushers
  - Equipped with T2 Side Guards
  - Standard plastic pins
  - TC tire position material
  - Running on MCC3000 wear plates
- Application information:
  - Vehicle weight 2500 Kg (max)
  - Takt length: 6,2 mtr
- Start-up: August 2014







#### Volvo Torslanda, Sweden

- Project name: Inspection conveyor
  - Chain BSM6999H4-K162
  - Sprockets: KU6990Hybrid T19 R260
- Information about conveyor:
  - Inspection conveyors, final assembly
  - Length of conveyor: 100 meters (330 ft)
  - Width: 4100 mm
  - Material: GSM acetal, reinforced tire positions
  - Chain Surface Resistivity: <10<sup>3</sup> Ohm/sq
  - 1 tact = 5,7 meters (18,5 ft)
  - Load per tact = ca. 2200 kg
  - Speed: 6,5 m/min
- Drive construction
  - Main drive shaft connection using Rexnord Lifelign Gear Couplings
  - Type: 1050G20, Max torque: 56.000 Nm
- Start-up: June 2014





#### Skoda Mlada Boleslav, Czech Republic

- Project name: Inspection Fabia KB 8 hall M1
  - Chain BSM6999H4-K126
  - Sprockets: KU6990Hybrid T14 S100
  - 2 conveyors side by side
- Information about conveyor:
  - 2 Inspection conveyors, final assembly of Fabia
  - Length of conveyor: 78 meters (255 ft)
  - Width: 3200 mm
  - Material antistatic BSM acetal
  - Chain Surface Resistivity: <10<sup>3</sup> Ohm/sq
  - 1 tact = 6,5 meters (21 ft)
  - Load per tact = ca 2000 kg
  - Speed: 8 m/min
- Start-up: August 2014







#### Volvo Gent, Belgium

- Project name: Inspection conveyor
  - Chain BSM6999H4-K162
  - Sprockets: KU6990Hybrid T19 R260
- Information about conveyor:
  - Inspection conveyors, final assembly
  - Length of conveyor: 109 meters (350 ft)
  - Width: 4100 mm
  - Material: GSM acetal, reinforced tire positions
  - Chain Surface Resistivity: <10<sup>3</sup> Ohm/sq
  - 1 tact = 5.7 meters (18.5 ft)
  - Load per tact = ca. 2200 kg
  - Speed: 6,5 m/min
- Drive construction
  - Main drive shaft connection using Rexnord Lifelign Gear Couplings
  - Type: 1050G20, Max torque: 56.000 Nm
- Start-up: August 2014







### **Application Inspection conveyor**

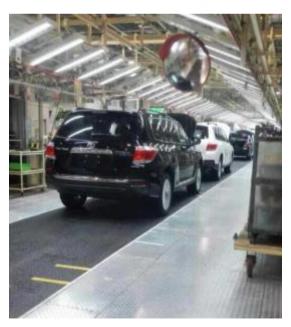


#### GAC Toyota (Guangzhou), China

- BSM6999H8-K78.
  - 71mtr (225ft) long dry running 78-inch (1981 mm) wide inspection conveyor in the shipping area.
  - Material antistatic BSM acetal
  - Chain Surface Resistivity: <10<sup>3</sup> Ohm/sq
  - Chain equipped with yellow markings and front tire pusher arrangement.
  - Running on High density PE wear plates
- Application information:
  - 2500Kg Pick-up trucks, 6.0 mtr takt length
- Start-up August 2014

#### 广汽丰田汽车有限公司 SAC TOYOTA MOTOR COLLEGE







#### Volkswagen Changsha, China

- HCAS6999-K141 Hybrid chain:
  - ZP8 position in the assembly line
  - 1x70mtr long conveyors, 3.5 mtr wide
  - Antistatic chain material
  - AS specifications  $10^{11} 10^{113}$  Ohm/sq



ERROR: stackunderflow
OFFENDING COMMAND: ~

STACK: