

### 3 WIRES COATED BOARD MACHINE KM2



- Original manufacturer: Voith (Heidenheim)
- Machine type: "Board machine (3-ply) Fourdrinier
- Production start: November 1929
- Portfolio: GC1+GC2, GD1, UC Board
- Current FLG 230 - 500g/m<sup>2</sup>
- Gross width at KM2 ~2500 mm
- Gross production: "depending on FLG 120-175t/d"
- Daily record: 196t/d"
- Drive side from the headbox towards the pope reel on the left
- Raw materials used: Mechanical pulp, cellulose, and waste paper at GD1
- Reel irons: 10
- Specific power consumption across all grades and FLG: an average of 796 kWh/t of board
- Specific steam consumption across all grades and FLG: an average of 1.46 tons of steam/t of board



Number of wet wires: 3  
Number of presses: 3 presses (+ one suction couch press)  
- 1st and 2nd presses: flat-bed press  
- 3rd press: turret press  
Roll dimensions identical  
all felt lengths identical  
Line pressure during operation: 1st press 40-50 kN/m  
2nd and 3rd press 60-80 kN/m  
Number of drying cylinders: 35 cylinders (without GLZ and felt dryer)



Pre-dryer section: 24 cylinders  
-> 12 cylinders each for the top and back  
After-dryer section: 11 cylinders  
-> 6 cylinders for the top  
-> 5 cylinders for the back  
3 felt dryers in the basement of the VTP  
Steam pressure during operation: max. 2.4 bar  
Yenne cylinders: yes (4500 mm diameter) + German press and protective felt  
Yenne roll driven by GLZ: bottom roll, top roll: CC roll, max. line load 120 N/mm,  
manufacturer: Bellmer GapCon

Coating Shop  
Voith Size Press  
Voith Precoater - Application Roll with Doctor Blade  
Top Coat Combiblade from Jagenberg (Blade Operation)  
Drying Surface Size and Coating: "Surface size is dried after the precoating using warm exhaust air from the drying hood.



Top coat is dried using a gas jet."  
Chilling Rolls: "A total of 4 chill rolls  
-> One chill roll before and after the precoat coater  
-> Two chill rolls after the top coat jets."



Poperbollar: "Installed between 1982 and 1983 (built in 1971), manufacturer: Escher Wyss  
-> Carrier drum Ø800 mm  
-> No reel magazine  
--> The empty reel is located in the pivoting lever and is changed using a change cord."

Some Dimensions:  
Dimensions from the center of the breast roll, top, to the top: 73340 mm  
Insertion from the breast roll to the SSW 12600 mm  
Cover from breast roll to SSW 14300 mm  
Back from breast roll to screen cylinder 4000 mm  
Press section (from SSW to cylinder 1) 10200 mm  
Drying cylinder diameter (not cylinder 25) 1500 mm (BL 2700 mm)  
Drying cylinder diameter 25 3200 mm (old GLZ)

#### Conversions/History:

- 1952 Installation of the 4500 mm Yankee cylinder (old GLZ 3200 mm is used as cylinder 25)
- 1958 Installation of size press, drying cylinder, and second calender
- 1960 Installation of short Fourdrinier wire (back side wire), originally intended as a protective layer, the wire was subsequently converted to a back side wire
- 1963 Installation of dryer hood on GLZ
- 1964 Fourdrinier wire insert was turned (old back side wire removed)
- 1982/1983 Installation Pope reel
- 1991 Steam blow box installed in front of the first press
- 1992 Web guide modified, without a cooling cellar
- 1993 Jagenberg Combiblade installed (top coat)
- 2004 Drive upgrade (longitudinal shaft removed)
- 2006 Yankee roll upgraded in front of the pope reel
- 2009 Dryer hood installed (Brunnschweiler)
- 2009 Yankee cylinder with dryer fabric (GLZ hood was removed with the dryer hood)
- 2017 Installation of hydraulic spray pipe movements (inlay, back, top fabric, couch felt, and first press) [2nd and 3rd presses run with jet spray pipe]
- 2017 New couch chest for inlay
- 2019 Yankee roll installed (Bellmer GapCon)
- 2020 New gearbox from SSW for top fabric





