

# Specification No. PM-498

# Second-hand Paper Machine Fourdrinier with DuoFormer for Woodfree coated and uncoated Paper



#### <u>Offer No. : MR1004</u> <u>Offer date :01,08,2024</u>

#### Conditions of Offer:

- The above mentioned equipment is offered on the basis of the condition as it was and at the location where it was at the date when this specification was established. We are not liable for any changes of scope and condition of the equipment.
- Before a contract becomes effective and before receipt of a down payment we reserve the right to offer and sell the equipment at any time to anybody who might be

interested and our offer does not incorporate any rights of the receiver with respect to the reservation of the equipment or any kind of exclusivity.

- 3. The price offered is unless explicitly mentioned otherwise subject to confirmation and may - as standard practise in second-hand machine sales - increase or decrease depending on the market situation, offers of other bidders or decisions of the seller
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  All information about scope, quantity, type, size and capacity of the equipment is provided subject to confirmation and none of the information supplied in this offer or in later correspondence and communication is guaranteed.
- 5. This offer, unless mentioned different explicitly in writing is valid for a period of maximum 60 calendar days up from the date of offer. However, this validity of offer does NOT mean that the equipment will be reserved for you during this period of time.

Best regards

#### <u>Key Data</u>

Manufacturer	Voith
Original year of made	1970
Main rebuilds	• 1995 by Voith -> DuoFormer D
	<ul> <li>1995 by Voith -&gt; Film press Speedsizer</li> </ul>
	• 1999 by Voith -> Headbox: Module Jet Dilution Water
	<ul> <li>2006 by Voith -&gt; steam and condensation system</li> </ul>
	<ul> <li>2007 by Voith -&gt; V.I.B. Steam-Box</li> </ul>
	<ul> <li>2008 by Voith -&gt; Pope reel rebuild</li> </ul>
	• 2008 by ABB -> New drives
	<ul> <li>2013 by PGA -&gt; Surface Filling Plant</li> </ul>
Туре	Fourdrinier with DuoFormer D
Paper grades	WFC + WFU (Woodfree coated & uncoated paper)
Raw Material	Virgin Fiber
Grammage range	40 - 145 g/m²
Paper width reel	5.475 mm
Operating speed	Max. 950 m/min
Design speed	700 m/min
Capacity	170.000 tpy
	Approx. 500 tpd
Drive side	Right (from headbox to pope reel)

Scope of equipment	<ul> <li>Stock preparation &amp; Approach Flow System</li> <li>Headbox</li> <li>Forming Section</li> <li>Press Section</li> <li>Pre-Dryer Section</li> <li>Film Press</li> <li>Final-Dryer Section</li> <li>Calender</li> <li>Pope Reel</li> </ul>
Spare parts	Including, as far as available
Documentation	Including, as far as available
Condition	Machine stopped in November 2023, very good condition
Location	Europe

#### Stock preparation & Approach Flow System

- 2 pc Refiner for softwood (LF), made by Sprout-Bauer (Andritz) 1996, type TwinFlo 3E, diameter 42'', 1500 kW
- 1 pc Refiner for hardwood (SF), made by Andritz, 2005, type Papillon CC-380, diameter 380 mm, 750 kW
- 2 pc Refiner (reserve), made by Voith, 1969, type 3RS Cone Refiner, 520 kW
- <u>6<sup>th</sup>-stage Cleaning System, made by Noss, 2008/2018), equipped with:</u>
  - 1<sup>st</sup> stage -> 500 cones, type AM80-D (year 2008)
  - 2<sup>nd</sup> stage -> 150 cones, type AM80-D (year 2008)
  - 3<sup>rd</sup> stage -> 50 cones, type AM80-D (year 2008)
  - 4<sup>th</sup> stage -> 20 cones, type AM80-G (year 2008)
  - 5<sup>th</sup> stage -> 8 cones, type AM80-G (year 2008)
  - 6<sup>th</sup> stage -> 1 cone, type HDC 150 (year 2018)
- 1 pc Pulsation damper and venting tank, made by Voith, 1969, stock temperature 40°C
- <u>2<sup>nd</sup> -stage Screening system, equipped with:</u>
  - 1<sup>st</sup>-stage -> 1pc Radiscreen, made by Noss, 2008, type M2000D, hole size 1,8mm
  - 2<sup>nd</sup>-stage -> 1pc Pressure Screen, made by Voith, 1995/2018, type VS10, slot size 0,3mm
- Fiber recovery system, equipped with:
  - 1pc Disperger (coated broke), made by Sulzer Escher Wyss, 1994, type HD4B
  - 1pc Plate screen (uncoated broke), made by Lamort, 2000, type Diabolo D4, Disc diameter 1,1m, hole size 3mm

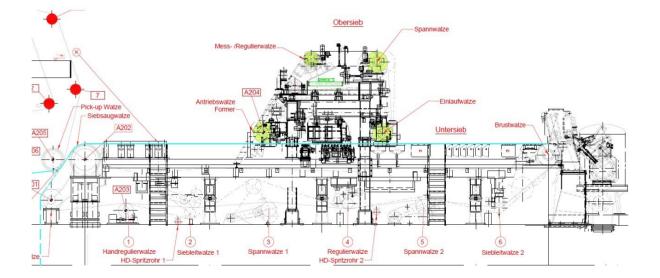
#### <u>Headbox</u>

- Made by Voith
- Type Module-Jet
- Throughput 8200-14.000 lpm/m (max. 14.750)
- Consistency range: 0,6-1,5%
- 8 pc of rows in tube bank
- With Consistency (dilution) profiling
- Grammage profiling zone width: 64 mm

#### Forming Section

- Fourdrinier Type with Top Former Voith DuoFormer D
- 9 pc Dewatering suction boxes
- 23-37% dewatering to top
- Position former after breast roll: 6,4m
- 17,5-20% Dry content at the end of wire part
- Wire part from IBS with edge control

### **Headbox and Forming Section**

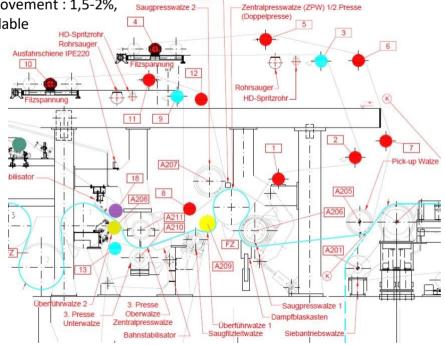


#### Press section

- Made by Voith
- Type Duo Centri II with seperate 3<sup>rd</sup> Nip (Venta-Nip)
- Press loading:
  - 1<sup>st</sup> Nip: 40 N/mm
  - 2<sup>nd</sup> Nip: 65 N/mm
  - 3<sup>rd</sup> Nip: 100 N/mm
- Dryness after 3<sup>rd</sup> Nip: 39-42 %
- <u>Roll Covers:</u>
  - 1<sup>st</sup> Nip: Suction roll, drilled+grooved, Voith Solarflow, Ø 1050 mm, Ceramic roll, Voith Terraspeed
  - 2<sup>nd</sup> Nip: Ceramic roll, Voith Terraspeed, Ø 1200 mm, Suction roll, drilled+grooved, Voth Solarflow

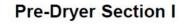
WSSS-Gautschknecht

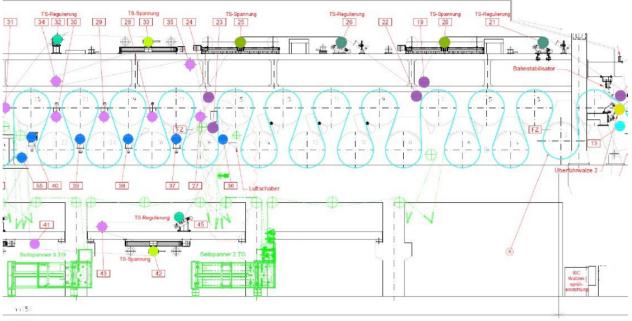
- 3<sup>rd</sup> Nip: Granite roll, Voith TopRock / 680, PU-roll, grooved, Voith G-2000 successor
- <u>Center Roll</u>:
  - made by IBS
  - type JamesRoll Superflex Twinschaber
  - blade angle: 28°
  - Linaer pressure: 300 N/m
  - With Shower
- <u>3<sup>rd</sup> press:</u>
  - Made by Cloud / Vickery
  - Type Conformatic 101 / Vickery U32M
  - Blade angle: 28°
  - Linear pressure: 300 N/m
  - With Shower
- <u>Steam Box</u>
  - Made by Andritz, year 2007
  - Position before 1<sup>st</sup> Nip,
  - Dryness improvement : 1,5-2%,
  - Profiling available



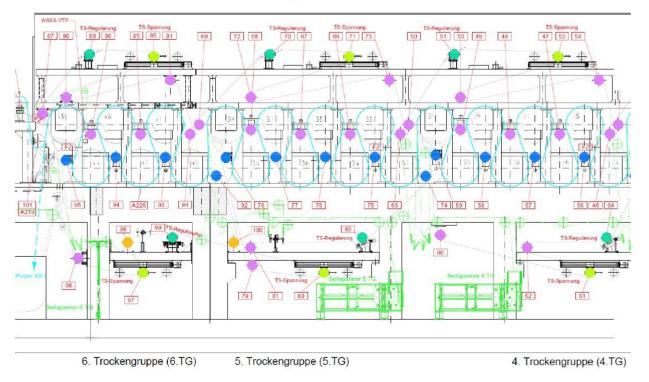
#### Pre-Dryer Section

- 6pc drying groups with 45pc drying cylinders, Ø 1500mm
- Type of groups:
  - 1<sup>st</sup> 2<sup>nd</sup> group: Slalom
  - 3<sup>rd</sup> 6<sup>th</sup> group: Double row
- 3pc Heating groups
- Steam: max. 3,8 bar
- Steam & condensate system rebuild by Voith, 2006



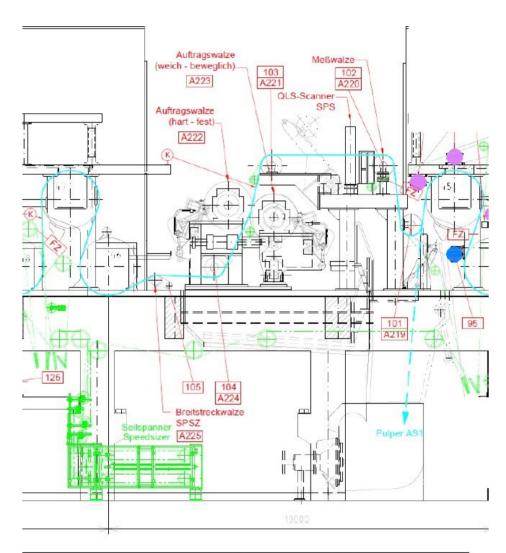


#### **Pre-Dryer Section II**



#### <u>Film Press</u>

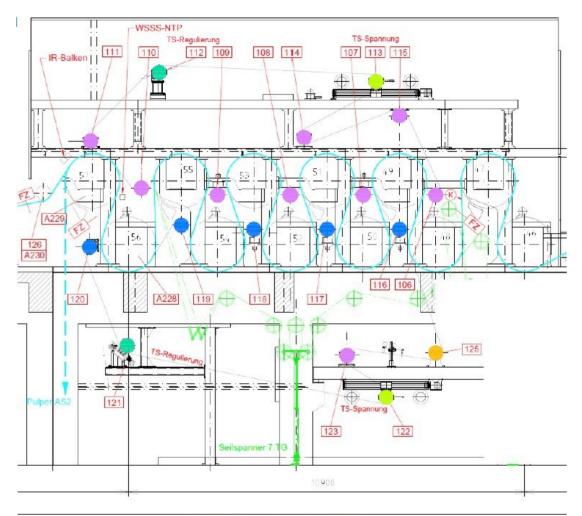
- Film press, made by Voith, year 1995
- Type: Speedsizer
- Nip pressure: 30 kN/m (max. 60 kN/m)
- Roll diameter: 1240mm
- Roll cover: Voith eVenfilm / Valmet SizeHawk ZL
- Roll hardness: 15/30 P&J
- Starch application: 1 1,5 g/m<sup>2</sup> per side
- Starch concentration: 5 8%



Speed Sizer (SPS)

#### **Final-Dryer Section**

- 1pc drying groups
- 12pc drying cylinders, Double row, Ø 1500mm
- 2pc Heating groups (upper and lower due to curl)
- Steam: max 3,8 bar



7. Trockengruppe (7.TG)

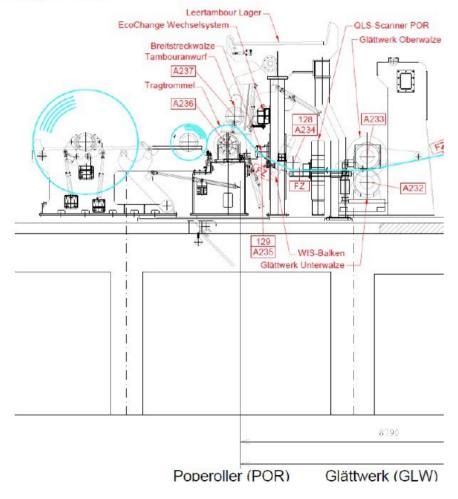
#### <u>Calender</u>

- Made by Voith, year 1979
- Nip load: 30 N/mm
- <u>Top Roll:</u>
  - PU-roll,
  - type Voith Nonoperal S92 / Schäfer C2 VariPro,
  - Hardness: 92 P&J
- <u>Bottom Roll</u>:
  - Steel roll
  - Type Küster S-roll

#### Pope Reel

- Made by VAS, Italy, year 2008
- Roll cover: Tungsten carbide covered steel
- Reel change: voith EcoChange with Goose neck

## Calender & Pope Reel



### <u>Photo series</u>

### Stock Preparation & Approach Flow



### <u>Headbox</u>





Forming section with Duo Former



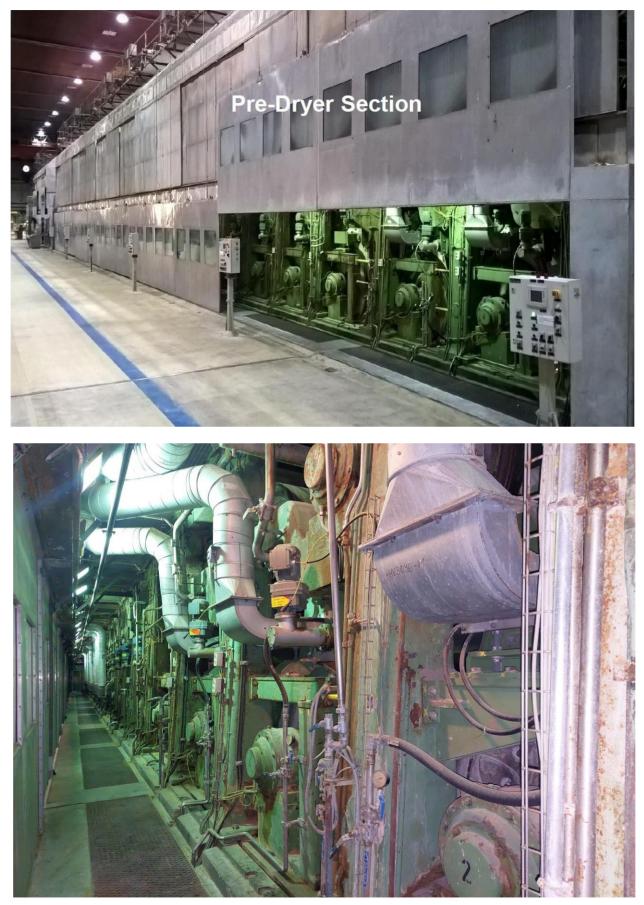


Maria Roboter GmbH

### Press Section



#### Pre-Dryer Section



### <u>Film Press</u>



### Final-Dryer Section



### <u>Pope Reeler</u>

