MET-TECH | Product Data Sheet
PAPER MILL - 5300 MM - 40-120 GSM

Ref. No.: PAPERM181101
Year: 1980
Brand: IHI, METSO, MITSUBISHI-BELOIT, JOHNSON FOILS, ETC.
Subj.: Offer about second-hand paper mill - Dismantled
Dear Mr ,
We have pleasure to provide you with an offer about second-hand paper mill that is
immediately for sale.
Qty. 1 Second-hand paper mill ? already dismantled!
Mfc.: IHI, Johnson Foils, Mitsubishi-Beloit, HONEYWELL, Metso Built
Revision: 2006. 5. 2 Revision of Hood Ventilation Specification 2015. 6. 29 Revision of Rebuild Item
2015. 7. 1 Revision of Description, Deletion of Part Drawing
2016. 3. 23 Addition of Poly Disc Filter Specification
2016. 4. 19 Revision of Operating Data
Paper width: 5300 mm Reel Web Width
Operation speed: 1100 m/min. Max. Production
Head Box Hydraulic Type (Converflo) Slice Width: 5,150mm
Wire (PF Gap): twin wire type Rebuild of Forming Zone by Johnson Foils in 2004
Press Tri-Nip Replaced of Center Roll (Ceramic Cover) by Metso in 2005
Replaced of Steam Box by Honeywell in 2003
Dryer 4 Group (42 Cylinder) 1-2 Single / 3-4 Double
Installation of Web Stabilizer by EV Group in 2007 Stationary Syphon
Rebuild by Deublin in 2006
Calender SNC - 1 Stack / 1 Nip Rebuild by Metso in 2003
Reel Pope
Winder Type: Two-Drum Speed
Replaced of Slitting Station by APE in 2006
Drive Sectional, DC Motor (Toshiba: JAPAN) Speed-Up in 2005, 2007
Vacuum Water Ring

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Control system QCS: Davinci
Changed of Scanner by Honeywell in 2003 Basis Weight, Moisture, Caliper,
Hole Detector: New Installation by Isravision in 2006
Dimension product of paper: Width - 1,576 mm Diameter - Max. 1,200 mm after winder
Paper Grade: Printing & Writing Paper/Liner /Kraft/Newsprint

Paper Machine
Existing Operated Base (Actual)
Kind of Paper: Newsprint, Printing & Writing Paper
40 ~ 80 g/m² main 46 g/m²
Furnish: DIP 100% Headbox Consistency
Stock Temperature: 35 ~ 48? Stock pH
Wire Width: 5,300 mm Reel Trim Width
Mechnical design speed: 1,100 m/min Operating Speed
Type of Machine: PF Gap Former and Tri-Nip Press with multi-cylinder dryers
Rebuild by JOHNSON FOILS in 2004. (Bel-Baie ? Former ? PF Gap Former)
Hand of Machine: Right Hand
(When standing at the headbox and looking toward the reel, the drive will be on the rignt hand side)
Production: 348 ton/day (max. Production on reel)
46 g/m² x 1,100 m/min x 4,780 mm x 1.44 x 10-6 x 100 % eff
Drive Capacity: 1,100 m/min on 1st Dryer
(Electrical and Mechanical)
Roll Balancing All the rolls are balanced dynamically.
Balancing Speed for all the rolls except reel spools 1,100 m/min
Balancing speed for reel spools 2,300 m/min
STOCK APPROACH SYSTEM
Cleaner Stage: 3 stage with Deculator Screen Stage
Basis weight control valve: 1 set (250A)
Ball valve with electric motor (Replaced by METSO in 2007)
Deculator system: 1 set
1) Deculator Tank (1) pc
2) Vacuum pump (1) pc
- Model Name AT-3004 - Type Water Ring Type
- Capacity 70 m³/min×650 mmHg (at 27?) - Motor 150 kW×6P
- Material Cast Iron - Remark Replaced by KOVAESCO in 1998
3) Separator (1) pc

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- Size O.D.772×1,830×5 t - Material SS400
- Remark Replaced by KOVAESCO in 1998

4) Barometric Condensor (1) pc
- Type Ring and Disc Counterflow (Water Cooled)
- Size Dia. 950×4,000×6t - Heat Duty 531,000 kcal/hr
- Cooling Water Flow Max. 2.95 m³/min - Material SUSS304
- Remark Replaced by KOVAESCO in 1998

Primary Cleaner: 34 sets

1) Type Cyclean Model 7 (Centrifugal Type) 2) Capacity 1,500 L/min/pc

3) Material Cylinder: STS304 Cone

4) Maker MHI-Bird

Secondary Cleaner: 8 sets

1) Type Cyclean Model 7 (Centrifugal Type) 2) Capacity 1,500 L/min/pc

3) Material Cylinder: STS304 Cone

4) Maker MHI-Bird

Tertiary Cleaner: 2 sets

1) Type Cyclean Model 7 with dilution water (Centrifugal Type)

2) Capacity 1,500 L/min/pc

3) Material Cylinder: STS304 Cone

4) Maker MHI-Bird

Primary Screen: 1 set

1) Type Pressure Screen 2) Model Name: HF 1200 / 15 (Andriz)

3) Screen Basket Horizontal 0.25 mm slot

4) Rotor Multi-Foil with 39 blade Rotating 202 rpm

5) Drive 90 kW×8P V-Belt Drive

6) Size Dia. 1,720×Height 3,141

7) Material 316L Stainless Steel (Contact with stock)

8) Weight approx. 5,525 kg (Empty weight with drive without motor)
approx. 10,085 kg (Total weight with filling without motor)

9) Remark Replaced by Fiedler (Andritz) in 2003

Secondary Screen: 1 set

1) Type Pressure Screen 2) Model Name HF 500 / 7 (Andriz)

3) Screen Basket Horizontal 0.25 mm slot

4) Rotor Multi-Foil with 12 blade Rotating 538 rpm

5) Drive 37 kW×6P V-Belt Drive

6) Size Dia. 680×Height 1,880

7) Material 316L Stainless Steel (Contact with stock)

8) Weight approx. 1,437 kg (Empty weight with drive without motor)
approx. 1,798 kg (Total weight with filling without motor)

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9) Remark Replaced by Fiedler (Andritz) in 2003
Tertiary Screen: 1 set
1) Type Pressure Screen 2) Model Name HF 300 / 4 (Andriz)
3) Screen Basket Horizontal 0.2 mm slot
4) Rotor Multi-Foil with 6 blade Rotating 933 rpm
5) Drive 11 kW×6P V-Belt Drive
6) Size Height 1,125
7) Material 316L Stainless Steel (Contact with stock)
8) Weight approx. 320 kg (Empty weight with drive without motor)
approx. 406 kg (Total weight with filling without motor)
9) Remark Replaced by Fiedler (Andritz) in 2003
Stuff Box: 1 set Material SUS 304 Pits and Tanks
1) Silo: 1 pc Rainforced Concrete with SUS Lining
2) Screen, Cleaner reject pit: 1 pc Rainforced Concrete with tile
3) Deculator Condenser pit: 1 pc Rainforced Concrete with tile
4) Seal pit: 1 pc Rainforced Concrete with tile
Fan Pumps
1) No.1 Fan Pump: 1 set
(Cleaner Supply Pump)
- Capacity 53 m³/min×38 m - Operating Consistency 1.1 ~ 1.4%
- Motor 600 kW×8P, AC Motor, 3300 V - Discharge Pipe Size 500 A
- Material Casing and Impeller with Cast Stainless Steel
- Maker Shinryo Seisaku (Japan)
2) No.2 Fan Pump: 1 set
(Head Box Supply Pump)
- Capacity 53?/min×24m
- Operating Consistency 1.1 ~ 1.4%
- Motor 280kW, DC Motor, 440V
- Discharge Pipe Size 500A
- Material Casing and Impeller with Cast Stainless Steel
- Maker Shinryo Seisaku (Japan)
Poly Disc Filter: 1 set
1) Maker MHI-Beloit (Jones) 2) Specification dia. 3,800×19 Disk, 16 Sector
3) Inlet Consistency 0.7 ~ 1.2 % 4) Discharge Stock 190 BDT/D
5) Filtrate White Water - Clear 350 ppm - Cloudy 500 ppm
6) Center Shaft dia. 945×8,770 L Material STS304
Replaced of Center Shaft by MHI in 2006
7) Motor
- Disc Drive Motor 22 kW×8P (Inverter) - Repulper Motor 22 kW×4P

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- Oscillating Cleaning Shower 2.2 kW×4P (Geared Motor)
8) PDF Spec.
- Disc Diameter dia. 3,800 - Disc Quantity 19 Disc
- Disc Speed 1.5 ~ 2 rpm - Filtrate Outlets 2
- Barometric Drop Leg Min. 6.5 m
9) Shower Water / Pressure
- Discharge Shower 23 L/min,disk / 5.6 kg/cm² (Clear White Water)
- Cleaning Shower 106 L/min,disk / 5.6 kg/cm² (Clear White Water)
- Chute Shower 19 L/min,disk / 2.8 kg/cm² (Cloudy White Water)
- Air Sluice 0.35 Nm³/min, disk / 6.0 kg/cm² (Air)
HEAD BOX
Dimensions of Headbox
Type Converflo Headbox (Mitsubishi-Beloit) Pond Width: 5,150 mm
Slice Width: 5,149.5 ± 0.25 mm Operating Speed
Stock pH: 7.1 ~ 7.5 Headbox Consistency
Profile Control
- Type Micro Worm Jack - Pitch 100 mm Centers, 75 mm Edge, 52 sets
- Control Auto - Remark Replaced by HONEYWELL in 2003
Headbox Mounting: 1 set - Type Pivot Mount and Tilting Jacks Support
Headbox Tilting Jacks: 1 set - Operated by Hand Wheel
Header: 1 pc - Type Rectangular Taper Header
Approach Pipe for Head Supply: 1 set
- Size 550 A (Elbow 600 A) - Material SUS316L
- Finishing Inside Polished - Remark Replaced by BLI in 2006
WIRE SECTION (FORMER)
Dimensions of Wire
Former Type PF Gap Former [PF = Pulsation Frequency]
Replaced by Johnson Foils in 2004 (Bel-Baie? ? PF Gap Former)
Retention 50 ~ 60% Wire Change Cantilever for Plastic Wire
Wire Width 5,320 mm
Rolls
Suction Couch Roll: 1 pc
1) Diameter / Shell Length 1,220 mm / 5,830 mm
2) Vacuum Face 5,350 mm 3) Shell Material M-Alloy 1100
4) Vacuum 2 Vacuum Compartments
Low ? 467 m³/min×380 mmHg High ? 419 m³/min×500 mmHg
5) Suction Box Material 316L Stainless Steel
6) Cover Material None
7) Suction Hole Gun Drilled, Silent Drillng Pattern

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8) Drive 150 kW, DC Reducer Helical Type, 1/6.5454
Wire Rolls: 3 pcs
1) Location NO. 1 Wire # 1 Return Roll
NO.1 Wire Stretch Roll NO.2 Wire Stretch Roll
2) Diameter / Shell Length 965 mm / 5,400 mm
3) Shell Material Steel 4) Cover Material Rubber, 10 mm Thick
5) Drive
- NO.1 Wire Stretch Roll 260 kW, DC Reducer Bevel Type, Ratio 1/4.343
New Installed of DC Drive by MHI & Toshiba in 1986
- NO.2 Wire Stretch Roll 220 kW, DC
Reducer Helical Type, Ratio 1/4.292
Wire Rolls: 8 pcs
1) Location Forming Roll
Breast Roll
NO.1 Wire #2 Return Roll (Tension Roll) NO.2 Wire Return Roll (Tension Roll)
NO.1 Wire Guide Roll NO.2 Wire Guide Roll
NO.1 Wire Outside Roll NO.2 Wire Outside Roll
2) Diameter / Shell Length 710 mm / 5,400 mm
3) Shell Material Steel 4) Cover Material Rubber, 10 mm Thick
5) Drive None
Lubrication
Wire Rolls: Grease Suction Roll
Roll Mounting
Forming Roll Pivoted, Jack Supprt, Air Motor Driven, Adjustable
Breast Roll Fixed Return Rolls & Couch Roll Fixed
Wire Guide: 2 sets
- Loading Air Sroing + Mech. Spring - Positioner Manual Pneumatic Operated
Wire Stretcher: 2 pcs
- Type Remote Manual Control - Actuator Worm Jack
- Driven By Air Motor
Wire Tension Indicator Electrical Loads Cell
Forming Equipments This Forming Zone Replaced by Johnson Foils in 2004
EIS (Engineered Impingement Shoe): 1 set
1) Body 316L Stainless Steel 2) Shoe Material Al2O3 with Slot
3) Mounting Fixed
4) Vacuum 0 ~ 250 mmH2O (Operation Vacuum: 0 mmH2O)
Forming Shoe 1 set

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1) Body 316L Stainless Steel 2) Blade Material Silicon Carbide
3) Blade Quantity 16 pcs with Slide-On
4) Mounting and Display Screw Jack and Manual rotating, Tilting Range ±25 mm
Local Display and Digital display of LVDT
5) Vacuum 2 Chamber
#1 Forming Shoe - 22.9 m³/min×30 mmHg
#2 Forming Shoe - 25.9 m3/min×48 mmHg
Counter Blade 1 set
1) Body 316L Stainless Steel
2) Blade T-Bar Type with Slid-on
- Material Silicon Carbide - Loading Air Tube
- Quantity 4 pcs (possible max. 7 blades assembly on this unit)
3) Mounting Fixed
Suction Box: 1 set
1) Body 316L Stainless Steel
Dual Vacuum Compartments
2) Cover Type Composite Type
- No. of blades 14 pcs - Blade Material Silicon Carbide
3) Mounting Fixed Double Stud Support
4) Vacuum Control Separator with Support
Automatic Control Valve
5) Vacuum #1 Suction Box - 27.6 m³/min×300 mmHg
#2 Suction Box - 27.6 m³/min×300 mmHg
Pre-Couch HiVac 1 set
1) Body 316L Stainless Steel Single Vacuum Compartments
2) Cover Type Composite Type
- No. of blades 7 pcs - Blade Material Silicon Carbide
3) Mounting Fixed Double Stud Support
4) Vacuum Control Separator with Support Automatic Control Valve
5) Vacuum 24.9 m³/min×250 mmHg
Super-HiVac
1) Body 304 Stainless Steel Dual Vacuum Compartments
2) Cover Type Composite Type
- No. of blades 8 pcs (IBS) - Blade Material Silicon Carbide
3) Mounting Fixed Double Stud Support
4) Vacuum Control Automatic Control Valve
5) Vacuum Max. 500 mmHg 6) Remarks New Installed in 2007
Doctor

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Doctor Type Fixed Doctor Doctor Back Material STS304
PRESS SECTION
Dimensions of Press
Type Tri-Nip
Operating Nip Pressure 1st ? 68 kg/cm (Design 70 kg/cm)
2nd ? 90 kg/cm (Design 90 kg/cm) 3rd ? 105 kg/cm (Design 110 kg/cm)
Nip Loading Device Hydraulic Replaced by Domestic company in 2007
Rolls
Suction Pick-Up Roll: 1 set
1) Diameter / Shell Length 710 mm / 5,450 mm
2) Vacuum Length 5,200 mm 3) Shell Material M-Alloy 1100
4) Vacuum 115.9 m³/min×500 mmHg 5) Suction Box Material 316L Stainless Steel
6) Cover Material None
7) Suction Holes Gun Drilled, Silent Drillng Pattern
8) Drive 45kW, DC Reducer Helical Type, Ratio 1/3.154
9) Lifting Hydraulic Cylinder
Suction Press Roll: 1 set
1) Diameter / Shell Length 1,240 mm / 5,600 mm
2) Vacuum Length 5,200 mm 3) Shell Material M-Alloy 1100
4) Vacuum 152.8 m³/min×380 mmHg
5) Suction Box Material 316L Stainless Steel
6) Cover Material Hi-Top
7) Suction Holes Gun Drilled, Silent Drillng Pattern
8) Drive 400 kW, DC Reducer Hellical Type, Ratio 1/4.3793
1P Bottom Grooved Roll: 1 set
1) Type Controlled Crown Roll 2) Loading Self Loading
3) Diameter / Shell Length 850 mm / 5,350 mm
4) Shell Material Cast Iron 5) Cover Material Poly Last
6) Drive None
Center Roll: 1 set
1) Diameter / Shell Length 1,220 mm / 5,350 mm
2) Shell Material Cast Steel or Foged Steel
3) Cover Material Ceramic Coating
Roughness 0.7~0.9, Hardness (Hv) 1,100~1,400
4) Drive 400 kW, DC Reducer Hellical Type, Ratio 1/4.3793
5) Remark Replaced of center roll (Ceramic cover) by Valmet in 2006
3P Roll (CCR): 1pc
1) Type Controlled Crown Roll 2) Shoe Material Al-Alloy

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3) Loading Self Loading 4) Diameter / Shell Length 850 mm / 5,350 mm
5) Loading Length 5,150 mm 6) Shell Material Cast Iron
7) Cover Material Poly-Urethane, Grooved 8) Drive None
Press Felt Rolls 19 sets
1) Diameter / Shell Length 426 mm / 5,510 mm 2) Shell Material Steel
3) Cover Material 15 Hard Rubber, Plain (460mm)
- Drive 3 Roll Driven (For Felt Inching)
Air Motor Driven with Oneway Clutch Type 16 Rolls None Driven
Roll Mountings
Felt Stretchers 3 pcs
1) Type Remote Manual with seam Straightener
2) Actuator Screw Jacks 3) Driven by Air Motor
Lubrication
All Rolls: Grease
Others
Press Felt Suction Box 6 sets
1) Pipe Size 250 A SUS316L Pipe with Air spring 2) Slot Openning 19 mm
3) Lip Material Ceramic (Silicon Nitride)
4) Blade Lip Mounting T-Bar (Slide-On)
5) Remark Replaced by KANENG in 2006 and 2007
Steam Box 1 set
1) Loaction Suction Press Roll 2) Body Material 316L Stainless Steel
3) No of Zones 51 Zone, 99.5 mm Pitch
4) Heating Width Max. 5,075 mm, Min. 4,925 mm
5) Control Automatic Linked with DCS
6) Remark Replaced by HONEYWELL in 2003
Tail Threading System 1 set
1) Type Air Chute, Manual
2) Loaction Center Roll New Installed in 2007
3P CCR Oil Unit 1 set
Hydraulic Oil Unit 1 set
For 1P, 2P, 3P Roll Loading / Unloading New Installed in 2007
Doctor
1) Center Roll Double Doctor 1 set
DST, Air Tube, Motor Oscillating Type Replaced by Valmet in 2002
2) Other Roll Single Doctor (Oscillating and Non-Oscillating Doctor)
DRYER SECTION
Dimensions of Dryer
Type: 1 to 2 Group Single Tier with Web Stabilizer and 3 to 4 Group Double

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Tier
Operating Speed: 1,100 m/min
Dryer Code Rating: JIS 5.0 kg/cm²G Pressure Test 10.0 kg/cm²G
Roll Arrangement
Group Dryer Cylinder PV Roll Canvas Roll (dia. 350) Remark
1 Group 1+6 1 7 Lead-In 1 set
2 Group 13 26
3 Group 12 26
4 Group 11 25
Dryers and Rolls
Paper Dryer: 1 + 42 sets
1) Diameter / Shell Length Lead-In Dryer (1 set) - 1,220 mm / 5,150 mm
Paper Dryer (42 sets) - 1,524 mm / 5,150 mm
2) Shell Matrerial Cast Iron 3) Shell Cover None
4) Drain Joint, Spoiler Bar Stationary Syphon
Turbosint Turbulence Bar (Bolt Mount)
Steam In (Back Side), Syphon (Front Side) Replaced by Deublin in 2003 to 2006
PV Roll 1 set
1) Diameter / Shell Length 424 mm / 5,510 mm 2) Blowing Length: 4,960 mm
3) Shell Matrerial Steel with Drill Hole 4) Shell Cover None
Canvas Roll 84 sets
1) Diameter 350mm
2) Shell Length 5,510 mm (Standard Type), 5,375 mm (Sill Type)
5,395 mm (Short Type)
3) Shell Matrerial Steel 4) Shell Cover None
Roll Mountings
Doctor: 17 sets
1) Type: Oscillating Type with Geared Motor
2) Loading / Unloading Air Tube
3) Geared Motor 2.2 kW, 440 V, 60 Hz 4) Remark: Installation by Essco in 1997
Canvas Guide: 6 sets
1) Type Auto Guide Palm 2) Source Air
Canvas Strerchers: 6 sets
1) Type Remote Manual 2) Actuator Pneumatic Cylinder
Drive
#1 Dryer Group: 1 set
1) Reducer Hellical Type 2) Ratio 1/6.199

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3) Drive 110 kW, DC Motor, 440 V
#2 ~ #3 Dryer Group: 2 set
1) Reducer Hellical Type 2) Ratio 1/6.303
3) Drive 150 kW, DC Motor, 440 V
Others
Web Stabilizer
1) Location 1 Group and 2 Group
2) Type Single Installation water shower pipe at box inside
3) Blowing Width 5,050 mm 4) Blowing Hot Air Volume 0.8 m³/s×1000Pa
5) Material Mild Steel 6) Remark: Installation by EV Group in 2007
Canvas High Pressure Shower: 2 sets
1) Location 1 Group and 2 Group 2) Type Fixed and Rotating Head for Oscillating
3) High Pressure Max. 350 bar
4) Remark: Installation by Demastic Company in 2007
Sheet Threading
1) Tail Cutting Device Doctor and air nozzle with manual
Location - After Press
2) Tail Feeding Equipment Rope Carrier
Dryer Hood: Enclosed Type
Sheet Cutter: 1 set
1) Location 4 Dryer Group 2) Use For Soft Nip Calender Protection
Lubrication
1) All Rolls Oil 2) Rope Sheaves Grease
CALENDER
Dimensions of Calender Type Soft Nip Calender
Mgc.: Metso Number of Units 1 Stack 1 Nip
Nip Pressure 5 ~ 150 kN/m (Operation 30~70 kN/m)
Temperature (Heating Roll) Max. 160? (Operation 100~120?)
Replaced by Metso in 2003
Rolls
Soft Nip Roll: 1 set
1) Type Multi-Zone controlled SymCDS/HP Roll
2) Diameter / Shell Length 725 mm (with cover) / 5,380 mm
3) Cover Thickeness 12.5 mm
4) Cover Material / Hardness CalJaguar / ShD 91±2
5) Shell Material GRS-300 6) Loading Hydraulic
7) Drive 200 kW, DC Motor, Reducer Ratio 1/2.07
8) Weight (with Bearing) 16.5 ton

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Heating Roll: 1 set
1) Type Thermo Roll 2) Diameter / Shell Length 860 mm / 5,010 mm
3) Shell Material Chilled Cast Iron 4) Shell Hardness 580 HV ± 20
5) Heat Source Oil 6) Loading Hydraulic
7) Drive 75 kW, DC Motor, Reducer Ratio 1/3.607
8) Weight (with Bearing) 18.5 ton
Spreader Roll: 1 set
1) Type Fixed Bow 2) Diameter / Shell Length 210 mm / 5,132 mm
3) Shell Material Steel, Hard-Chrome Coating
4) Drive 7.5 kW, Belt Drive, Reducer Ratio 1/0.839
Guide Roll: 2 sets
1) Diameter / Shell Length 550 mm / 5,132 mm
2) Shell Material Steel 3) Drive 5.5 kW, Geared Motor
Others
1) Web Threading System Belt Drive + Air 2) Doctor
3) Oil Rotary Joint For Heating Roll 4) Soft Roll Edge Cooling
REEL
Dimensions of Reel
Type: Pope Reel Parent Roll Diameter
Rolls
Reel Drum: 1 pc
1) Type Grooved 2) Diameter / Shell Length 915 mm / 5,000 mm
3) Shell Material Cast Iron
4) Drive 65kW, DC Motor Hellical Reducer, Ratio 1/4.8235
Reel Spreader Roll
1) Diameter / Shell Length 350 mm / 5,000 mm
2) Shell Material Steel 3) Drive None
Reel Spool
1) Diameter / Shell Length 460 mm / 5,250 mm
2) Shell Material Steel 3) Cover Material Rubber
4) Spool Change Reel Spool Starter
- Drive 7.5 kW, DC Motor Geared Motor, Ratio 1/5.74
- Auxiliary Device Tire
Others
Jumbo Roll Storage: 1 set Stationary Stand Type (3 Jumbo Roll Storage)
Turn-Up: 1 set Goose-Neck Air Jet with Nozzle
Doctor: 1 set Oscillating Type
Hole Detector: 1 set Replaced by Isra Vision in 2006
WINDER

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Dimensions of Winder
Number of Winder: 1 set Maker / Model
Type: Two Drum Paper Grade
Basis Weight Range: 40 ~ 80 gsm Operating Speed
Unwinding Roll (Parant Roll) Diameter: Max. 2,400 mm
Rewounding Roll (Shipping) Diameter: 1,200 mm
Slitting Station
1) Type Vertical 2) Number of Slitter Knife 9 sets
3) Top Knife Type Pneumatic 4) Slitting Width Main 788 mm, 1576 mm
5) Remark Retrofit by APE in 2006
Rewinding Station
1) Nip Control Rider Roll Control 2) Remark Retrofit by MHI in 2003
Tension Control: Load Cell, Unwinder Motor
Auxiliary Equipment: Roll Ejector, Cradle
Rolls
Unwind Spool: 1 set
1) Diameter / Shell Length 460 mm / 5,000 mm
2) Unwinder Frame Saddle Type
3) Oscillation ±50 mm Stroke Hydraulic Cylinder Operated
4) Spool Brake Drum 5) Drive 150 kW, DC Drive
Lead-In Paper Roll: 1 set
1) Diameter / Shell Length 510 mm / 4,900 mm
2) Adjust Manual Screw Handle 3) Drive 30 kW
NO.1 Spreader Roll: 1 set
1) Diameter / Shell Length 175 mm / 505 mm×10 Segment
2) Drive None
Segment Roll: 2 sets
1) Diameter / Shell Length 175 mm / 1,675 mm×3 Segment
2) Drive None
NO.2 Spreader Roll: 1 set
1) Diameter / Shell Length 175 mm / 260 mm×12set+355 mm×2set
2) Drive None
Rider Roll: 1 set
1) Diameter / Shell Length 320 mm / 2390 mm×2set
2) Drive 11 kW×2sets
Drum Roll (Front Drum, Rear Drum): 2 Roll
1) Diameter / Shell Length 610 mm / 4,900 mm
2) Roll Suface Tungsten Carbide Coating 3) Drive 110 kW, DC
Slitter Knife: 9 sets

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1) Diameter (Top / Bottom) 203 mm / 267 mm
2) Material (Top / Bottom) High Speed Steel / S45C 3) Positioning Manual
DRIVE
Type: Sectional Electric Motor Drive
Gear Reducers: Bevel Gear, Helical Gear, Geared Motor
Coupling: Universal Joints Motor
Replaced of Reducer by Domestic company in 2007
VACUUM SYSTEM
Type: Watering Type
Vacuum Pump: 8 sets
1) Model Nash 2) Power 825 kW (4 sets) 3) Reducer 8 sets
HOOD VENTILATION & HEAT RECOVERY
Hood Type: Enclose Type
Heat Recovery
1) Air to Air
(1) Type Economizer (2) Quantity 2 Wetend / Dryend
2) Air to Water
(1) Quantity 2 Wetend / Dryend (2) Heat Exchanged 1,200,000 kcal/h / set
(3) Remark New Installation in 2012
PV Supply Fan Centrifugal Fans Wetend / Dryend
1) Quantity 2 2) Air Flow 3) Power 220 kW×4P, 6600 V
4) Drive Direct, Coulping
Hood Exhaust Fan Centrifugal Fans Wetend / Dryend
1) Quantity 2 2) Air Flow
3) Power 220 kW×6P, 440 V Inverter 4) Drive V-Belt Drive
Steam Heater Wetend / Dryend
1) Quantity 2
DESIGN BASE
1. Production
The paper machine manufactured and actual operating to produce the paper, based on the
following conditions.
Kind of Paper: Printing & Writing Paper Basis Weight
Furnish: DIP 100% Max. Production
Dimension product of paper: Width - 1,576 mm, Diameter - Max. 1,200 mm after winder
2. Utilities at the paper mill
2-1 Fresh Water (At the entrance of each department)
Pressure: 3 kg/cm² Temperature

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Quality of Water: Should be satisfied by TAPPI STANDARD
E602s-48 of ground wood papers
2-2 Steam Conition (at the flow control valve in machine room)
Pressure: 5 kg/cm² (saturated)
2-3 Electrical Power (at the entrance of the paper machine)
High voltage: 3,300 V, 3 phase, 60 Hz for motors of 75 kW and over
Low voltage: 440 V, 3 phase, 60 Hz for motors of less than 74 kW
For control: 220 V, single phase, 60 Hz
For instrumentation: 110 V, single phase, 60 Hz
2-4 Process Air Pressure: 7 kg/cm²G Temperature
Essential Air Pressure: 7 kg/cm²G Temperature
3. Ambient Conditions
3-1 Outdoor Temperature
Maximum: 39? at summer Minimum
3-2 Relative Humidity: % R.H.
3-3 Indoor Temperature Maximum: 40? Minimum

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