GENERAL

1. The FibreFlow® drum repulping system is an assembly of fundamentally proven major components, tailored to produce high quality pulp from secondary fiber.

2. The system operates as a continuously rotating drum. Recycled papers are introduced into the high consistency impregnation zone, sometimes in conjunction with caustic soda and deinking chemicals, and dilution water is added to achieve approximately a 15% consistency. Alternately lifted and dropped, the feed material travels longitudinally through the 1° sloping drum. During this deflaking action, the paper is repulped without degrading the contaminants in all such furnish. In the low consistency screening section, additional dilution water is added, via showers, to the partially processed furnish. This results in a 4% consistency, and allows for fiber passage through the screen plates to the bottom vat. The contaminants are rejected through the end of the drum and conveyed to disposal.

3. The FibreFlow® drum experiences low maintenance costs. The screening section is not hampered by plugging as the dilution water is added via showers through a hood at the top. The shower water drives down on the screen perforations at high velocity. This action forces any fiber bundles, which tend to plug the holes, back into the slowly rotating drum. Effective deflaking is accomplished with minimal electrical energy consumption; losses sustained in maintaining drum rotation are very low.

4. Output is of high quality due to efficient screening and lack of contaminant degrading. The relatively high consistency operation minimizes chemical usage as well.

5. Reliable operation, low maintenance requirements, minimal energy and chemical consumption and high quality output are the documented history of this design

SPECIFICATIONS
FIBREFLOW® DRUM REPULPING SYSTEM

Prepared for: Alliance Forest Products, U.S. Corp

Location: Coosa Pines, Alabama

Andritz-Ahlstrom Job No.: RF069

GENERAL SPECIFICATIONS:

Model No.: FF400

Quantity of Drums:	Two (2)	Serial No.:	106 and 107
Pulping Section Mat'l:	SIS 2343	Screen Mat'l:	SIS 2343
Vat Material:	316L	Hood Material:	316L
Drum Inside Diameter:	13'-1½"	Length:	93'- 7 $^{11}/_{16}$"
Drum Weight Empty:	231 kips		
Number of Drives:	Two (2)	Power:	700 HP each
Motor Speed:	1800 RPM	Drum Speed:	12.3 RPM
Input, Tons/Day:	1800 bdst/d	Pulping Consist.:	15 –18%
Screening Consist.:	4%	Vat Consist.:	3.5%

SUBASSEMBLY SPECIFICATIONS (for one drum):

	Manufacturer	Type	Model
Drive Motor (2):	Toshiba	700 HP 1800 RPM	2BE900168
Motor Coupling (2):	Falk	Fluid Type	1660HFD132-1
Main Gear Box (2):	Falk	"A"-Parallel	485A2-17.64
Pinion Coupling (2):	Falk	Gear Type	1060G20
Pinion Gear (2):	Santasalo	Spur Gear	280252501
Girth Gear (1):	Santasalo	Segment/Spur	2803957
Pony Speed Reducer	Falk	Helical/Worm	09UB-17.78
Pony Disengage Coupling		Gear Type	1035G70
Pony Motor		Toshiba	B0254FLT3BMHD
Proximity Switch (3):	Turck	Inductive	Ni 4-G12-AZ33X
Speed Switches (2):	Turck	Inductive	Ni 4-G12-AZ33X
Agitators(2):	Lightnin	impeller	30VSA40
Agitator Motors (2):	Toshiba	40HP (364T) 1200RPM	B0406LFL3BMHD

EQUIPMENT WEIGHTS:

Description	Weight (LBS.)
FibreFlow Drum	231,000
Support Ring, Inlet End	23,000
Support Ring, Outlet End	23,400
Seal Ring	570
Inlet Funnel & Support Assembly	8,150
Inlet Funnel	4,400
Seal Protector	80
Support Structure	2,850
Distribution Pipe	150
Drip Pan	550
Drip Pan Support Arm	128
Inlet Seal Assembly	395
Seal, Rope Packing	35
Weight Hanger	20

Description	Weight (LBS.)
Pulley Support Bracket	150
Tension Plate, Inlet Funnel Sealing Device	39
Pivot Pin, Inlet Funnel Sealing Device	2
Weight, Inlet Funnel Sealing Device	130
Pulley, Inlet Funnel Sealing Device	8
Seal Ring, Funnel Side	570
Support Roller Assembly, Axial Roller, Inlet End	34,100
Support Roller Frame	9,700
Axial Roller Assembly	920
Guide Roller	390
Shaft	190
Sealing Ring	14
Bearing Cover	16
Base Plate	190
Drum Stop	610

Description	Weight (LBS.)
Roller Position Switch Bracket Stand	20
Pillow Block Bearing	1,900
Support Roller	5,700
Support Roller Shaft	1,340
Stop Block	40
Roller Position Switch Bracket	2
Support Roller Assembly, Discharge End	32,570
Support Roller Frame	8,900
Pillow Block Bearing	1,900
Support Roller	5,700
Support Roller Shaft	1,340
Stop Block	40
Girth Gear Assembly	15,400
Single Girth Gear Segment	940
Single Segment Side Plate	150

Description	Weight (LBS.)
Assembly Tool	10
Drive Frame Assembly	38,000
Drive Support Frame	10,330
Drive Motor	7,277
Fluid Coupling	613
Main Speed Reducer	6,430
Pinion Shaft Gear Coupling	675
Pony Drive Motor	470
Pony Speed Reducer	450
Pony Disengagement Coupling	125
Drive Gear Assembly (shaft, pinion, & bearings)	6,705
Drive Gear (Pinion)	1,050
Drive Gear Shaft	1,855
Pillow Block Bearing	1,900
Pony Drive Base	365

Description	Weight (LBS.)
Support Rail (Long)	910
Support Rail (Short)	575
Stop Block	80
Hood Assembly	15,650
Header Assembly	1,560
Bottom Vat	35,000
Manhole Cover Assembly	350
Support Roller Guard	320
Girth Gear Guard Assembly	4,150
Section I	575
Section II	315
Section III	240
Section IV	105
Section IV Side Panel	35

Description	Weight (LBS.)
Section V	150
Side Inspection Cover	10
Drip (Grease) Pan	60
Support Frame	515
Cross Support	40
Axial Guide Roller Guard	50
Weight Guard, Seal Assembly	250
Coupling Guard, Pinion shaft	125
Coupling Guard, Fluid Coupling	125
Oil Pan, Fluid Coupling	72
Pony Disengage Coupling Guard, Top	30
Pony Disengage Coupling Guard, Bottom	35