APPENDIX NO. 1

TECHNICAL SPECIFICATIONS

CHAMPION INTERNATIONAL CORP.

HEDEMORA VACUUM DISC SAVEALL

Units	1
Disc Diameter, ft	12 ft
Number of Discs Installed/Space For	16/18
Disc Area, sq ft	2800/3150
Material for Wetted Parts	316L S.S.
Number of Filtrate Outlets	2
Height of Vertical Drop Leg Min.	23 ft
Disc Speed, RPM	0.3-1.8
Conveyor-Repulper Speed, Approx. RPM	90

Shower Water Requirement LPM (per unit)	16 Discs	18 Discs
Cloth Cleaning (clear filtrate) GPM	317	357
Sheet Discharge (clear filtrate) GPM	148	166
Sluicing Water (feed slurry) GPM Min.	85	95

Motor Sizes	16 Discs	18 Discs
Disc. Drive, HP/RPM	15	15/300-800
Conveyor-Repulper Drive, HP/RPM	15	15/1200
Cloth Cleaning Shower Drive, HP/RPM	2	2/1200

Weights	18 Discs
Filter, Net Without Pulp (Est)	25 sh.tons

HEDEMORA No 4PM REBUILD SAVE ALL SPECIFICATIONS.

5-540-627-745-03

APPENDIX NO. 1

TECHNICAL SPECIFICATIONS

CHAMPION INTERNATIONAL CORP.

HEDEMORA VACUUM DISC SAVEALL (cont)

Filter Vat

The vat is welded in stainless steel and reinforced on the outside on all four sides with closed beams made of painted carbon steel. The beams are tight welded on the vat.

The pulp is discharged through chutes between the discs leading to a rectangular opening for flanged connection to the conveyor-repulper or a manifold chute.

The vat ends have bolted tightening shields for the shaft lead through. The shaft seal consists of a stuffing box with attachable gland.

The bottom of the vat includes connection for level transmitter and drainage.

Feed Box

The feed box is manufactured in stainless steel and is welded on to the vat. The box is made with hinged covers. The inlet to the vat from the feed box is arranged as weirs giving an even distribution of incoming pulp along the filter length.

Center Shaft

Fabricated stainless steel construction including internal channels with conical cross-sections. Blind flanges will be supplied for discs not in use.

Bearings

On the valve end the bearing consists of a plain bearing with housing of cast iron and liner type Glacier. At the drive end the stub shaft rotates in an antifriction bearing.

Filter Discs

Each disc consists of twenty sectors. The sectors are manufactured of stainless steel comprising a frame of U-profiles and a deck of projection welded wire screen.

The filter cloth is stainless steel plain weave 35 mesh.

APPENDIX NO. 1

TECHNICAL SPECIFICATIONS

CHAMPION INTERNATIONAL CORP.

HEDEMORA VACUUM DISC SAVEALL (cont)

Filter Discs

The sectors are fixed on to the center shaft with two stainless steel bolts. An extended socket wrench for this purpose is delivered with the filter. At the periphery the sectors are connected by means of screwed-on stainless steel profiles.

Automatic Valve

The three-point suspension stainless steel valve has no internal bearings. Between the rotating shaft and the fixed valve is a replaceable wear plate made of HD polyethylene.

The valve is pressed against the wear plate by three springs. A sealing arrangement around the wear plate is connected to the barometric leg which prevents leakage between the shaft and the valve.

The valve is normally made with two filtrate outlets: one for cloudy and one for clear filtrate with an adjustable filtrate split. The valve is equipped with vacuum gauge and flexible vacuum connection.

Sheet Discharge

The discharge system consists of a header with branch pipe and shut-off valve for each disc. The nozzles for water jet discharge are spoon nozzles with conical inlet, which minimizes clogging.

Cover Cleaning

The cover shower consists of a header with branch pipes oscillating between the discs. The header is driven by a gear motor and a crank. The motor is equipped with a brake, which means that the oscillation can be stopped in any position. The nozzles are of the same type as the stock discharge nozzles.

Sluicing

The sluicing consists of a header with branch pipes to every chute for pulp discharge.

APPENDIX NO. 1

TECHNICAL SPECIFICATIONS

CHAMPION INTERNATIONAL CORP.

HEDEMORA VACUUM DISC SAVEALL (cont)

Conveyor-Repulper

The vat is a welded stainless steel construction with a flanged connection for bolting to the vat. The screw is built from a hollow steel bar lined with stainless steel. The screw is mounted in antifriction bearings. The drive consists of reduction gear, motor and V-belt transmission. The motor is not included

The stock discharge connection is placed to suit local requirements.

Filter Hood

The heads are stainless steel connected by a special welded I-beam of stainless steel and equipped with flanged exhaust connections.

The hood is divided into sections which can easily be lifted by hand. Every section is equipped with an inspection door.

Disc Drive

The disc drive consists of a shaft-mounted reduction gear and a V-belt transmission between gear and motor. The motor is not included

For control of the variable speed, we recommend a DC motor or an AC motor with frequency converter.

Lubrication

The filter includes five points for grease lubrication. Upon request these points can be connected to a central lubricator.

Painting

Non-stainless parts in contact with the atmosphere are sandblasted and painted in accordance with customer requirements.

Vacuum

Vacuum required for the function of the filter may be produced with a barometric leg or a vacuum pump. A combination of a barometric leg and a vacuum pump can be used when the available height is too short.

IPAS 846A/974la SPECIFICATIONS FOR

SHEET 7 OF 10

520-70-003 REV 0

ITEM Disc Saveall - No. 4 Paper Machine EQUIPMENT NO.

CUSTOMER Champion International Corporation PROJECT NO. 3137

PLANT LOCATION Bucksport, Maine

		14 D	16 D
5.3	SAVEALL INFORMATION		
5.3.1	Vendor's Name	Hedemora, Inc.	
5.3.2	Saveall Model No.	High submergence	
5.3.3	Number of Discs and Diameter	12 ft dia x 16/18 D	
5.3.4	Number of Sectors/Disc	20	
5.3.5	Maximum Saveall Capacity	Appr. 5300 GPM incl. broke	
5.3.6	Sweetener Required (Norm/Max)	Appr. 517 GPM (norm)	
5.3.7	Suggested Saveall Feed Consistency (Normal Operation)	0.5% BD	
5.3.8	Feed Consistency on Machine Break (Maximum)	1.60% BD	
5.3.9	Expected Consistency of Stock Discharge From Discs	10% BD	
	From Repulper	4% BD	
5.3.10	Suggested Cloudy/Clear Split	Appr. 25%/75%	
5.3.11	Expected Consistency of Clear Filtrate	Appr. 100 ppm	
5.3.12	Expected Consistency of Cloudy Filtrate	Appr. 700 ppm	
5.3.13	Vacuum Drop-Leg Requirements	Min. 23 ft. (str vertical)	

Showers

Location		
Sheet Knock Off	Descending side of discs	
Face Cleaning	"	
Sluicing	"	

5.3.14 — Quantity and Quality of Water (~~Fresh or~~ White)

	16 D	18 D
Sheet Knock Off	148 GPM	166 GPM
Face Cleaning	317 GPM	357 GPM
Sluicing	Min. 85 GPM	95 GPM

SIMONS

SIMONS-EASTERN CONSULTANTS, INC.

IPAS 846A/9741a

SPECIFICATIONS FOR

SHEET 8 OF 10

520-70-003 REV 0

ITEM Disc Saveall - No. 4 Paper Machine EQUIPMENT NO.

CUSTOMER Champion International Corporation PROJECT NO. 3137

PLANT LOCATION Bucksport, Maine

— Pressure Required		
	Sheet Knock Off	100 psi
	Face Cleaning	100 psi
	Sluicing	30 psi
5.3.15 Sector Face Clothing Material		SS 316 35 mesh
5.3.16 Metallurgy of Wetted Parts		SS 316 L
5.3.17 Metallurgy of Discs		"
5.3.18 Metallurgy of Shower Pipes		"
5.3.19 Metallurgy/Material of Hood		"
5.3.20 Type of Nozzles		Spoon type flat spray
5.3.21 Disc Operating, RPM		0.3-1.8 RPM
5.3.22 Motor HP and RPM		
— Main Drive		16 D 18 D
-- Repulper		15 HP 20HP/300-1800
5.3.23 Type of Main Drive		15 HP 15HP/1200
5.3.24 Type of Repulper Drive		Shaft-mounted gear
5.3.25 Assembled Weight (Dry)		" "
5.3.26 Shipping Point		Est 25 sh tons (18 discs)
5.3.27 Price for Saveall Complete (FOB Bucksport, ME)		See quotation
5.3.28 Estimated Freight to Mill Site		See quotation
5.3.29 Delivery		See quotation

6. OPTIONS (PRICE SEPARATELY)

6.1 Controls to adjust the Clean and Cloudy Split on the Run — Included in std.

SIMONS

SIMONS-EASTERN CONSULTANTS, INC.

IPAS 846A/974la SPECIFICATIONS FOR

SHEET 9 OF 10

520-70-003 REV 0

ITEM Disc Saveall - No. 4 Paper Machine EQUIPMENT NO.

CUSTOMER Champion International Corporation PROJECT NO. 3137

PLANT LOCATION Bucksport, Maine

6.2	One Full Disc Complete With Face Cloth, Etc.	USD 8,000:-
6.3	Self-Washing Face Cleaning Nozzles	N/A x)
6.4	Fiberglass Sectionalized Hood Instead of S.S.	No price diff.
6.5	Additional Two Disc Locations Added to Saveall	RO

x) Possible addition of strainer battery (S elements)