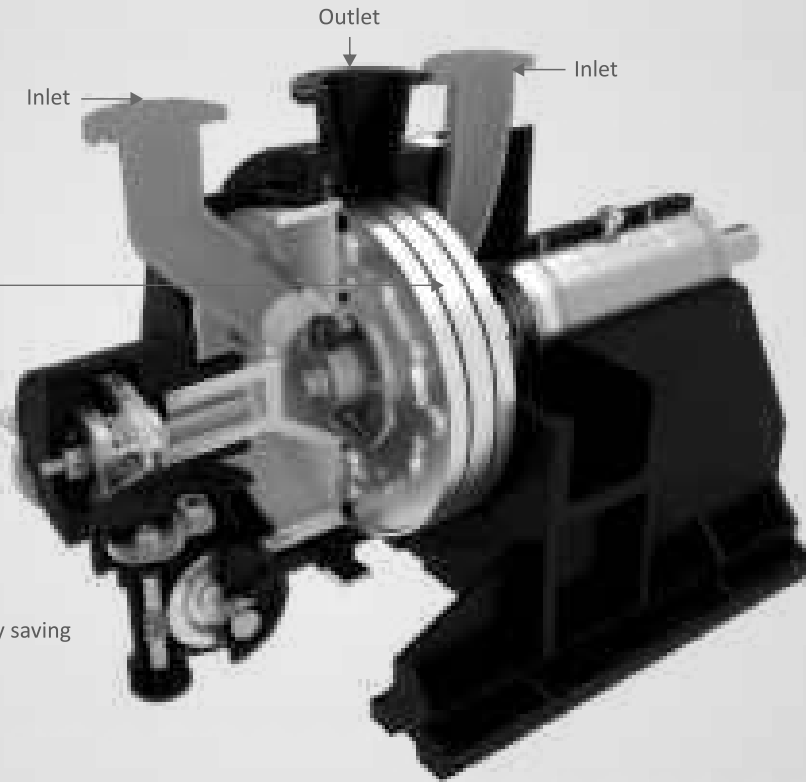




Disc Gap Control Mechanism



- Uniform fiber quality and energy saving
- Optimized operating cost
- Maximum machine safety

PARASON REFINER FILLINGS

KEY FEATURES

- Wide range of metallurgies developed for industry needs
- Various patterns & bar designs available
- Custom designed plates are developed in shortest time on CNC
- Continuous development of new cost-effective material and designs

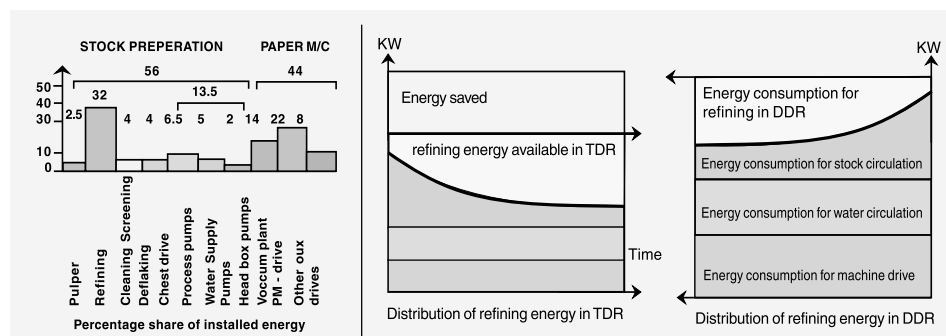
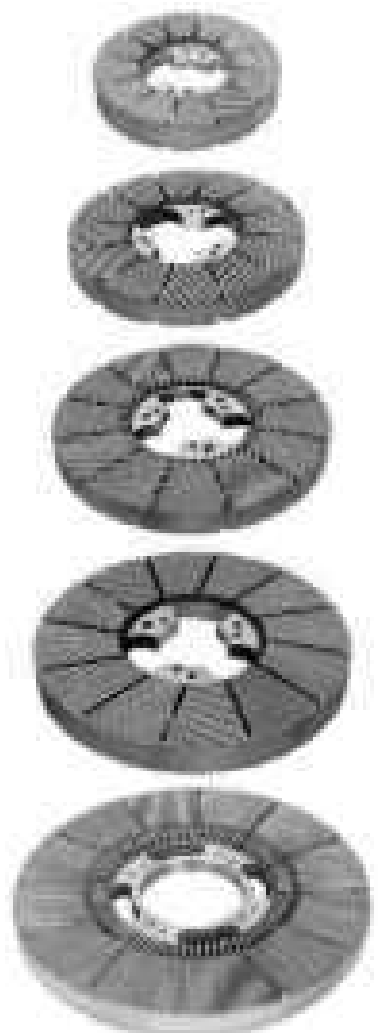
PARASON - The Prime source for Refiners & Refiner Plates

Compact, sturdy, latest mechanism and most important the refiner plates bar designs to suit specific applications are special features. TDR is the result of ACCUMULATED PRECISION making this machine unique in the paper world. Parason has more than 2000 installation within 15 years and this is a direct indicator of its supreme performance.

FURTHER REFINING OF REFINERS

The inclusion of splined shaft technology in Parason TDR permits rotor movement with longer force resulting in uniform floating conditions under stock pressure of 1-2 kg/cm.

The use of unique and high technology of centrifugally casted martensitic stainless steel shaft sleeves offers maintenance-free working for years.



EXCLUSIVE FEATURES



Splined Shaft

Splined shaft technology has enabled to reduce weight of shaft assembly. PARASON TDR is manufactured with splined shaft to achieve easy movement flotation of rotor. Uniform wear of discs on both faces.

Automation System

Special feature to operate refiner with full auto control mechanism with SP (Set Point) feature saves power with uniform refining.



A unique Schenck Germany Analyzer to Analyze

- Spectrum of frequency
 - Tracking
 - Transfer
 - Balancing
 - Alignment
 - Bearing Vibration
 - Bearing Condition
 - Shaft Vibration
 - Shaft Vibration Sumac
 - Temperature
 - Sound
 - Axial Position
 - Process Parameter
 - Oscilloscope
 - Ultramodern Technology
- Analysis of Overall Evaluation.

Oil Bath

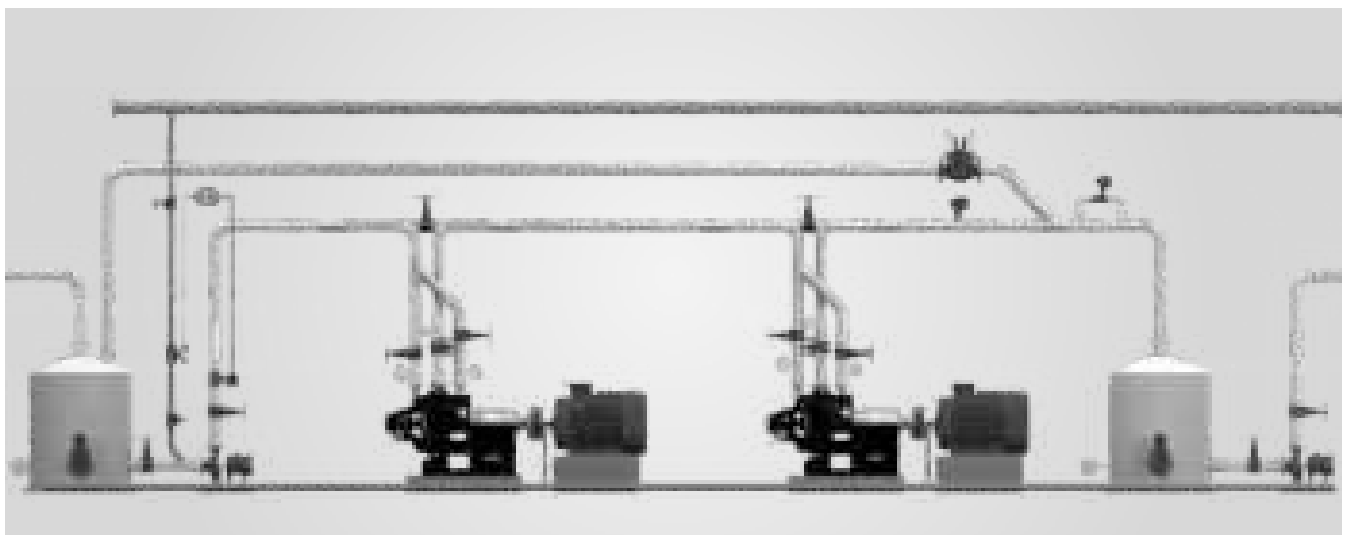
This is the only system that provides positive lubrication to the bearings. The continuous feeding of oil ensures soft, smooth, trouble-free & vibration less operation of the PARASON Refiner.

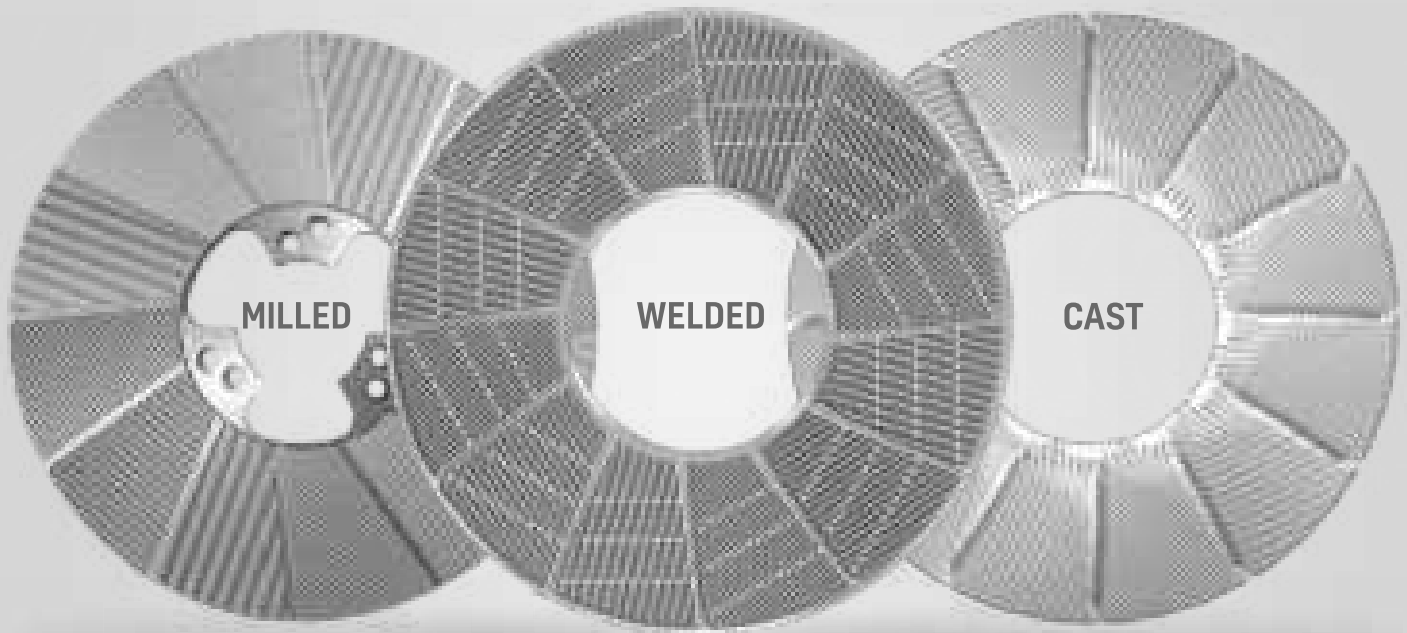


EXCLUSIVE FEATURES :

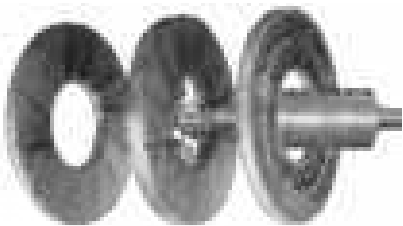
- Replace gear coupling by tyre coupling
- Sturdy and speedy operation
- Consumes less power
- Virtually maintenance free operation
- Uniform wear of plates on both faces is achieved

P&I Diagram of Tri Disc Refiner





PARASON TRI DISC REFINER



PARASON TDR

- Rotor 60% lighter.
- 180% larger opening.
- No bolting on surface.
- No bolting on surface.
- Large refining area.
- Saves energy by min. 20%.
- low cost per tonne.



CONVENTIONAL DDR

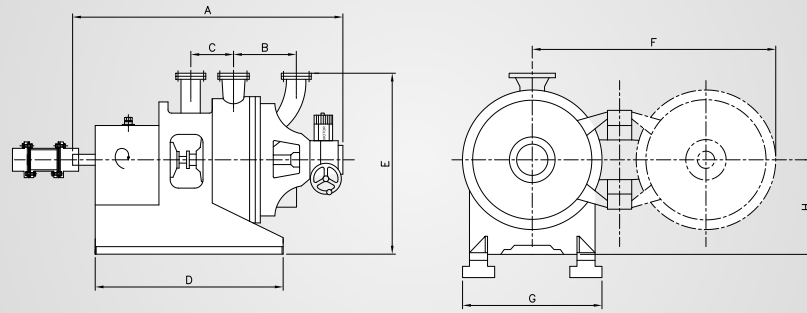
- Heavy rotor, Poor life.
- Bolts on bar surface-reduced refining area.
- On run breakages occur.
- Higher energy consumption.
- More down time for plate change.



New Developed Tangential Refiner



Results of Flow simulation performed using latest computational fluid dynamics software



GENERAL DIMENSIONS

Type	A mm	B mm	C mm	D mm	E mm	F mm	G mm	H mm	Disc mm
TDR – 13	1325	470	235	750	650	600	530	340	330
TDR – 17	1455	520	240	795	745	760	620	410	420
TDR – 21	1660	636	260	1000	900	930	760	500	508
TDR – 24	1700	665	250	1000	1000	1035	760	5000	610
TDR – 26	2250	800	300	1300	1250	1095	935	650	660
TDR – 30	2250	800	300	1300	1250	1095	935	650	762
TDR – 34	2750	950	350	1600	1500	1150	1200	750	864
TDR – 38	2750	950	350	1600	1500	1150	1200	750	965

TECHNICAL DATA

Model		*TDR-13	TDR-17	TDR-21	TDR-24	TDR-26	TDR-30	TDR-34	TDR-38
Hydraulic Capacity	TPD	10-15	15-45	20-70	40-140	80-140	80-200	120-250	140-400
Consistency	%	4.0-5.0	4.0-5.0	4.0-5.0	4.0-5.0	4.0-5.0	4.0-5.0	4.0-5.0	4.0-5.0
Motor Rating	Hp	30-60	100-150	200-300	350-450	500-550	600-650	900-1200	900-1200
Refiner Speed	RPM	960	960	960	720	720	600	600	525
Stock Inlet Pressure	Kg/cm ²	1.5-2.0	1.5-2.0	1.5-2.0	1.5-2.0	1.5-2.0	1.5-2.0	1.5-2.0	1.5-2.0
Approx. Weight	Kg	500	7000	1600	2500	3000	3000	4500	5500

MANUFACTURING FEATURES

Cylinder Housing	S.G.Iron (IS-1865-1974)
Main Body	M.S. fabricated and stress relieved
Shafts	Precisely ground finished splined shafts made in SAE – 8620 forgings case carburized and hardened.
Parts Contacting stock	Stainless Steel casting grade SS-304
Packing box system	Stainless Steel grade SS-304 gland sealing with cooling system
Coupling	Tyre and Geared
Bearings	Standard make
Adjustment of disc	By manual for auto-operated control system panel with dual speed gear motor.
Auto Control system	Optional

*TDR-13 in is plain shaft model, with geared coupling.

- Throughput depends on pulp grade, consistency & specified technological properties. Hydraulically attainable maximum throughputs are substantially higher. Upon request data will be indicated after our engineers have studied our requirements.
- Due to constant research and development specifications are subject to change.