PROFILE

PT TRI GANESHA JAYA

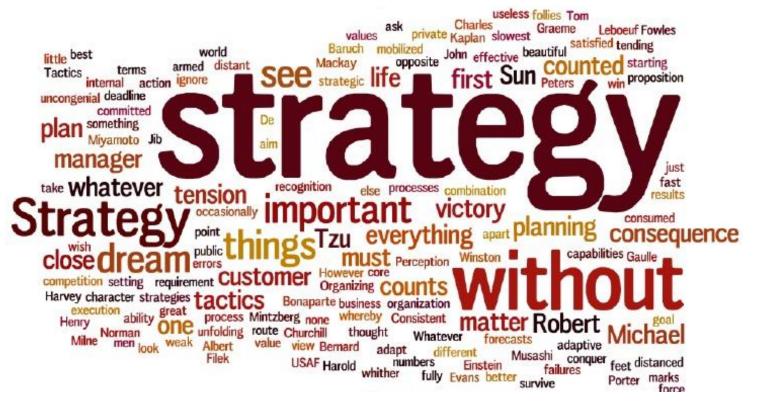


"Technology, Treasury, Today"

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COMPANY PROFILE

Corporate objectives



- To deliver clean water as foundation for a core sustainable Indonesian economic development through low-cost, techologicallysound processing
- To acquire and build a portfolio of brackish water treatment projects in Indonesia
- To develop strong water treatment plants capability in long term period through cooperation with state owned enterprises, and or local government

COMPANY **PROFILE**

Corporate SWOT Analysis



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Strength

- LAPI ITB Endorsement
- Experienced in Brackish Water Processing in Pertamina
- Low Cost
- Technology

Weakness

Financial



Opportunity

 Huge upside for commercialization of low-cost brackish water treatment plants throughout Indonesia

Threat

 Overseas/ State-Owned Enterprises player with large capitals



COMPANY PROFILE

Key Competitive Advantage



Local Expertise

Customize Monitoring

Tax Reduction

Low Cost Labor & Maintenance

Local Component

PROFILE







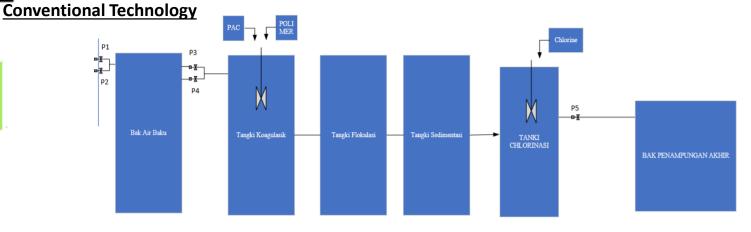
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Technology Comparison

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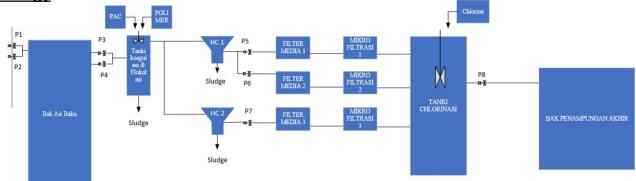
Benefits:

- ✓ Lower Capital Expenditures
- ✓ Lower
 Operational
 Costs due to
 Reduced
 chemicals
- ✓ Faster Processing
- ✓ Improved Water Quality
- ✓ Smaller space



- P1 & P2 : Pompa Intake Air Baku dari Sungai
- P3 & P4 : Pompa Pendorong ke Tangki Koagulasi & Flokulasi
 P5 : Pompa Pendorong dari Tangki Chlorinasi ke Penampung Akhir

Our Technology



- P1 & P2 : Pompa Intake Air Baku dari Sungai
- P3 & P4 : Pompa Pendorong ke Tangki Koagulasi & Flokulasi
- P5,P6 & P7 : Pompa Pendorong dari HYdrocyclone ke Filter Media
- P8: Pompa Pendorong dari Tangki Chlorinasi ke Penampung Akhir

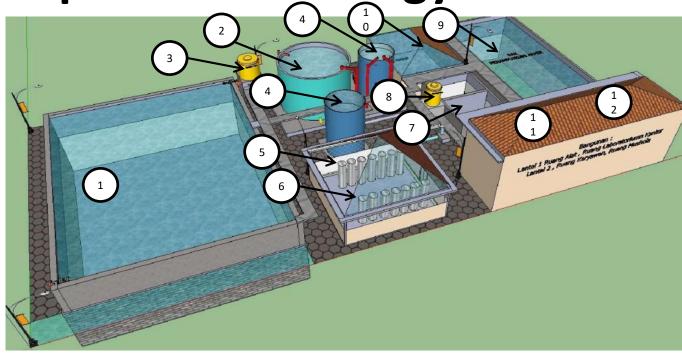


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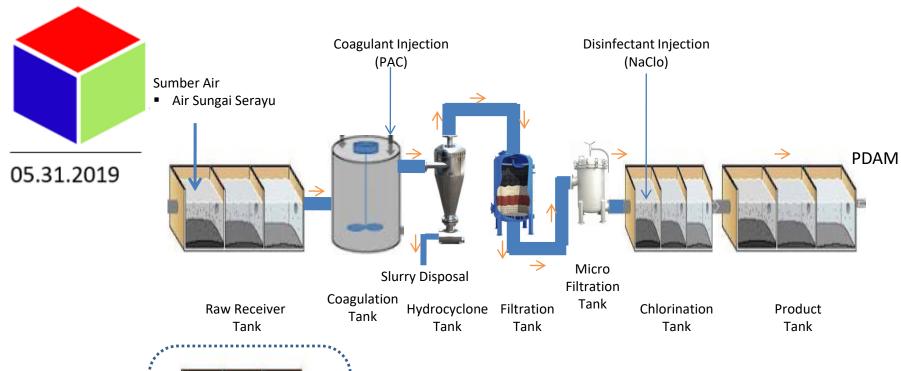


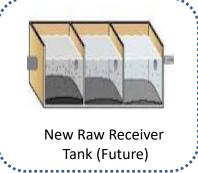
- Tangki Penampungan 1.
- Tangki Koagulasi, Flokulasi
- 3. Tangki Kimia - PAC
- Hydrocyclone 4.
- **Filterisasi** 5.
- 6. Microfiltrasi

- Tangki Chlorinasi 7.
- Tangki Kimia Chlorine
- Tangki Penampungan
- Mesin EMHF & RO System 10.
- Kantor & Laboratorium 11.
- 12. Sistem Monitoring (Kontrol Panel)

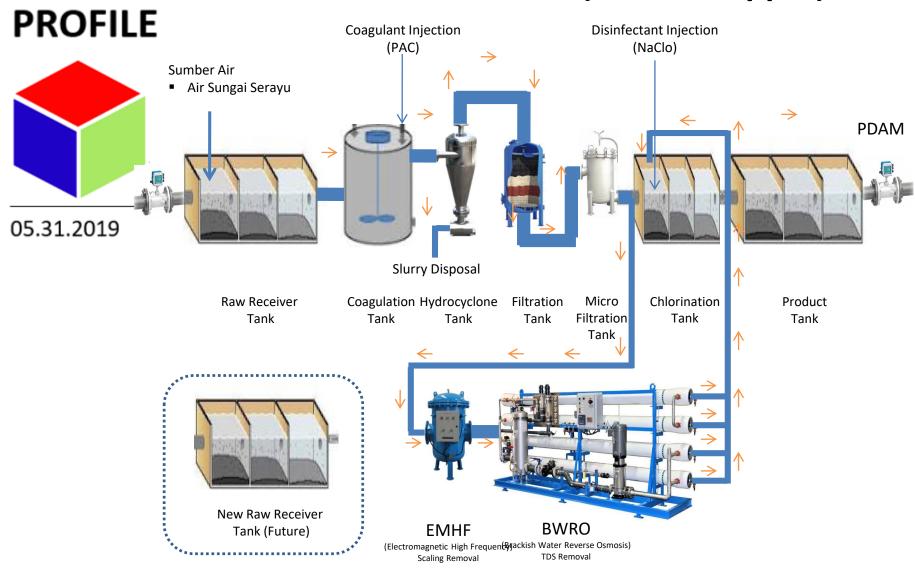
Duplication without

Scenario#1: Fresh Water Condition PROFILE (TDS<300 ppm)





Brackish Water Condition (TDS>2000ppm)



Duplication without

PROFILE

Hydrocyclone



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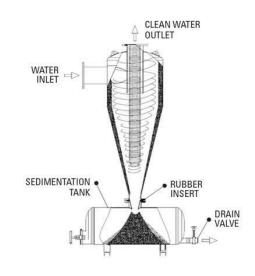
SPESIFIKASI HYDROCYCLONE

Kapasitas : M3/Hr x 2 UnitFrame : Mild Steel Coating

Diameter : 3000mmTinggi : 6000mm

Pipa Inlet/Outlet: 6 Inch/6 Inch

Rapid Sedimentation Unit



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SPESIFIKASI FILTERISASI UNIT

Kapasitas : 250 M3/Jam x 4 Unit

Operasional : Manual

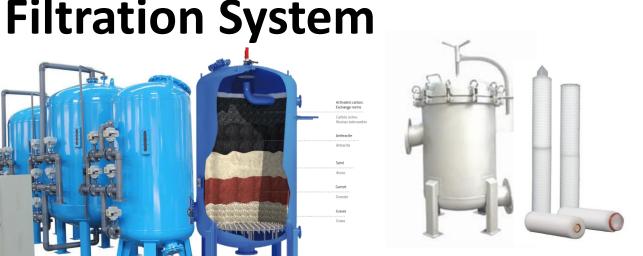
Backwash

Frame: Mild Steel Coating Diameter : 2400mm : 1300mm Tinggi

Pipa Inlet/Outlet : 6 Inch/6 Inch

Tekanan Kerja : 2~6 Bar Media Filter : Pasir Aktif, Carbon Aktif, Mangan Zeolit

Turbidity & TSS Removal > 5mm



SPESIFIKASI MICROFILTRASI UNIT

Kapasitas : 200 M3/Jam x 4

Unit

Cartridge Type : SOE : SS 304 Frame Diameter : 600mm

T. Dimension : 2600 x 950 x

900mm

Pipa Inlet/Outlet : 6 Inch/6 Inch

: 1 Inch Drain Tekanan Kerja : 2~6 Bar

Media Filter : PP Pleated Big

Cartridge

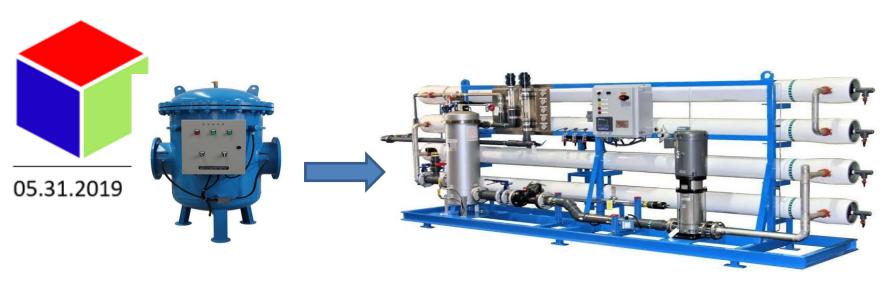
Turbidity & TSS Removal > 10 Micron



Duplication without

EMHF & BWRO

PROFILE



SPESIFIKASI MESIN EMHF

Kapasitas : 125 M3/Jam x 4 Unit

Daya Listrik : 70 Watt

Pipa inlet : 5"Pipa outlet : 5 "

Ukuran Diameter : 219 mmPanjang : 600 mmTinggi : 1000 mm

Scaling Removal (Ca, Mg as Hardness Removal)

SPESIFIKASI MESIN BWRO (4 UNIT)

■ Kapasitas : 35 M3/Jam x 4 Unit

■ Type : Brackish Water RO

Frame : SS 304Panjang : 7000mm

Panjang : 7000mmLebar : 3000mm

■ Tinggi : 2000mm

• FRP Housing : 8 Inch, $5 \sim 6$ Buah

■ Tekanan Kerja : 100~125 Psi

TDS Removal (Reduce TDS > 90%)

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Sensor & Monitoring



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Realtime Monitoring Software

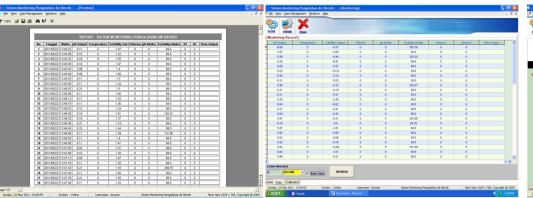
- Windows Based
- Graphic User Interface
- Database dapat dikembangkan dengan mudah sewaktu-waktu jika diperlukan
- Data-data pengukuran dapat diexport dalam bentuk Pelaporan Harian, Mingguan, Bulanan, Tahunan dengan format Microsoft Excel secara otomatis
- Display/Tampilan dapat disesuaikan dengan kebutuhan di lapangan sehingga menyerupai kondisi sebenamya
- Pengambilan data secara realtime monitoring yang dapat disetting sesuai kebutuhan
- System Remote Monitoring melalui Internet (Web Based System) dan Android

Data Recorder Unit (DRU) & Sensor

Calibration Value Record & Monitoring

Data Monitoring Record

Data Monitoring Report





PROFILE

BILLING & MONITORING



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Data Recorder Unit (DRU) & Sensor

- 8 Analog Input
- 8 Digital Input
- Microprocessor based system
- RS485 Communication
- Power Supply 12 Volt DC
- Realtime Monitoring

- pH Sensor

Range: 0-14 pH Accuracy: 2% of full scale Operating rating 0-100 psi

- Temperature Sensor

Range: -50°C to +50°C Accuracy: +/-0,1°C

- Dissolved Oxygen 0.00 to 20.00mg/L

0.00 to 20.00m

- Turbidity Sensor

Range: 0-50 NTU & 0-20.000 NTU Accuracy: 2 % of full scale

- Conductivity Electric Sensor 0.00 to 10.00S/m

- Salinity Sensor 0.00 to 4.00% 0.0 to 40.0%(air payau)
- Level Air Sensor
- Sensor lain sesuai kebutuhan

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COMPANY **PROFILE**

High Quality, yet Cost Friendly

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Clear Water Processing

	CONVENTIONAL	OURS
CAPEX	More civil works	More ME works
	More space	Less space (can be stacked up)
	More time to construct	Modular availability
		Less construction time
OPEX	More chemical	Less Chemical
	Poor quality due to low filtration	High quality end products due to Filtration Microfiltration
	Sedimentation requires more than 4 hours	Hydrocyclone to speed up sedimentation (< 2 minutes)
	Low efficiency due to slow processing time	Efficiency improves significantly (+/- 50 x more efficient)
	Less imported products	More imported components (especially filters)

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Work Experience

- Pengolahan Air Bersih di PT. Pertamina TBBM Gede Bage
- Pengolahan Air Payau di PT. Pertamina TBBM Tanjung Priok
- Pengolahan Air Limbah di PT. Pertamina TBBM Panjang Lampung
- Pengolahan Air Laut Jadi Air Bersih di PT. Pertamina TBBM Sambu
- Pengolahan Air Limbah Jadi Layak Buang (+) Air Proses di PT. Panasonic
- Pengolahan Air Bersih di PT. Pertamina TBBM Merak
- Pengolahan Air Bersih di PT. Pertamina TBBM Kertapati Palembang
- Pengolahan Air Minum di PT. Pupuk Kujang
- Pengolahan Air Bersih di PT. Pertamina TBBM Sekong
- Pengolahan Air Limbah di PT. UTC Pindad
- Renovasi Gedung UTC Bandung
- Pengerjaan Pembangunan Gudang di UTC Bandung
- Pengerjaan Jalan di UTC Bandung
- Pemasangan Instalasi Listrik di UTC Bandung
- Pengerjaan Renovasi Gedung Pabrik di Pupuk Kujang Cikampek
- Pengolahan Air Bersih di PT. Pertamina Tanjung Gerem
- Waste Water Treatment
- PT.Sarana Inti Pertiwi, bergerak di bidang supply fresh water utk penduduk di Muara baru, dan Tempat Pelelangan ikan Muara Baru. DII.
- RS.Kordinha Medica di Ciawi Tasikmalaya (on progress)
- PT.Pertamina Region I, Sumatera. Di Pulau Sambu Batam (SPK,tgl 7 maret 2011).
- PT.Panasonic, Jl.Raya Bogor KM 29, Jakarta.
- PT Pertamina Panjang, Bandar Lampung



TBBM Tanjung Priok

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COMPANY **PROFILE**

TBBM Tanjung Priok



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