

Advantages & Benefits

- ✓ Compact Design & Simpler Construction
 - A totally enclosed re-circulating air system.
- ✓ Easy Installation
 - Installation is simple and can be easily installed with the existing system.
- ✓ Improved Separation
 - Air terminal velocity has been utilized to its highest efficiency. This results in good separation with precision control.
- ✓ Saving of Building Space
 - Compact systems give substantial saving in area required.
- ✓ Lower Capital Cost
 - Eliminates winnowing column, air ducting, external fan, air cyclone and big supporting steel structure. Less building area and less power required.
- ✓ 30% Power Saving
- ✓ Low Maintenance Cost
 - Maintenance is minimum and only occasional cleaning is required.
- ✓ Automation
 - System can be upgraded to automated process with IT technology.

Air Separator

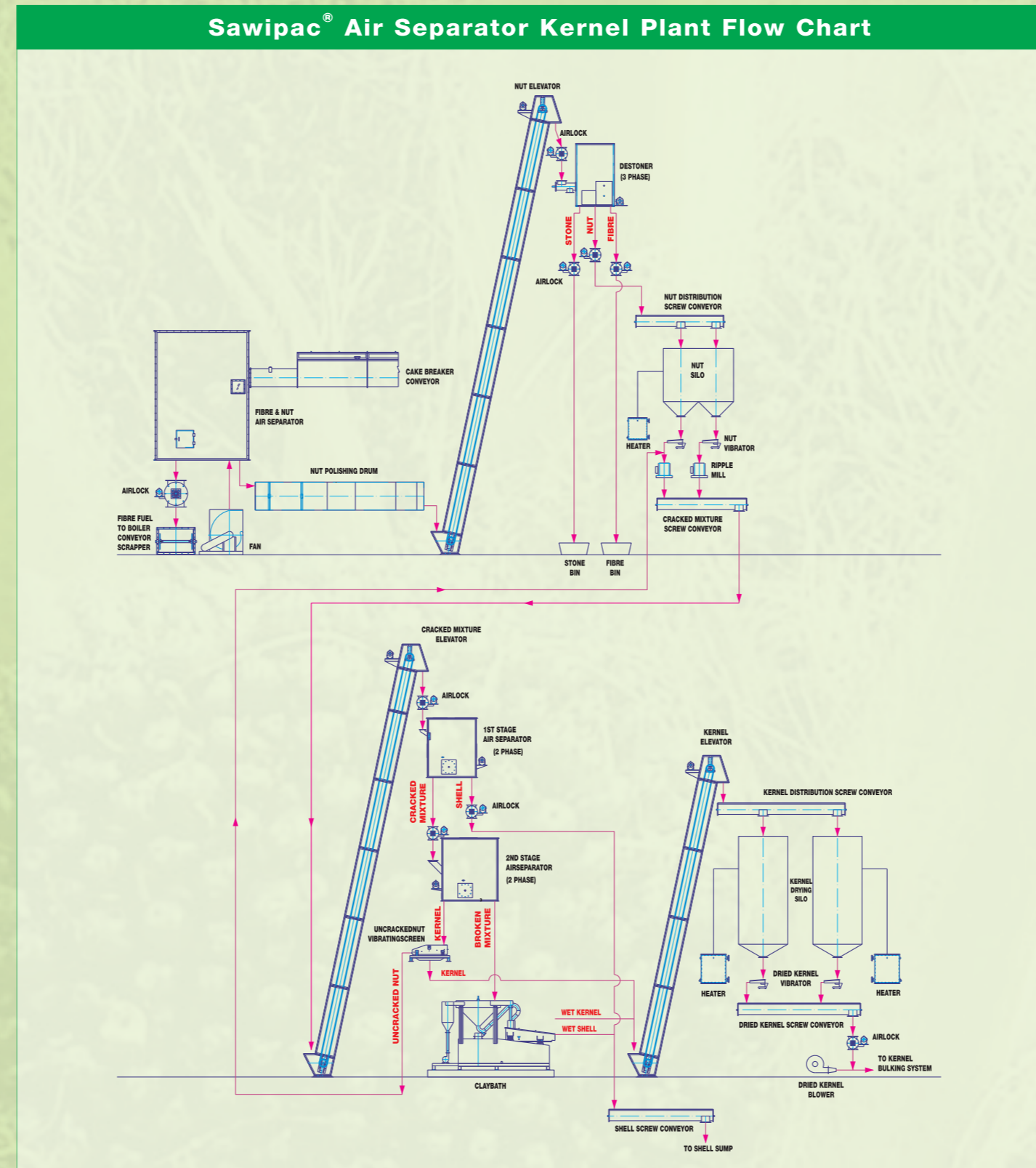
Sawipac®

Innovative Palm Oil Process Solutions

Air Separator

Sawipac® Air Separator is an innovative compact pneumatic separation system for palm oil milling industry. The uniqueness of the two-phase separation system eliminates shell cyclone and kernel loss. The stability of the terminal air velocity of air separator gives precision control where desired result can be achieved easily.

The operating principle of air separator is based on pneumatic air separation. Materials with different bulk density are fed into air separator where heavier and lighter materials are separated. There is no venting of air to the atmosphere for this enclosed re-circulating air system.



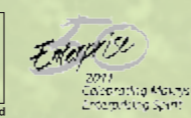
SAWIPAC SDN. BHD.
(405898-D)

Website: www.sawipac.com
Email: info@sawipac.com

Head Office:
Lot 181, Batu 4, Jalan Mersing,
86000 Kluang, Johor Darul Takzim, Malaysia.
Tel: +60-7-7733661 Fax: +60-7-7732661



Sabah Branch:
Lot No. 10, Harapan baru Industrial Estate, Mile 7½, Jalan Labuk,
P.P.M. 258 Elopura, 90000 Sandakan, Sabah, Malaysia.
Tel: +60-89-668669 Fax: +60-89-669669



Air Separator

Fibre / Nut Separation

In the conventional system, the compacted pressed cake discharged from the screw press is conveyed by a cake breaker conveyor to the depericarper column. The cake breaker conveyor will loosen the compacted pressed cake, and nuts and fibre are separated in the depericarper column by induced air current from a depericarper fan. The separated nuts and fibre are discharged to nut polishing drum and fibre cyclone respectively.



Mesocrap Fibre from Press



With Sawipac® Air Separator, pressed cakes from the cake breaker conveyor are fed to the air separator where fibre and nuts are separated within the separator box.



Nut to Polishing Drum



Fibre after Cyclone

Technical Specifications & Details

No	Model	Capacity FFB (Ton/hr)	Motor (kW)	Overall Dimension (H x L x W)	Application	Separation	
						Nut	Fibre
1	SAS-F7-75	60	55	14 ft x 10 ft x 8 ft	Fibre/Nut Separation	✓	✓
2	SAS-F7-60	45	45	14 ft x 10 ft x 8 ft	Fibre/Nut Separation	✓	✓

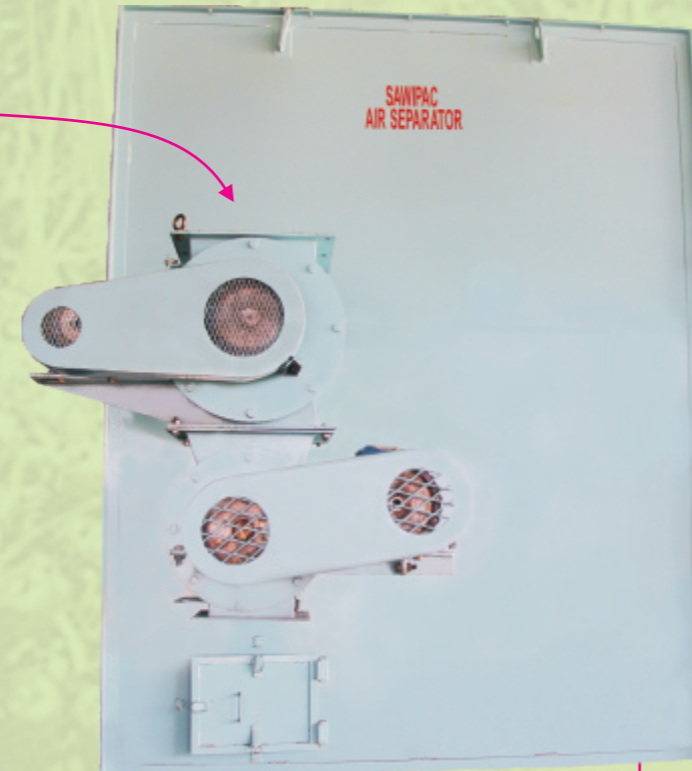
Nut / Stone Separation

In the conventional system, mixture of nuts and stones are conveyed by the nut elevator and fed into the destoner column where an upward flow of air current induced by destoner fan separates the nuts and stones. Nuts are lifted to the nut cyclone and discharged into the nut silo while stones and other heavier materials are discharged through the bottom of the destoner column into a stone bin.

With Sawipac® Air Separator, the destoner separating column, fan and air ducting are eliminated. Mixture of nuts and stones are fed to the air separator to be separated within the separator box.



Nut from Polishing Drum



Stones and Dura Nuts



Nut



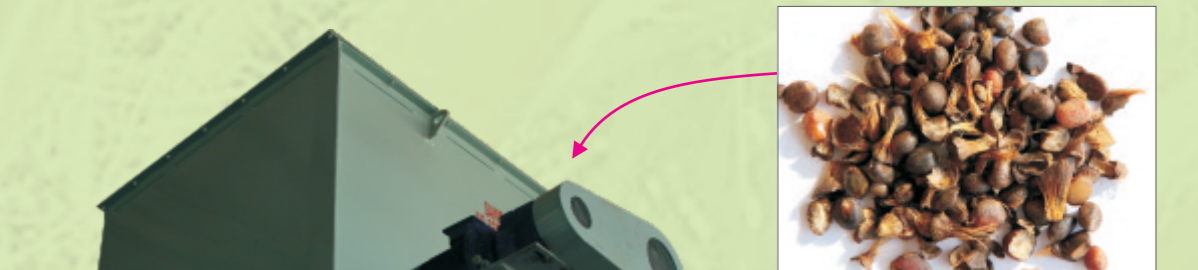
Fibre and Dust

Technical Specifications & Details

No	Model	Capacity FFB (Ton/hr)	Motor (kW)	Overall Dimension (H x L x W)	Application	Separation		
						Stone	Nut	Fibre / Dust
1	SAS-D7-30	60	22	8 ft x 9 ft x 6 ft	3 phase, Nut/Stone Separation	✓	✓	✓
2	SAS-D5-25	60 / 45	18.5	8 ft x 8 ft x 4 ft	2 phase, Nut/Stone Separation	✓	✓	

Cracked Mixture Separation

Sawipac® Air Separator System for cracked mixture separation involves two or three stages of separation. At the first air separator, light shells are separated and conveyed to boiler. At the second air separator, whole kernels are conveyed to kernel silo while small & broken kernels and shells are conveyed to hydro cyclone / claybath for wet separation.



Cracked Mixture after Ripple Mill



Cracked Mixture



Kernel



Light Shell and Dust

Technical Specifications & Details

No	Model	Capacity FFB (Ton/hr)	Motor (kW)	Overall Dimension (H x L x W)	Application	Separation		
						Cracked Mixture	Kernel	Shell / Dust
1	SAS-CM7-25	60	18.5	8 ft x 9 ft x 6 ft	3 phase, Cracked Mixture Separation	✓	✓	✓
2	SAS-CM5-20	60	15	8 ft x 9 ft x 6 ft	2 phase, 1st stage Cracked Mixture Separation	✓		✓
3	SAS-CM5-15	60	11	8 ft x 8 ft x 4 ft	2 phase, 2nd stage Cracked Mixture Separation	✓	✓	
4	SAS-CM5-10	45	7.5	8 ft x 8 ft x 4 ft	2 phase, 2nd stage Cracked Mixture Separation	✓	✓	