



## Kilang Sawit Bukit Bandi ensures minimal downtime in high-volume palm oil processing

Kilang Sawit Bukit Bandi

Case Story

### OER important ...

In the specialist world of processing crude palm oil, one of the key metrics is the Oil Extraction Rate (OER) – how much oil you can get out of any given batch or harvest. The actual equipment is only part of the profitability equation, however.

### ... but uptime even more so

This is one of the reasons why the Kilang Sawit Bukit Bandi palm oil processing mill in Malaysia (part of the Ladang Rakyat Trengganu Sdn Bhd group of companies) has prioritized the multiple benefits available from Alfa Laval Performance Agreements.

“The normal oil loss rate in palm oil processing is 0.8–1.0%, but here at Bukit Bandi we’ve been able to achieve an average oil loss rate of 0.25–0.5%. This is 50% less than the norm, which gives us a big commercial advantage.”

*Mill manager/chief engineer  
Mr Haji Matan Ibrahim*



Intelligent, pro-active service and maintenance can be just as vital a parameter as performance. For Kilang Sawit Bukit Bandi, for example, the entire operation would grind to a halt if the production-critical Alfa Laval decanter centrifuge at the heart of the D3 PRO separation process were to break down. As mill manager/chief engineer Mr Haji Matan Ibrahim points out, “we had only one decanter centrifuge, so we really need it to be in tip-top condition and to keep running all the time.”



Careful investment in the right equipment and maintenance strategy were some of the factors that have helped Kilang Sawit Bukit Bandi achieved the highest OER on the east coast of Peninsula Malaysia.

### 8 years of successful reliability

This is why the mill has also made sure to benefit from the performance and revenue optimization provided by Alfa Laval Performance Agreements that have extended uninterrupted for over 8 years – to date.

As Mr Haji Matan Ibrahim reports, there has hardly been any downtime associated with the Alfa Laval installations since they were first brought on line in 2008. “We have no problems, even though our process is running 24 hours a day, non-stop. For us, the Performance Agreement means hardly any breakdowns – and immediate, prioritized action should they arise,” he explains.

### Prevention better than cure

Key measures of the Alfa Laval Performance Agreements include the exclusive use of OEM parts, strict adherence to a proactive maintenance schedule, privileged discounts on parts and a renter floating unit programme to help keep the customer's production running while any service work takes place.

### Spare parts availability

The effective pre-planning pivotal in Alfa Laval Performance Agreements, also factors in the effective service lives of key parts so that these are made available even before the item needs to be replaced. This contributes still further to the Kilang Sawit Bukit Bandi goal of zero downtime.

### No-surprises advantage, peace-of-mind benefits

For Kilang Sawit Bukit Bandi, this focus on prevention and performance brings significant benefits.

- Easy availability of OEM spare parts that boost performance and extend equipment service life
- Enhanced service life for downstream equipment
- Earlier detection of technical problems keeps repairs to a minimum
- Minimizing wear and tear reduces operating costs
- Pre-agreed annual maintenance costs makes budgeting easier
- Planned schedule of service visits minimizes production interruptions

By reducing or eliminating risk of costly downtime and processing interruptions, Alfa Laval Performance Agreements provide operators with considerably greater peace of mind.

### Multiple practical benefits, big uptime payoffs

According to Mr Che Ku Hafeez, chief executive of Ladang Rakyat Trengganu Sdn Bhd, "If we have any problem, we can liaise directly with the manufacturer. Alfa Laval experts really know what to do, how to repair things and how to deal with the problems. We insist on always going back to Alfa Laval for after-sales service ... because we've proved that it's cheaper in the long run."



The oil room is the heart of a mill, where oil is extracted from raw material.

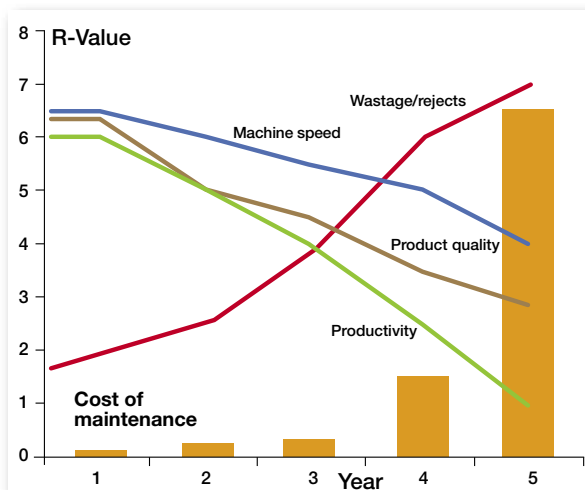
Alfa Laval reserves the right to change specifications without prior notification.

### How to contact Alfa Laval

Up-to-date Alfa Laval contact details for all countries are always available on our website at [www.alfalaval.com](http://www.alfalaval.com)

Alfa Laval Performance Agreements provide the company with other profit-boosting and know-how-building benefits, too. These include special training sessions – both on-site and in the classroom – focused on trouble-shooting and maintenance to give mill personnel professional training. There are also quarterly inspections in which mill personnel take on a hands-on role in assessing the current state of the palm oil processing equipment, alongside Alfa Laval engineers.

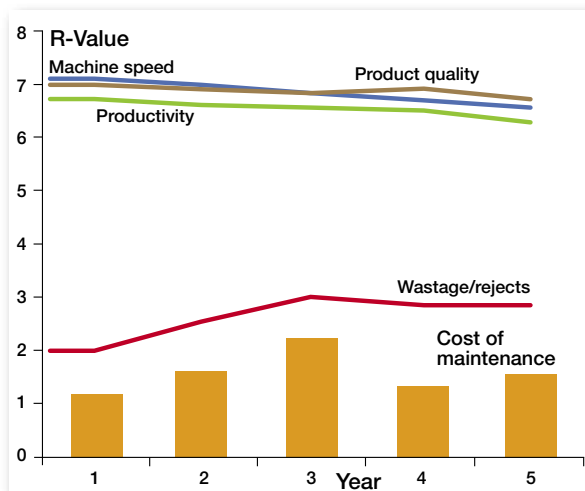
### Run-to-Fail Maintenance



### Unplanned downtime

Losses >30 times higher than the costs of maintenance.

### Planned Maintenance



### Planned maintenance

Early detection and intervention save >20% on maintenance costs.