PPI Awards 2011:
Honors well earned
Although tissue producers usually operate under a veil of secrecy due to the nature of their highly competitive marketplace, openness has always been a hallmark of Cellynne. In the past few years, we have covered the startup of its Haines City, FL, mill and the addition of PM 2 (Pulp & Paper, August 2006, October 2008).

Recently, PPI returned to the Sunshine State to catch up with Cellynne. Jeff Hammonds, paper mill manager, says the mill is performing above the expectations set when the company moved into tissue production after being strictly a converter. The company still has its three converting facilities: Haines City, which is part of the tissue mill complex; Las Vegas, NV; and Green Bay, WI. Some of the Haines City tissue is shipped (inter-modal) to the two out-of-state converting plants.

Cellynne consumes all of its own tissue and still buys some toweling (brown and white) to convert. “Our goal is to ship the same, consistent paper to all of our converting plants,” says Hammonds. “The move into production has fit like a glove.”

A WORKING MODEL FOR OTHERS

Looking back on the startups, Hammonds, who was there for both, says they were “unbelievable. I thought PM 1 was good; PM 2 was even better. Within 28 days, we were at 6,850 ft/min. It really is a working model for people who want to install two paper machines.”

Cellynne purchased the first Metso Advantage DCT-100 tissue machines. The second machine is virtually identical, being the HS model. The general layout is the same with the machines running side by side. Hammonds says the reel on PM 1 was a challenge but by the time it came to install PM 2, Metso had developed many improvements into the design. Metso still provides a lot of service for the machines.

The electronic controls for the reel sections differ. On PM 2, there are a lot of remote I/Os, rather than one large rack.

Cellynne also implemented numerous safety and housekeeping improvements on PM 2. For example, it has a dust collection system. “We push very hard on the housekeeping,” Hammonds says. However, since startup, modifications have been kept to
a minimum; "nothing that takes steel or manpower", notes Hammond.

Total capacity now is 70,000 tons/yr. PM 1 produces mainly towel grades. PM 2 produces tissue in the 9-16 pound basis weight range. The mill uses a 100% virgin pulp furnish: southern hardwood and softwood kraft as well as some South American eucalyptus pulp. There was talk of installing a drinking plant. However, after looking at the options, these plans are in a holding pattern. "We want to see what the waste paper markets will do," explains Hammond. "It's not a high priority now."

One reason for that is Cellyne's market is tending toward the high end and virgin pulp is seen as the way to go. However, the engineering and cost studies have been done in case the company decides to go down the recovered paper route.

**KEEPING A CLOSE EYE ON WATER USE**

One project that is going ahead concerns an issue that has become of great importance worldwide: water. Haines City has built a reclaimed water pipeline. Water usually used for things such as golf course irrigation will be piped to the mill for use as its fresh water. This water is then reclamation from the Haines City effluent treatment plant. Cellyne has been using its wells as its fresh water source. Once the pipeline is operational at the end of 2011, the wells will only be used for things such as boiler makeup water. It should be noted that the mill's water consumption is already quite low, about 2.6 m³/ton including the boiler.

Cellyne runs a relatively closed mill. How have the machines reacted? Hammond points out that they have to be very careful about any chemical addition: "It will stay with you. You just can't flush the system and go. The key to that is running virgin pulp."

As it does not have a pulp mill and water consumption is low, effluent treatment is not an involved process for Cellyne. The mill treats its primary effluent with a DAF system. It is then sent to the Haines City treatment plant. All reclaimed fiber from the DAF is sent back to the hardwood pulp line.

Cellyne has grown tremendously in a short time and its owners are always eager to improve. Still, it may be time to catch its breath. Hammond notes that with its history, there will be new projects but because it grew so fast, it may be time to slow down and "tighten up. We don't want to outgrow our personnel."

There has been one new twist added to the warehouse: a system of automated guided vehicles known as barges. The mill had laser guided vehicles from the beginning but the barges are new. When Cellyne added converting line 14, it knew it would need something to improve conveying product to storage as the line is so fast. The barges are used in the warehouse, but there is potential for them to do more elsewhere in the mill.

To be able to grow so fast means the company is doing something. Production from both machines is sold out. In the last 10 years or so, Cellyne has

**Drives make a difference**

Although Cellyne opted for Metso paper machines, Jedsion Engineering was given the electrical and controls EPC contract for the projects and it chose ABB's model PMC800 for the machines' drive systems. Of particular importance to tissue, the PMC800 application software covers all drive control functions needed for highly coordinated sectional drive controls and optimal web handling. The core of the PMC800 system is the ACS800 product platform for drives and engineered control. The ACS800 industrial drives are designed for maintainability and energy efficiency:

- Fewer module types, one core module type from 250 up to 5,200 kVA
- Bookshelf design with plug-in connectors for fast maintenance
- Advanced self diagnostics
- Small dimensions

The ACS800 liquid cooled drives are designed to reduce the energy consumed in air conditioning and electrical rooms. The temperature in the inverter modules stays stable even with higher load variation, leading to longer equipment life. The direct drive permanent magnet motors, a special application in the standard motor frame, make it possible to reduce mechanical drives. Kevin Metts, E&S superintendent at Cellyne, says the drives are very reliable and thus far, only routine maintenance has been required. "We're afraid of what will happen if they do break down because we have no experience with repairs. Basically, we just forget about them."

The only time there is an issue is when there is a power outage and then the entire mill is out. As Metts explains, Haines City is the "lightning capital" of the world. When service is needed, Metts points out that ABB is quick to respond keeping any downtime to a minimum.
evolved from being a converter for many of the major North American tissue producers. Although it still does some contract converting, the emphasis is on its own tissue.

A BOOM YEAR

David Shapiro is senior vice president, sales and marketing, for Stefco, which is the marketing arm of Cellynne. The away-from-home (AFH) market accounts for about 85% of Cellynne’s tonnage at present. It sells no parent rolls and has to buy about 1,500 tons/yr to supplement what it makes. He would like to see Cellynne’s percentage of at home (AH) products grow to about 20% of its tonnage as recessions hit the AFH market harder. “In the last recession we saw a 5-7% drop in tonnage going to the AFH market.”

Thus far, 2011 has been a “boom year” for Cellynne, according to Shapiro. “Our top lines will show about 20% growth.”

Costs are in control, Shapiro adds, and there is a good balance between supply and demand. Pulp prices are beginning to soften, which is good for a company such as Cellynne that uses a 100% virgin furnish. “The AFH market is usually about 85% recycled,” says Shapiro, “and in 2010 DIP prices were a lot lower than virgin. They are still lower but the gap is closing.”

In the US, Cellynne has about a 3% market share for AFH products. “In the US southeast, which is our marketing focus, our share will be higher,” Shapiro explains. However, he adds, “Our world is becoming more and more national accounts, migrating from regional accounts. We serve seven to 10 national accounts from our three locations.”

With its location in Florida, the cruise lines have been good customers for Cellynne. “They want a high-quality AFH product,” says Shapiro.

Among the product lines are:

Heavenly Soft: towels, facial tissue, napkins and bathroom tissue, all two-ply except for some bathroom tissue.

Heavenly Choice: This is a two-layer product line, bathroom tissue and towel. There are two plies fused into one to create a heavier basis weight one-ply product that can compete with two-ply tissue. It is the company’s most dynamically growing brand.

Confidence: This is proprietary dispensing system for hardwound towel developed by Cellynne to compete with companies such as SCA and Georgia-Pacific. Cellynne has its own dispenser as well. Shapiro notes that portion control dispensing is becoming more important. Cellynne also has developed bathroom tissue and TAD towels in the Confidence brand.

There is ongoing process of product development within the company. The work can be initiated in-house or may come from a customer request. There is a feasibility process any new product must undergo to see if it should go ahead. “Customers have a great appreciation of our products and what we do,” Shapiro says. PPI