Well ahead of the curve in Barton
Starting up in October 2008, the new deink plant and tissue machine in Barton, Alabama are well on their way to full production.

“Perhaps it wasn’t as exciting as the greenfield mill in 2004, but it sure feels good to have a successful start-up,” says Jim Haeffele, Project Director for the expansion project at SCA Tissue’s Barton operations and the company’s VP of Tissue Technology.

Haeffele is talking about the new 350 t/d ANDRITZ deink plant and 5.5 m wide ANDRITZ PrimeLine CrescentFormer tissue machine that have added considerably to the capacity and capabilities of the Barton mill. The USD 145 million expansion boosts production capacity at Barton by 70,000 tons to 180,000 t/a.

“The design is proven, the technology tested, and the ramp-up has been impressive.”

Jim Haeffele, SCA Tissue’s Project Director

“The design is proven, the technology tested, and the ramp-up has been impressive,” Haeffele says. “Sheet formation is perfect, and product quality is excellent.”

Mark Phiscator, VP of Engineering and Maintenance, adds that the mill is “way ahead of the start-up curve. The production line is beating plan by about 20% per month. We’re almost double where we planned to be in terms of efficiencies.”

Filling a void
When Barton first opened, it was SCA’s first full-scale greenfield paper mill start-up in the world (see the story “From cotton field to greenfield” in FiberSpectrum Issue 2-2005). The Barton operations were home to PM12 – the first ANDRITZ PrimeLine tissue machine in North America. PM12 produces heavier toweling and dispenser-type napkins from 17-53 gsm. Trim is 5.5 m and top machine speed is about 1800 m/min.

“We are very pleased with the start-up and performance of PM12,” says Phiscator. “We didn’t have to travel very far to get a good reference for ANDRITZ.”

According to Marty Ferguson, SCA Tissue’s Operations Director for the Southeast, the new PM14 “fills a void” in SCA Tissue North America’s Tork® brand tissue and two-ply dinner napkin products. We can now produce about 95% of our products in-house, close to our customers.”

Marty Ferguson, SCA Tissue’s Operations Director for the Southeast

“PM14 fills a void in our lightweight Tork® brand tissue and two-ply dinner napkin products. We can now produce about 95% of our products in-house, close to our customers.”

America’s Tork® brand tissue and two-ply dinner napkins in the 14-25 gsm range. “The driving force was that we had a 70,000 t/a shortfall in lightweight tissue production,” Ferguson says. “We were purchasing a high percentage of parent rolls and wanted to become more balanced between paper-making and converting. PM14 is part of our closer-to-the-customer strategy. We can now produce about 95% of our products in-house. We are basically running to order now. This helps us optimize our scheduling, keeping inventories low while increasing our service level.”

Following the plan
“The main justification was to improve our ability to support our customers in the Southeast. The Board approval for the project came in February 2007, construction began in August 2007, and the machine started up in October 2008.”

Actually, the new production line was planned for from day one, says Phiscator. “The PM14 project followed the same basic design philosophy as for PM12,” he says.

“From the outset, this mill was designed for expansion. Extra piping tees, tie-ins, lines, etc. were installed so that new equipment and systems could be added.”

The overall design for PM14 follows that of the existing line in that the deink plant and tissue machine are considered as one unit. “PM12 has its own deink plant and tissue machine, and one team runs the entire operation,” Phiscator says. “We did exactly the same thing for PM14.”

Andy Chorney of SCA Tissue took the mechanical lead on the project team. “We spent time up-front to get this right,” Chorney says. “The project took 18 months from engineering to start-up. In the project business, time costs money. The sooner we get the machine producing revenue for us, the better we are.”

Chorney was pleased with the transition from engineering drawings to reality. “Everything looks good on paper,” he says. “It’s not until you get into the field that you see how good your design really is. In this case, we are very pleased with the design.”

Mark Phiscator, SCA Tissue’s Vice President of Engineering and Maintenance

“Nothing is perfect. I say that as a high compliment.”

Mark Phiscator, SCA Tissue’s Vice President of Engineering and Maintenance

“From the outset, this mill was designed for expansion. Extra piping tees, tie-ins, lines, etc. were installed so that new equipment and systems could be added.”

The overall design for PM14 follows that of the existing line in that the deink plant and tissue machine are considered as one unit. “PM12 has its own deink plant and tissue machine, and one team runs the entire operation,” Phiscator says. “We did exactly the same thing for PM14.”
“The quality of wastepaper is a moving target. Wastepaper today is more contaminated and the adhesives are more troublesome.”

Tony Epie, Assistant Superintendent

“The ANDRITZ Mixed Office Waste (MOW) DIP system for SCA Barton is rated for 350 bdst/d production for PM14. In the first loop, accepts from the FibreFlow® drum pulper go through two stages of high density flotation and two stages of forward cleaners and three-stage fines cleaning. The second loop is the bleaching loop, which has flotation and two stages of bleaching.

Sarah Freeman, SCA’s Assistant Superintendent for PM14