Tech Update — Debarkers

By Tony Kryzanowski

Nicholson
As a leader in ring debarker technology since 1948, Nicholson has built its reputation on constant innovation, performance, quality, service support and long-term business relationships. Customers worldwide demand debarkers that deliver the highest debarking quality, with minimal fibre loss, high uptime, ease of maintenance and long-term durability. Nicholson delivers all of these benefits and more via innovative machine design, quality of manufacture and state-of-the-art control technology, backed up by 24/7 service and parts support.

The Nicholson A8 debarker is recognized within the industry as one of the most technically advanced high speed ring debarkers available. Operating in both single ring and tandem ring formats, the A8 offers exceptional debarking performance at high speeds under the most demanding conditions.

The Nicholson A6 sliding ring debarker provides optimum debarking quality at medium feedspeeds. This rugged, low maintenance machine protects valuable wood fibre and provides a quick return on investment through optimum fibre savings. www.nmwa.com

USNR
USNR manufactures three types of ring debarkers that can be fully customized with single, double or triple rotor configurations to accommodate various log diameters and feed speeds.

USNR’s design enhancements to the widely popular Cambio debarker have dramatically improved its performance. USNR also makes two other models: the MV debarker, a modular, high performance machine derived from the original Cambio technology; and the HS-Series high-speed debarker, designed to meet the needs of high production mills. Both the MV and HS series debarkers offer advantages in throughput and performance over the Cambio, while the Cambio remains a popular and economical choice for many operations. USNR offers new and rebuilt rotors for Cambio-style debarkers that can accommodate a variety of tool tensioning systems including spider, hydraulic, and air-bag tensioning. All are available on new USNR debarkers or as upgrade kits for Cambio-style debarkers made by other manufacturers. USNR also manufactures high quality replacement parts for all of its products. www.usnr.com
Peterson
The Peterson model 4800-E multiple log delimber/debarker is designed to be used in tandem with whole tree chippers to produce high quality pulp chips. It utilizes innovations such as a patented floating upper flail, adjustable feed and flail speeds, and hydrostatic flail drive. The 4800-E can produce 40 to 60 US tons per hour with a bark content of less than one per cent. Capable of simultaneously processing logs from 2” to 23” diameter, this machine increases productivity while reducing bark content, product handling time and fibre loss.

With a proven track record, this third generation design outperforms its competition by accepting a wider variety of wood sizes and shapes, requires less fuel per hour, less working space, operates with lower chain costs, and increases fibre yields by as much as 25 per cent per acre, says the company. www.petersoncorp.com

Acrowood
High capacity debarking and chipping plants are processing beetle-killed lodgepole pine with Acrowood’s DEAL rotary debarking technology in the side discharge format. The live-floor, open-bottom design provides gentle stem rotation and avoids tearing apart split stems. At the same time, the bark removal process meets or exceeds cleanliness target levels.

Acrowood DEAL PocketRotaries are available with either a mechanical electric side discharge gate or a hydraulic arrangement. The mechanical approach uses an over-centre arm design to hold the gate closed during the debarking process. The debarker design includes curved upper and lower finger plates, which enhance stem rotation in heavily loaded machines. Tip profiles have been updated, improving bark bruising by each abrader block. The new tip profiles increase debarker capacity and extend abrader life, reducing maintenance requirements and frequency. www.acrowood.com

Price LogPro
Price LogPro is a worldwide leader in log handling systems servicing the forest products industry and bio-fuels industry. The company released its first rubber tire drum debarker system in 1982 and now has over 100 drum debarker systems in operation worldwide today.

Price LogPro has developed a number of new products due to the ever increasing desire to better utilize small wood diameters for fuel, lumber and engineered wood products. The company’s urban recovery wood drum debarking systems are specifically designed to debark and process waste wood for the bio-fuels industry.
In addition to its full line of material handling systems from transfers to screening, Price LogPro also offers optimized merchandising systems and rotary log cranes. www.pricelogpro.com

**Johnson Innovations**
The Johnson debarker arm consists of a patented lip on the side of the arm. The result is better log engagement, better penetration control into the log during the debarking process, better bark removal and the fibre remains untouched. The arm involves using less pressure due to the sharp debarking tip edge, and the engaged log never hits the side of the tips due to the patented lip on the engaging side of the arm. Johnson tips are truly used on four sides. www.johnsoninnovations.com

**Morbark**
Morbark offers a number of debarker options and configurations. Among them is the 640 debarker, which can handle material from 6” to 40” in diameter and handle production at up to 100 lineal ft/min.

The 640 comes with a 25’ trough-type infeed conveyor with track type chain and hydraulic drive, as well as a 25’ trough-type outfeed conveyor with WD-110 chain, hydraulic drive and one set of manually operated three-arm kickers. Options include additional three-arm manual kickers, four-arm manual with dual cylinders, or additional four-arm manual kickers. The front yoke can be set at 10 degrees or 16 degrees.

It has a hydraulic shoe for bark removal depth, the hydraulic top wheel and backwheel are adjustable to the log diameter, the hydraulic spiral can be controlled for debarker speed, and it comes equipped with a table lock assembly. www.morbark.com

**Brunette**
Brunette Industries’ Kodiak debarker represents the convergence of decades of manufacturing experience and research with the latest emerging technologies. The result is unsurpassed high-speed debarking with high uptime, says the company. High uptime is possible because the Kodiak is built to withstand the abuse that comes with a demanding job like debarking. Extra heavy-duty construction means breakdowns are a thing of the past, according to Brunette Industries. As well, any time spent on maintenance is minimal thanks to carefully thought-out features that allow safe and simple accessibility to key components.

Brunette Industries can provide a Kodiak debarker in a size and configuration to suit any application: 17”, 22”, 27”, 32”, 36”, single or dual rotor, optional self-centring infeed conveyor, optional butt reducing rotor, and OSB. www.brunetteindustries.com
DK-Spec
Production can be increased without compromising debarking quality with the DK-Spec TimberFox debarker with its double rotor (reversed) with 400 ft/min speed. Two reversed rotors reduce torsion created by the first rotor, which requires less force to maintain the log in place, improving debarking and equipment resistance. This special design allows effective debarking of frozen, dry or burnt wood.

With the two debarking rings being closer together, the TimberFox has the advantage of processing logs as small as 6' in length. And this configuration can be installed in the same parameters as a conventional debarker with guide rolls. The mechanical performance is a key factor of this success. The new electric drive feed roll technology (two-year warranty), an improved extra heavy duty link arm, a better tensioning system, an improved rotor, and an air bag concept make this debarker an industry leader, says the company. www.dkspec.com

Savico
Savico’s distinctive line of specialized rotor-action debarkers includes models with lengths of 20’, 30’, 40’, 60’, 80’ and 90’. The three rotor designs and patented abraders provide higher production with low fibre loss, says the company. They are designed to process wood of all species, shapes, forms and sizes, and are said to perform outstandingly well with eucalyptus and frozen logs. Savico’s rotor-action debarkers are ideal for softwoods and hardwoods and all types of birch. They operate at .05 per cent fibre loss and .05 per cent bark retention. They feature robust and heavy-duty construction, and are also modular, so the system can be expanded easily. The company says the debarkers have the lowest maintenance cost in the marketplace.

Adding to the company’s line, a new yard cleaning model was recently introduced specifically designed to remove bark and separate rocks and dirt. www.savico.com