

## BIG MACHINE DREAMS

## DESIGNING FORESTRY EQUIPMENT

Nicholas Johnson, a Minnesotan born and raised in Long Prairie on a small hobby farm, was interested in engineering as early as the seventh grade.

“Initially, I thought I might grow up to be a carpenter. I was good in math and had an aptitude for building things, but even then others knew that engineering would definitely be my niche.”

Johnson chose to attend North Dakota State University (NDSU) – “a small campus with much to offer,” he says. After classes and study hours took the biggest bite out of a college day, life was crammed with other activities. He played volleyball, basketball, co-chaired homecoming activities, clerked the library circulation desk, and was actively involved in the ASABE student branch.

Throughout four undergraduate years, Johnson never had any doubts about pursuing his career aspiration. Even when the dean of engineering warned that only one in two students make it through the program, Johnson had no second thoughts.

“Once you get through the general classes, it gets very interesting ... very intriguing. Looking back, I think Machine Design was my most beneficial course. I still use the concepts learned and pull the textbook off my shelf at least once a week at work. There is light at the end of the classroom tunnel: nearly 100 percent of those in NDSU’s agricultural and biosystems engineering program have a job related to their major within one year of graduation.”

### “Never underestimate the résumé ... Patience and perseverance pay off ...”

When the Vice President of Engineering for Blount International’s Forestry and Industrial Equipment Division (FIED) contacted NDSU’s agricultural department chair casting for candidates for prime job openings, Johnson set a future goal. He enrolled in a cover-letter/résumé writing class to hone his job-search skills – and “how I look on paper” – to put his best foot forward and, hopefully, in Blount’s door.

“Never underestimate the résumé! I had a phone interview and was invited for an on-site look-see. I was encouraged, because I had driven my classes toward hydraulics and mechanical structure.”

Patience and perseverance pay off. Today, Johnson’s career is project-driven with “fatigue life” and “finite element analysis” being a few of his key, workday words.

Employed within Blount’s FIED, Johnson can explain in excited detail the intricacies of feller-bunchers (equipment that, as the name implies, fells large trees and bunches them).

Settled in Owatonna, Minn., Johnson focuses his creative engineering and number-crunching skills on timber harvesting and processing equipment.

“It’s suited for full-tree or cut-to-length logging with an eye on environmental impact. The goal is always to leave smaller footprints in the woods,” he says. “And that’s a big order considering the size of our equipment, easily weighing 40,000 to 80,000 pounds. They are easy to maneuver, however, as they are controlled by pilot-operated hydraulics.”

At the end of the day, when Johnson leaves his desk and drawing board, he tackles hands-on projects on his recently purchased home. He putters around on nearby golf courses, too. And living near a river provides him with relaxing after-twilight hours, sitting on a sand bar, catfishing.

“It’s so peaceful to get on the river around 9 p.m., pull out the monster hooks, and wait. You get a hit, the line goes, and there’s a 50-pounder waiting to have his picture taken!” Johnson snaps a digital memory, releases, and sends the fish on its way. Patience and perseverance pay off.

And that’s his advice to those seeking a niche, a dream, a position with a good company: patience and perseverance.

“Be persistent in building a résumé with solid coursework and some extracurriculars. Get an internship – even if it’s just for a summer – to get that all-important on-the-job training on your résumé. Then, set a goal. You’ve got to like what you do and who you’re working with.”

Johnson, at this career juncture, has set two five-year goals for himself: “to get my PE and an MBA.” No doubt he’ll achieve these objectives. Because patience and perseverance — Johnson knows the drill — pay off.



Nick Johnson grabs a seat on one of Blount International’s market-leading brands of forestry equipment, Prentice.