

TOOLING AROUND

By **John Lowrey**

Ergonomic designs that help prevent worker injury and “wear and tear” headline the latest generation of hand tools

To ease strain on employee knees, shoulders, hands, and elbows while improving safety and productivity, an “ergonomic revolution” has taken place in line work over the past few decades. While climbing poles remains a key part of the job, many assignments today take place from within a bucket.

In the same vein, basic line tools—some sporting the same design for 70 years—have seen big changes as well, switching first to hydraulics and now batteries to replace old-fashioned muscle power.

Kevin Bunn, manager of materials & purchasing for Cass County Electric Cooperative in Kindred, N.D., works directly with lineworkers and line superintendents at his co-op on tool-buying decisions.

“Employee input is highly valued,” he remarks. “We try to send our employees to trade and equipment shows so they can see the different devices available. They bring back ideas and suggestions, which are factored into our budgeting and selection process.”

Popular items at Cass County Electric include battery-powered compression hand tools from Anderson Tools and DeWalt, and voltage indicators from A.B. Chance.

“Battery-powered compression helps prevent repetitive motion injuries and is easier to use in tight spaces,” Bunn comments. “The voltage indicator makes it easy to check if voltage is present but doesn’t relieve the responsibility for proper grounding.”

Compression tools do have a few problems, reports Bunn. “The hydraulics are made

by Huskie, and the case and head are made by Anderson. We’ve encountered some problems with air getting into the hydraulic system. To fix it, Huskie has recommended we switch to an aviation hydraulic fluid. Our repair shop, meanwhile, is trying some new ways to bleed the tools when they’re repaired.”

Brad Schmidt, Cass County Electric senior vice president of transmission & distribution services, points to another lineworker favorite: an 18-V DeWalt battery-powered tool set. “We use the cordless drill on things like meter socket and loop installations. The Sawzall works well on PVC and underground conduits. And the impact wrench includes variable torque, making it great for removing or tightening bolts.”

At Oklahoma Electric Cooperative, Randy Simmons, operations manager for the Norman, Okla.-based distribution system, indicates: “Our line crews use Huskie crimping tools and a hydraulic impact wrench from Greenlee/Fairmont that makes quick connections in the bucket or on the back of the truck. Two new additions that have earned praise include a hydraulic ground rod driver from Greenlee/Fairmont and a stick chainsaw that provides a lot of reach when trimming trees.”

Testing has become even more critical for insulated tools such as hot sticks and rubber gloves. As a former lineman, Chris Benti, senior tool specialist for Hi-Line Utility Supply Co. (hilineco.com), emphasizes that “having everyone return home safely is what it’s all about.”

Hi-Line Utility Supply Co. services all of its tools at an in-house repair facility. “We also maintain testing labs for fiberglass restoration, ground and jumper assemblies, and state-of-the-art rubber goods,” stresses Benti.

Jerry Olson, vice president of marketing & sales for Salisbury (whsalisbury.com)—which supplies nearly 80 percent of the insulating rubber gloves used by electric co-ops—argues that in addition to daily inspections,

rubber gloves should be tested after any incident that could reasonably be suspected of having caused damage.

“We offer portable and stationary glove inflators that can assist with inspection,” he says. “A two-color glove option helps find problem areas easier. The inner color is easily seen from the outside when a puncture or tear occurs.”

Lane Electric Cooperative, based in Eugene, Ore., field-tests all new tools up front, explains General Manager Rick Crinklaw. “When a need is identified, we request a loaner or demo model that our employees can use under actual conditions. How it performs influences our purchasing decision.”

When choosing a vendor as part of Lane Electric’s “tool team,” Crinklaw places importance on reliability and rapid post-purchase service capabilities. “Tools are used in a demanding environment and must stand up well. Once deployed, we need to revise work practices. Consequently, when a tool needs to be serviced or repaired, quick turn-around becomes critical.”

At the end of the day, Crinklaw sees new battery and hydraulic tools helping to improve safety, efficiency, and productivity.

“They have reduced injuries, resulting in fewer lost work days, reduced medical premiums, and lowered workers’ compensation insurance costs,” he concludes. ■