Packin’ a punch

Manufacturers talk about what makes their hand-held and backpack equipment so powerful

How do manufacturers of hand-held/backpack equipment turn their small, two-cycle engine products into virtual powerhouses that are expected to meet stringent clean air regulations and be quieter, more ergonomically correct and safer to use? And why do some hand-held tools seem to fit like a glove while others cause operator fatigue and blistering skin? We wondered about that, too, and decided to go right to the leading manufacturers of these products to find out the answers to all our questions.

PHOTO COURTESY STILES LANDSCAPE COMPANY
CHAPIN MANUFACTURING
Greg Condon, Vice President

Hand-held/backpack equipment: Hand-held compressed air sprayers available in 1-, 2- or 3-gal. sizes.

Product design trends: "We've developed some poly sprayers with an extra wide mouth for easier filling and cleaning and less spill, contamination and germinal contact. We've also developed a sprayer with a filter inside that rests towards the bottom of the tank instead of near the nozzle where contaminants can get trapped. Ours is a self-cleaning filtration system that's not entrapped in a tube or canister but floating in an ocean of floating solutions. When you stop spraying, it never gets plugged."

Safety/training: "We'd like to see the industry move to pre-packaged materials requiring a lower level of training for the applicant. This would prevent the operator from over-applying or underapplying and protect him from dermal contact when trying to mix chemicals. There's also a need to redesign packaging for chemicals. We urge operators to wear protective apparel and read the instructions on every product prior to use. The most important thing to do when handling this equipment is to wear protective eye gear."

Purchasing/financing: "We're in a cost-competitive area — we have products that are already cheaper than commercial products in the turf area. You can spend a little more and have it last for years. Most specify a commercial buying grade and will pay more for those better hoses, brass nozzles and metal shut-offs."

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John Deere
Charlie Durand, Manager of Sales & Training/Portable Power Equipment

Hand-held/backpack equipment products: Chain saws, trimmers, edgers and blowers.

Product design trends: “Products that meet or exceed EPA’s CARB/Tier II low-emissions standards and reduce noise pollution are two key areas being pushed to the forefront. In our small-engine designs, emissions are lowered because of the elimination of an unburned fuel charge during the two-cycle engine’s exhaust stroke. With our ecoPOWER engines, which reduce emissions on most of our trimmers, brush cutters and blowers, we address noise levels on these products as well. Two-cycle equipment has become more reliable over the last several years with electronic ignition and lifetime warranties on ignitions and shafts. Ergonomics is another important feature we have to address. Commercial end users are looking for more powerful, lighter units than they’ve had in the past.”

Training/safety: “We have to meet strict ANSI standards in this country and around the world. We have programs/manuals addressing customer safety. We also conduct bilingual safety seminars at our dealerships.”

Purchasing/financing: “Most contractors will take advantage of their dealer’s credit or lease programs. I don’t see a lot of contractors going to the ‘big-box’ stores for purchases. The market trend is professionals remaining with dealers to get their products serviced properly.”

Husqvarna
Ken Taylor, Business Unit Manager for commercial lawn & garden

Hand-held/backpack products: Blowers, brush cutters, chain saws, edgers, hedge trimmers, pruning/hand-planting and digging tools, power brooms, trimmers, equipment storage racks and safety wear.

Product design trends: “Noise, emissions, overall environmental concerns, ergonomics and safety are important in designing products to meet end users needs. In our E-tech technology, the ‘E’ stands for engineering, ergonomics, efficiency and economy. The Husqvarna E-tech uses a combination of features to reduce certain harmful exhaust emissions and the smoke and odors associated with them without sacrificing fuel economy and power. In regard to ergonomics, providing solutions that reduce operator fatigue and enhance overall performance are our benchmarks. Being a Swedish company, we’re all too well aware of mandated European designs, many of which were introduced by Husqvarna.”

Training/Safety: “We are the sponsor of Chain Saw Safety Awareness Month — but our efforts on safety go beyond chain saws. Safety means safety training (which we’re actively involved in through trade associations and a support staff of end user experts), safety apparel and safety features like our inertia chain brake and ergonomic design to reduce operator fatigue. Retaining/finding qualified help is one of the key challenges facing employers.”

Purchasing/financing: “We offer four ways to assist our retailers in serving the commercial customer. Cash is always ‘king,’ but our retailers offer revolving charge plans and extended financing and leasing programs supported by Husqvarna to assist them in making the purchase process simple.”

Lesco
Pete Thompson, senior product manager for equipment

Hand-held/backpack equipment: Hand-held power products such as string trimmers, hand edgers, hedge trimmers and backpack blowers made by Kawasaki.

Product design trends: “Everyone is concerned with emissions and meeting the EPA’s CARB Tier II requirements. Our products meet or exceed regulations for continued on page 67

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Training/safety: “Over the last several years, we’ve packaged safety goggles/shields with our products. To help prevent injuries, we also ensure all our packaging is properly labeled so there is no misunderstanding when it comes to the right way to use these products.”

Purchasing/financing: “We know that people purchase equipment on an annual basis. Better-built equipment will last more than one season, and products that can be rebuilt instead of replaced may last two to three seasons. Durability is becoming a factor now because contractors usage is up. From our standpoint, a large percentage of our customers are buying with credit, but that’s also based on the size of the contractor’s business and how long they’ve been in business.”

LITTLE WONDER (SCHILLER-PFEIFFER, INC.)
David Navroth, Director of Sales
Hand-held/backpack products: Walk-behind blowers, edgers, gas/electric hedge trimmers.

Product design trends: “Our high-output series blowers feature reduced dBA ratings but more air output over prior models. Our hand-held edgers have a two-cycle vs. a four-cycle engine. Our newest edger is powered by a 34cc two-cycle engine and is designed for less operator fatigue. In addition, fully enclosed blade guards keep debris directed toward the ground. Our hedge trimmers have reduced weight and increased blade speed.”

Safety/training: “All Little Wonder equipment is submitted to multiple European safety standard companies for review. Our goal is to meet or surpass all European safety standards (because in our opinion they are much tougher than the USA safety standards). We are also producing our owner’s manuals in three different languages to improve operator knowledge.”

Purchasing/financing: “It appears the current trend is professional landscapers purchasing their equipment on credit. There are many retail finance companies for the dealer to offer to his customer. In addition, Visa and MasterCard are accepted at all dealers and mass merchant locations. Even if a landscaper purchases his equipment at a mass merchant (i.e. Home Depot), the servicing dealer is there to service that equipment.”

MARUYAMA
John Krueger, Marketing Manager
Hand-held/back products: Blowers, brush cutters, edgers, hedge trimmers, sprayers and trimmers.

Product design trends: “The key issue today and in the near future is EPA standards. Noise reduction is an issue in California, but in other parts of the country where noise really isn’t an issue, contractors want bigger blowers and more power.”

Safety/training: “We provide the information and hope it’s being passed on to users. Safety goggles are important. Hedge trimmers can be especially dangerous if improperly used.”

Purchasing/financing: “Price is an issue with consumers, but we market from the standpoint of, ‘Pay a little bit more and get a much better commercial grade piece of equipment that will last more than one season with the proper care.’”

REDMAX
Tommy Tanaka, Engineer
Hand-held/backpack products: Blowers, brush cutters, chain saws, edgers, hedge trimmers.
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trimmers, power brooms, trimmers/edgers.

**Product design trends:** “All our products are designed with operator fatigue in mind. We want a balance of performance, weight, durability and price. Meeting the CARB emissions is also a major priority. For example, we’ve developed a clean air trimmer that meets CARB II and EPA standards without a catalytic converter but with a 25.4 cc, two-cycle Strato-Charged™ Air Head™ engine. Weighing 5% less, the engine uses 35% less fuel and reduces emissions by 73% over previous engines.”

**Safety/training:** “We have safety gear that can only be purchased from a trained dealer who is required to explain how to use all of our equipment he sells. Our manuals are also thorough when it comes to explaining safety.”

**STIHL**

Gary Hardee, National Sales Manager

Hand-held/backpack equipment:
Blowers, brush cutters, chain saws, edgers and pruners, along with a full line of handshears, manual hedge trimmers, long-reach installing devices, trimmers and power brooms.

**Product design trends:** “Our blowers meet all noise regulations and emissions standards. Other design trends include chain saws equipped with a quick change ad- juster that requires no tools and allows the user to keep the chains at the correct tension at all times, and those which feature a triple-activated chain break and low noise; brush cutters with anti-vibration handle bars; edgers with a straight shaft delivering 20% more power to the edger blade; power brooms with a drum width of 23 in. for a quality pass.”

**Safety equipment:** “We offer a variety of protective and cut-resistant apparel including a nine-layer chap. We use a material called ENGTTEX which is fibrous and can be machine washed without losing its protective coating capabilities. To get more landscapers to wear eye and ear protection, this equipment, we introduce a stylish pair of safety sun glasses every two years. Many landscapers don’t like the helmet system, so we’ve developed a face/ear protector that eliminates the need for a helmet and features a wire mesh screen face shield with ear muffs. OSHA is starting to effect this industry more, and many contractors are putting safety items on their bids for contracts.”

**TANAKA**

Jeff Wright, President, North and South American operations

Hand-held/backpack products:
Trimmers, brush cutters, blowers, chain saws, portable and wheeled edgers, hedge trimmers and pruning saws.

**Product design trends:** “All man-

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ufacturers of hand-held, two-cycle products must meet the stringent requirements regarding lower emission levels. Our 'PureFire' low emission, fuel saving engines were originally introduced in California to reduce emissions levels. We discovered that a by-product of the lower emission levels was lower fuel consumption. With current fuel costs at an all-time high, it's important that we reduce landscape contractors' and residential users' total operating costs by reducing their fuel costs.

Training/safety: "The most notable trend is the cohesive effort by manufacturers to create voluntary safety standards for their products. Additionally, manufacturers of premium equipment continue to solicit assistance from the servicing dealer in educating the consumer about product usage hazards and accident prevention. Lastly, the advent of the Internet is helping to educate consumers on proper product use."

Purchasing/financing: "The big box stores and mass merchants are selling high volumes of power equipment. But these facilities don't provide service for these products. When customers need service, they must take their product to a local servicing dealer. It's wrong to think that service isn't an issue! Service is a big concern, especially for the landscape contractor. Downtime costs thousands of dollars in lost revenue."

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