



PREFORMED LINE PRODUCTS 16" WIRE ROPE AUTO-FEED

Quote Q210153-R4 Dated 20 November 2021





PLP WIRE ROPE AUTO FEED SAW:

Overview:

- This revision includes a statistical runoff and training (2-3 days) at Everett and a corresponding reduced on-site start-up by Everett. Pricing also reflects that second tooling set will be purchased with machine (eliminates second set-up and heat treat costs).
- Material/Process cutting parameters:
 - 7.7mm, 9.2mm, 11mm and 13mm diameter wire rope on coils
 - 10-24" cut lengths with +/-0.0625" tolerance desired improving on current +/-0.125"
 - Dry/Wet abrasive cut without dust and mess
- Desire turnkey solution including uncoiling, feeder, saw, cut piece collection
- Quoted prices subject to full engineering review and risk assessment once concepts are refined and scope of supply is roughly determined
- Pricing assumes entire project is purchased. Portions of project could be disaggregated and undertaken on a stand-alone or staged basis, but installation, runoff, project management, programming, and other soft costs would likely be different.
- Everett is open to a fixed-cost engineering phase whereby concepts are further developed and documented prior to a complete approval of all aspects of project by PLP.





SINGLE CUT-PER-CYCLE WITH COMPLETE AUTOMATION









Optional Mist Collector



Standard Coolant Tank/Pump





Optional Filtration System

ADDITIONAL CONCEPT IMAGES



System Layout Options-Right or Left Hand Infeed

ADDITIONAL CONCEPT IMAGES

OBJECTIVES:

- 1. Efficiently cut wire rope to length without operator intervention.
- 2. Leave wire profile round after cut.
- 3. Improve cut tolerance to 1/8" total vs +/-1/8" current tolerance. Note, cycle time and tolerance are likely correlated.
- 4. Run saw continuously until out of blade or out of wire on spool.
- 5. Reduce cycle time per cut and/or improve blade life.
- 6. Gap elimination through electronic start/end of cut detection.
- 7. Free up operator time for other operations/multiple machine tending. Visual/Audible stack light notification for blade change/stock out or fault conditions.



PROPOSED SOLUTION:

- 1. 16" diameter (400mm) blade, 20hp (15kW), hydraulic down-feed, wet cutting abrasive saw integrated with un-coiler (not powered) and 3-roller set, servo/stepper/gearbox driven wire feeder. Dual-grooved rollers are 122mm (4.8") diameter
- 2. Wire infeed guide bushings, dual sided clamping vise, entry/exit tubes, and exit chute similar to existing designs (subject to full review by Everett). One complete set (rolls, feed tubes, and jaws) of tooling for two wire diameters included in base machine price (rolls accommodate two wire sizes)
- 3. Operating Concept: Operator loads new wire spool onto non-motorized uncoiler equipped with an adjustable drag brake. Wire threaded through feeder rolls, size-appropriate infeed tube, and into work vise jaw equipped with size-appropriate wire groove. Feeder roll cam clamps are engaged, machine closed up, vise clamped, and single, initial trim cut to "zero" end of wire is made. Trim piece is removed from machine and discarded. Operator then programs part length, selects wire diameter (to call cut recipe), enters number of pieces desired, and selects "auto" mode. When dual-hand start buttons are pressed, machine actuates feed rollers which pull the programmed length of wire off the spool and advance it through the infeed tube and vise jaws where it is clamped and cut. When end of cut is electronically detected, saw retracts, clamp retracts, and feed process is repeated. Cut piece pushed out of exit tube into customer supplied tub.



PROPOSED SOLUTION (CONT'D):

- 4. Siemens failsafe safety PLC with all appropriate I/O, safety controllers, and HMI for system control. Electrics to IEC standards. Readily available, international brand components fully documented in BOM.
- 5. Complete system risk assessment to ISO12100 conducted with PLP EHS personnel. Safety system design to ISO13849, B11, and EN Machinery Directive.
- 6. User-friendly HMI touch screen provided for entry of draw speed motion profiles (acc/dec/speed rates for length consistency by size of wire/coil), jobs (work length, number of pieces, etc.), cut recopies by wire diameter/material, fault logging, and machine variables.
- 7. Full documentation package provided electronically (PDF) including assembly drawings, electrical/pneumatic schematics, bills-of-materials, and operating instructions.
- 8. Cell operation to be verified at Everett by PLP personnel prior to shipping based on agreed-to criteria.
- 9. PLP to provide safe area for receipt of material. One week installation, start-up, and training assumed to be sufficient.



COMPLETE SYSTEM INVESTMENT:

Item	Qty	Price
16" wet SaferCut® hydraulic down-feed saw, control, pneumatic work holding, and 20HP motor. With automation HMI kit and tooling for two parts	1	\$69,970
Wire un-coiler stand (un-motorized) with adjustable brake, high-accuracy servo/stepper-driven wire feeder, initial set of dual-grooved feed rollers and clamp tooling, mounting and integration, safety enclosure.	1	\$57,990
Additional tooling set consisting of dual-grooved feed rollers (6), clamp tooling (4 jaw inserts), and infeed tubes (2) w/IDs sized for each wire all hardened for wear resistance and longevity. (Pricing based on order with system order)	1	Included
Operations training and statistical runoff for 4 parts @ Everett with PLP personnel (2-3 days), Engr/Programming, Documentation, & Project Mgmt	1	Included
On-Site Commissioning (1 person, 2 days, incl. travel)	1	\$7,040
Everett-based runoff & training, 2 nd tooling set in orderlot price reduction		
Total:		\$135,000



OPTIONS

Item	Quantity	Total Price
Donaldson-Torit MM500 Mist collector (ceiling hung) for wet saw including basic duct work.	1	\$5,610
Carbon filter pack for mist collector (optional for odor)	1	3,740
Paper-bed coolant filtration system (40GPM). Note, each coolant system could handle 2 saws, net of standard coolant system for wet saw (Add \$4,500 for magnetic separator pre-filter)	1	\$7,490
Second saw and material handling system tooled, ordered, and installed concurrently		\$98,840
Second saw and material handling system tooled, ordered, and installed at a later date (subject to material cost differences)		\$110,150



TERMS AND CONDITIONS

- Terms (Incoterms 2010) Free Carrier (FCA), Warren, OH
- **Payment**: 30% down payment to confirm order, 20% upon engineering approval, 40% payment upon written acceptance at Everett and prior to shipping, and the final 10% upon successful installation and startup at customer site, net 30.
- Lead Time to Runoff at Everett Industries is currently 16-26 weeks ARO, subject to prior sale and crazy, global supply chain issues that pop up.



TERMS AND CONDITIONS (CONT'D)

- This offer firm for fifteen (15) days from date of quotation.
- Orders for USA machinery sold FCA, Warren, Ohio, loaded at Everett Industries, LLC, subject to written acceptance by authorized customer personnel. Shipment by dedicated carrier at buyer's risk, loaded at Everett facility, buyer's responsibility thereafter.
- All designs and software are and shall remain proprietary to Everett Industries, LLC.
- **WARRANTY:** Everett warrants that the product sold will meet contract specifications and will be free from defects in materials and workmanship and will possess the characteristics represented in writing by Everett. Claim for breach of the above warranty must be made within twelve (12) months from date of delivery to original user. Upon satisfactory proof of a claim, Everett will, within reasonable time, make any necessary repairs or additions; or, at Everett's option, replace defective parts free of charge. Everett will not allow any charges for repairs or additions, nor will Everett accept products returned for credit unless such action has been authorized by Everett in writing. This warranty is terminated immediately if product is relocated or modified by customer without the prior written approval of Everett.
- DISCLAIMER OF ADDITIONAL WARRANTIES: THE FOREGOING WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING THE WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE WHICH ARE HEREBY DISCLAIMED.
- LIMITATION OF DAMAGES: Repair or replacement of defective parts is buyer's sole and exclusive remedy for any claim against Everett arising hereunder. IN NO EVENT SHALL EVERETT BE LIABLE FOR CONSEQUENTIAL DAMAGES OF ANY NATURE, INCLUDING BUT NOT LIMITED TO ATTORNEY FEES, LOST PROFITS, INCREASED EXPENSES OR ANY COSTS ATTRIBUTABLE TO DELAYS OR NON-DELIVERY, WHETHER BASED ON TORT OR CONTRACT.
- CANCELLATION: Cancellation up to sixty (60) days prior to scheduled shipment billed at Cost plus 20%, later cancellation at full price. Notwithstanding
 anything in the standard Everett or Customer purchase order or Terms and Conditions to the contrary, if Customer cancels an order for this equipment
 at any time up to 60 days prior to scheduled acceptance trials at Everett Industries, as Everett's sole recourse and remedy for such cancellation,
 Customer will pay Everett for its Costs incurred up to the time of such cancellations plus 20%, but in no event in an amount greater than the purchase
 order amount. As used in the previous sentence, "Costs" shall mean all direct purchases, subcontracting costs, and direct labor and labor burden (at
 the rate Everett applies in the normal course of business), in each case directly related to Everett's work under the purchase order on the machine(s),
 and as reasonably documented and delivered to Customer in writing in connection with such cancellation claim. Customer shall have the right to
 audit all such claimed Costs with Everett's cooperation, and Everett and Customer will agree on the final amount of all Costs covered hereby. The
 intent of the aforementioned cancellation charges is to cover the costs incurred and the opportunity costs Everett foregoes in accordance
 herewith. Everett agrees to use its best efforts to mitigate any such costs.

