

Vertical Integration

The combination in one company of two or more stages of production normally operated by separate companies.

Clarté Lighting designs and fabricates our product offering in our studio in Covina, CA. In house design production capabilities allows for cost control, quality control, improved shipping times with no waiting for container ships from oversea to arrive, larger offering of product solutions and the ability to quickly address custom/modify versions of our existing product offering to meet the specifiers exacting application requirements.

All LED optical arrays are 100% extruded aluminum creating optimum thermal management of the CREE LEDs with 100,000+ L70 life and robust durable architectural fixture construction.

VERTICAL CNC MACHINE



HORIZONTAL CNC LATHE MACHINE



Clarté Lighting's 5 scale LED optics have an internal aluminum heat sink and external aluminum housing construction. The heat sink is Clartés own proprietary design to optimize thermal heat dissipation and tooling produced by our vendor in Southern California. The outer PAR8, PAR16, PAR20, PAR30 and PAR38 scale outer sleeve is standard aluminum extruded tube stock produced and stocked in Southern California.

The inner aluminum extruded heat sink and outer aluminum extruded sleeve creates a seamless massive integrated aluminum heat sink.

- Machines inner tube of 5 scale optics to allow for modular erector set assembly of each of the 5 scale optics.

COLD SAW

The inner heat sink is produced and stocked in our facility in Southern California in 8' lengths. The inner heat since and outer tube are cut to a desired length in house. In house cutting allows for custom lengths of the optic to be executed seamless during the production process internally based on a specifier's needs per application.

- Cutting of the internal LED heat sink and external aluminum shroud to any desired length.



VERTICAL MILLING MACHINE

All surface mounted PAR8, PAR16, PAR20, PAR30 and PAR38 scale optics are available with standard or custom stem lengths. The automated milling machine automates the threading process for all 5/8" diameter stem lengths of 42" or shorter.

- Automated stem threading of 42" or less.



LATHE

Custom threaded stem lengths of 43" up to 144" for 5/8" or 1/2" stem diameters for all surface mounted fixtures. Also allows for custom lengths of each of the PAR8, PAR16, PAR20, PAR30 or PAR38 scale optics.

- Custom threaded surface mount fixture stem lengths.
- Custom optics lengths.



3D PROTOTYPE PRINTER

All new fixture part designs are verified quickly and seamlessly with 3D prototype part printer.



3D PRODUCTION PRINTER

The next generation larger capacity and faster 3D printer allows for production of trim less recessed and surface screens creating a unique tapered edge design to reduce installation time and improve visual end result.



AUTOMATED LED PICK AND PLACE

Clarté Lighting utilizes multiple pick and place LED machines to automate the production of LED boards for LED fixture production. CREE LED's are preciously placed on to Clarté Lighting designed and fabricated LED boards with precision automated accuracy, speed and quality in houses to reduce production time, reduce cost and enhance control quality.

In house LED board production provides a greater array of LED color options with fifteen different CCT options on 100% of fixture offering.



LED SOLDER REFLOW OVENS

Reflow ovens cure LED solder to the LEDs once they are placed on LED boards by the pick and place machines.

LED boards designed/fabricated specifically for Clarté Lighting's PAR8, PAR16, PAR20, PAR30 and PAR38 scale fixtures allow for pick and place LED production with oven solder curing 100% in house.

