

ULTRALIGHT

CLEMCO'S New Lightweight System

Operator fatigue, due to wrestling heavyweight hose, coupling, nozzle and holder combinations can now be a thing of the past with this latest innovation from Clemco. Clemco's world-wide involvement with pressure blasting and surface preparation has resulted in another "Profit through Performance" system. From the Urethane jacketed, Silicon Carbide nozzle to the precision nylon nozzle holder to the extra lightweight, flexible "SUPA" hose and supertough nylon couplings, Clemco's Ultralight system is designed for ease of handling and built to LAST! In addition, components of this system fit older Clemco components like a glove so changeover can be gradual as older, heavier, components need replacing.

CLEMCO'S SYSTEM APPROACH

Using components designed to be combined with each other to achieve a specific result assures efficiency.

The Ultralight system is designed to improve operator efficiency by reducing fatigue and equipment efficiency by maintaining the integrity of abrasive flow. Whether using steel shot, walnut shell or the new Polymer Media for stripping high-tech substrates Clemco's Ultralight system is performance and profit designed.



CLEMLITE URETHANE JACKETED NOZZLES Last Longer, Cost Less, Do More!

Highly advanced wear resistant material, coupled with a precisely engineered design and testing by years of use in the field have produced the most important advance in nozzles in the last 15 years. Hexoloy™SA Silicon Carbide alloy is molded into a one piece, sintered, venturi, creating the Clemlite™ liner. This has increased nozzle life by 25% or more while maintaining the same power and abrasive distribution pattern, hallmark of the Clemco venturi.

The materials used to make Clemlite nozzles were selected for maximum impact resistance and minimum weight. These nozzles are more durable and 62% lighter than similar sizes made from other materials. Resiliant Urethane acts as a cushion of insulation between the liner and the Aluminum sleeve. It also acts as an outer jacket able to withstand normal rough handling on the job. The Aluminum sleeve keeps the Clemlite liner firmly seated for maximum security and strength. Clemlite nozzles are available in a variety of sizes and in three mounting bases: 1½" Straight Thread, 50mm Thread and Flanged. The 1½" threaded base is precise and conforms to NPT dimensions, the flanged base allows for quick exchange of nozzles. The 50mm Thread combines precision and a strong fit with ease of attachment and virtually no galling. Safety and strength are enchanced through the deeper grip of the large 50mm threads.



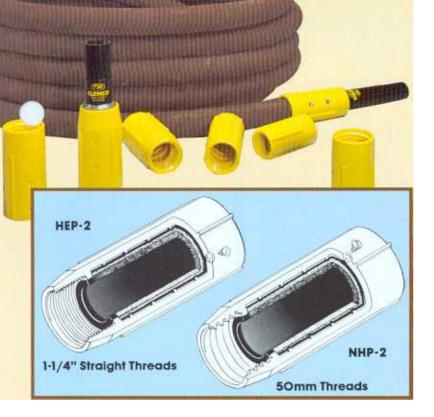
CUTAWAY OF CLEMLITE NOZZLE

Long barrel nozzles (4" to 8-3/16" length) have both one inch and one quarter inch entries. The one inch entry nozzles come with the two thread configurations described above (1½" straight thread models, SSR-3 through SSR-8 and 50mm threaded models, SMR-8) and the one and one quarter inch diameter entry, long barrel nozzles have 50mm threads (models SXR-6, 7 & 8) and flanged mounting bases (models SFR-6, 7 & 8). One inch diameter entry nozzles have venturi orifice diameters ranging from 3/16" to 1/2" in 1/16" increments. The one and one quarter inch entry nozzles have three orifice diameters: 3/8", 7/16", and 1/2":

Short barrel nozzles (length; 3-3/8") have either 11/4" straight thread (SJR-3 through SJR-8) or 50mm thread (SYR-3 through SYR-8) mounting bases and one inch diameter entries.

1¼" Straight Threads

Short barrel nozzles are designed for getting close to the workpiece surface, anywhere within 12". Long barrel nozzles are used when greater distance from the workpiece is desired. Typically, long nozzles with 1" diameter entries are for working from 12" to 24" from the surface being blasted and 1¼ entry long barrel nozzles are most efficient from distances of 18" to 30". In general, production increases with increases in nozzle orifice diameter. So does the rate of abrasive or media consumption and the amount of air required (expressed in cfm or cubic feet per minute).



CLEMCO'S LIGHTWEIGHT AND TOUGH NYLON FITTINGS

Clemco scored another first in the industry by introducing supertough lightweight nylon couplings and nozzle holders. Remarkably durable, these nylon fittings are injection molded to precision tolerances. Each piece is exactly identical, guaranteeing a perfect match.

NOZZLE HOLDERS Clemco Nozzle Holders are Matched to the Nozzles

There are two basic methods of attaching nozzle holders to blast hoses. Hose-end mounted holders have exclusive internal grip rings that "bite" into the hose when it expands slightly from being under pressure. Hose-end holders come with 1-1/4" straight threads or 50mm thread mounting configurations. The other method of attachment is the nylon quick coupling holder.







ANOTHER CLEMCO FIRST!

These holders accommodate each of the three nozzle mounting bases (1-¼', 50mm and flanged). The quick coupling holders all have a universal quarter turn locking lug and attach directly to the hose coupling allowing quick changes from one nozzle to another. The quick coupling holders also have an exclusive steel spring, first introduced into the abrasive blast industry by Clemco, which automatically locks into place, providing a degree of safety not found in competitor's equipment.



COUPLINGS Clemco Couplings are Made From Supertough Nylon.

Universal, quarter turn locking lugs permit interconnection of different size hose couplings from 1/2" to 1-1/2" if desired. Coupling shanks are extra long for added support and holding strength. Screw holes are counter sunk to accept 10 x 3/8" wood screws (NOTE: Never use improper size screws that could result in puncture of blast hose inner tube). Nylon couplings have the added feature of a steel safety spring that automatically engages into two sets of holes in the coupling's flanges to add back-up security, a Clemco exclusive!



In the cut-away shown here it is clear that Clemco's hose/coupling/nozzle holder combinations maintain the same inside diameter through-out their length. From the time the abrasive enters the hose at the metering valve until it is introduced to the entry throat of the venturi nozzle NOTHING acts as a restriction to it's movement. No turbulances are caused along the hose length, at the external couplings or at the point of contact with the nozzle.

length, at the external couplings or at the point of contact with the nozzle. This allows the venturi nozzle to work at it's peak efficiency and eliminates wear points such as are common with competitor's equipment. Abrasive lines and couplings last longer and safety is maintained as well.

Clemco has a commitment to provide it's customers with the best equipment possible. The new Ultralight SUPA blast hose is a good example of this commitment. From any angle this hose is an improvement over what has been offered before and is the best abrasive blast hose on the market today! Production tolerances are controlled to \pm 1/32". This dimensional reliability is essential to achieving a tight hose-to-holder (or coupling) fit. Clemco's SUPA hose expands slightly under pressure, creating a firm grip on couplings or nozzle holders, which have exclusive internal spiral grip rings which "bite" into the hose's outer cover. As a result, air losses, even minor ones, are prevented. The outer cover is "pin" relieved to prevent blow-outs, there are two layers of tough nylon fabric and a high percentage of gum rubber in the wear tube. The SUPA hose has the highest rate of maximum working pressure of all 1- $\frac{1}{4}$ " inside diameter hoses, up to 170 psig!! SUPA also has the lowest weight of any hose on the market for it's dimensions: 35 pounds for a 50' section!! SUPA hose is much more flexible and far easier for a blaster to maneuver around a cluttered jobsite. And SUPA hose is more economical as well. The outside diameter of 1-7/8' allows the use of the CQP-2 coupling which is the fitting normally used on standard 1" hose and with it HEP-2, 1- $\frac{1}{4}$ " straight thread or the NHP-2, 50mm threaded hose-end holders . . . more variety for less outlay.

Clemco's ULTRALIGHT System, the most up-to-date combination of blast hose, couplings, nozzles and nozzle holders available today. Nobody has the selection of equipment that Clemco offers. Nobody has given as much thought to the needs of the blasting contractor and his workforce as Clemco has. Nobody has pioneered new materials, modern processes and technologies as Clemco has. Clemco's Ultralight is a money saver from all angles; lower costs, longer wear, safer technology and reduced operator fatigue. Talk to your Clemco distributor today. He'll put you in touch with Clemco's system of Profit Through Performance.

For more information about Clemco's hose, nozzles, holders and couplings and for an introduction to Clemco's complete "Profit oriented" line of equipment, write for our catalog: "Clemco Abrasive Blast Equipment Selection Guide", today. Its the best move you'll make this year.

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