

ITW DeVilbiss  
An Illinois Tool Works Company  
1724 Indian Wood Circle  
Maumee, OH 43537-4048  
Telephone 419/891-8191

**ITW DeVilbiss**

November 20, 1996

NIOSH Docket Office  
Robert A. Taft Laboratories  
M/S C34  
4676 Columbia Parkway  
Cincinnati, OH 45226

Gentlemen:

**Introduction**

I am writing to you today on behalf of a current customer base of 64,000 United States automotive body repair shops. For several years now, our sales force has been asked repeatedly by these customers to provide them with a single hose supplied air system that services both critical respiration apparatus and paint spray equipment simultaneously.

This demand comes, we believe, from the inefficiencies of dual hose systems that have proven awkward to the user which, in turn, impinges the quality of the paint job. We have observed a number of instances where the operator will place himself at risk rather than cause errors that require additional costs. Further, these operators are aware of the use of such single hose systems in Europe and other industrialized nations, and questions why they are similarly not available in the United States.

As evidenced by DHHS Publication 96-111, Disocyanate alone has been attributed as a cause of asthma and, in some cases, death. Spray painting was cited in two cases to illustrate the occupational hazards of this chemical. While the Agency argues that engineering controls would substantially mitigate hazardous exposure, we respectfully submit that this view does not reflect workplace realities, at least in painting operations. However, we agree with the Agency that the use of tertiary apparatus (i.e., nose/mouth filters) does little to mitigate long term exposure. The answer, we believe, is the use of an available system that facilitates the painter's access and use of Grade "D" air for both breathing and tool operation.

DeVilbiss Company, a Division of Illinois Tool Works, Inc., and other manufacturers, already sell a single hose system throughout Europe, in Australia, and other industrialized countries. Our system, for example, meets stringent occupational health standards which have been developed by foreign government agencies and industry standards organizations. These systems have met with wide spread acceptance and, we believe, should be considered by the National Institute of Occupational Safety and Health (NIOSH), during its upcoming modular review.

**R E C E I V E D**

NOV 20 1996

NIOSH DOCKET OFFICE

**ITW DeVilbiss**

The DeVilbiss Corporation is a major component of the Finishing Systems Group of Illinois Tool Works, Inc. (ITW). The parent company is a worldwide manufacturer of value added products and systems with nearly 300 manufacturing facilities in 34 countries and annual sales in excess of \$4 billion. In the areas of commercial packaging technology, welding products, building construction systems, fasteners, and, of course, finishing systems, ITW is a world leader in technological innovation and product development. With over 100 years of experience, ITW DeVilbiss alone is a world leader in paint spraying technology.

In fact, we invented the concept of mechanical atomization. In addition to our status as a world leader in spray technology, we are also a leading supplier of supplied air respirators in Europe and Australia.

**Module Development**

In response to Part III, A. (2) Issue 2 of your request for input on developing future respiratory modules, a test criteria needs to be developed to adequately assess the performance capability of a supplied air respirator that utilizes a common air supply hose with pneumatic tools (a single hose system). These devices are standard respiratory protection throughout Europe, Asia and Australia. Over one million of these devices have been sold in Europe alone. The product has proven safe, effective and preferable in Europe.

Modules should be ranked by a variety of factors. Most important should be regulations that significantly reduce costs, increases production efficiency, and lowers workers discomfort while significantly improving the safety and health of U.S. workers. Consideration should be given to modules that can be developed quickly. An improved supplied air module will, we believe, result in a significant number of workplaces upgrading their protection from what is now commonly seen as inadequate air purifying respirators. This move will dramatically increase the protection afforded these workers. A prime example would be the spray painting industry.

Modules that are specific to improving respirator products should be ranked ahead of all administrative modules. ITW DeVilbiss proposes that developing a supplied air respirator module be given top priority. Administrative program modules to NIOSH will not affect workplace safety, and should not be given a high priority.

European standards such as the British HSE TM14 Standard for supplied air respirators could be adopted directly, or by reference by NIOSH as part of the rule-making process. Of significant importance to NIOSH is that the test parameters for approving a single hose respirator have been developed by HSE and are presently used throughout Europe.

Continued.....

Without a doubt, the development and implementation of a module that would allow for the testing and approval of single hose supplied air respirator systems would dramatically increase the health and safety of the nearly quarter million painters exposed to isocyanate -- containing materials in the workplace. Our customers repeatedly ask us for a single hose system. We are prepared to provide such a system when approved by NIOSH

Today there are approximately 64,000 body shops in the United States. With two painters per shop on average, over 125,000 automotive painters are exposed to the hazards associated with spraying isocyanate-based paints. In addition, there are 15,000 truck dealers, 4,000 aircraft service facilities and 6,000 boat marinas with service centers where painting is performed.

A 1996 NIOSH bulletin estimated that 280,000 U.S. workers are potentially exposed to isocyanates (DHHS 96-111) based on a 1983 report. We estimate that there are over 200,000 exposed workers in spray finishing operations alone. In addition, new products such as isocyanate primers, sealers and base coats are rapidly gaining in popularity, exposing an ever increasing number of workers to hazardous concentrations of isocyanates.

As far as the feasibility of a single hose system, a product has already been developed and has been proven safe and effective in Europe, Asia and Australia for over 15 years. In these markets, a single hose system is the dominant respiratory product, with dual hose systems unable to establish a foothold. This is obviously due to the cost and inconvenience associated with a two hose system. The NIOSH approved version of a product that ITW DeVilbiss currently markets could be easily adapted to a single hose system. In the 15 years we have been selling to the European market, we have never had a death or serious injury reported by users of our product. The single hose concept is so popular that an estimated 95% of all British body shops regularly use supplied air protection while paint spraying. Conversely, the U.S. body shop usage of supplied air respirators is only 5%.

Our single hose respiratory system is approved by British HSE Standard TM14 Part 7.25, Class 3. The CE approval number is 0194, and the B.S. license number is 3429. In addition, the product is designed and manufactured utilizing quality systems approved in accordance with BS4750, ISO-9000 and EN29000.

The economics associated with developing and distributing a single hose system in the United States is of negligible proportion. We already manufacture and distribute the product throughout the remainder of the world. The associated costs to end users will be favorable compared to existing dual hose systems, mainly due to the requirement of one less hose.

Our system also compares favorably to users of disposable charcoal respirators. In addition to the lack of appropriate protection these products offer, they are also more expensive in the long run due to the disposable nature of the product.

Continued....

As the enclosed letters from automotive body supply industry attest, (Appendix A) there is indeed both a strong desire and a large market for an **approved** single hose respiratory system. We ask that you give this concept the appropriate consideration and a high priority in your rule-making efforts.

### **Summary**

As the creator of atomizing paint systems and the world leader in the ongoing development and commercialization of such systems and their attendant accessories, ITW DeVilbiss believes its domestic customers will be well served by NIOSH's inclusion of air supplied respirators to its priority list of modules for consideration in early 1997.

Currently, the awkwardness of approved dual hose systems inhibits their use by professional painters which leads to hazardous exposure to a variety of chemicals, including isocyanates.

Already throughout Europe, in Australia and in other industrialized countries, a more convenient supplied air system, approved by HSE TM14, is in common use. This system utilizes a single hose supplying grade "D" air to both the air respirator and the tool. We are unaware of any injuries caused by such a device. Further, we believe this system has gained wide (95%) acceptance by painters, primarily because of its ease of use, but nonetheless, leading to a more healthy and safe workplace.

At least 200,000 American painters have been denied access to this product because of their desire to use NIOSH approved and OSHA accepted systems versus something jerry-rigged in the shop. We believe such a system is not only feasible, but is in fact easily and economically available. As evidenced by the enclosures, our customers desire such a system and are eager to buy it when it becomes available.

Hence, we strongly encourage NIOSH to include air supplied respirators as a high priority module for consideration in early 1997. While we can appreciate the agencies desire for more detailed information at this time, ITW DeVilbiss will provide additional technical information of a proprietary nature to NIOSH during module development to facilitate the rule making process.

Sincerely,



John Gulbronson

Enclosures

**Thompson**  
**PBE**  
Northeast Division

November 24, 1996

John Gulbranson  
ITW Devilbiss  
Safety Products Department

Dear John,

The Devilbiss Air Visor™ has been well received in our marketplace. It offers dramatic improvements in painter safety versus conventional paint respirators.

However, market acceptance has been hampered by not having a single-hose system. Our customers generally rate items that enhance productivity and ease of use as more important than safety related products.

If you would be able to offer this product as a single-hose system, it would offer significant value to the marketplace and our customer base. It would offer the best of all worlds in: improved painter safety, enhanced productivity and an easy to use system.

Please keep me up-to-date on availability of a single-hose system. We would like to offer a product to our customers that would enhance their productivity while improving shop safety.

Sincerely,

Jerry Polston  
Thompson PBE  
Sales Manager  
508-752-5626

*Kwik Auto Body Supplies, Inc.**Specialties in Automotive and Gloucester Marine Paints*163 MYSTIC AVE.  
MEDFORD, MASS. 02155  
(617) 395-2176, 2177, 2178, 2179

October 28, 1996

Mr. John Gulbranson  
ITW Devilbiss  
1724 Indian Wood Circle  
Maumee, OH 43537

Mr. Gulbranson;

As you well know, the need for a safer breathing environment is crucial to our industry. With the introduction of the new low V.O.C. products, the need for safe breathing equipment has become even more important. The introduction of the Air Visor from your company is certainly a step in the right direction. However, after seeing this product, there were some concerns with the way the unit is set up.

Several companies have come out with similar units in recent years. We have found that most of these units failed for one simple reason; they were an inconvenience for the painter. Any system that requires two hoses is such a nuisance for the painter, they will not use it. Because of having to pull two hoses around, getting them tangled among each other, or having to worry about two hoses hitting the wet paint on the vehicle, the painters will not use this type of system. They will revert back to a simple cartridge mask that doesn't protect them from the products they are spraying.

While bringing the Air Visor around to our customers, we were hit with one question every time. They asked if the unit could be used as a one hose system and how to do it. If this could not be accomplished, they did not want the system.

If the Air Visor could be assembled as a one hose system with NIOSH approval, there is no question it would be a huge success in our market. Having one hose to work is something the painters are already used to. If we could market this unit as a one hose unit, not only would the majority of our no sales turn to sales, but we would also be doing a great service to the paint technicians in our industry by protecting them from the hazardous chemicals this industry uses.

Sincerely,



William D'Orlando, General Manager

# AUTO BODY SUPPLY J & R

of

FRAMINGHAM, INC.

82 Herbert Street (Rear), Framingham, MA 01702  
 (508) 872-3594, (617) 235-8810, (800) 849-6898  
 FAX (508) 879-2374

October 30, 1996

Dear John,

We have been a DeVilbiss distributor for 35 years. Your attention to quality and service have been unmatched within the industry.

Since the introduction of the Air Vizor program, we have been very happy with the renewed interest in respiratory care among collision shop owners and painters. I do believe, however, that one additional change to the Air Vizor would dramatically increase customer interest, painter safety, and general shop awareness of respiratory care.

That change would be the inclusion of a single-hose system.

As I travel into dozens of body shops each week, we discuss the numbers of archaic supplied air respirator systems that are unused because of the cumbersome nature of either the mask or the "snake-like" hoses. Comfort and ease-of-use are the two primary reasons for painters refusing to wear any respirator. If you could eliminate the hose-hassle, you could dramatically increase user awareness, user safety, and USERS.

Please speak to the decision-makers and forward on my thoughts.

Sincerely,



Michael J. Coran

F A C T O R Y   D I S T R I B U T O R S  
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GARDINER

November 14, 1996

To: John Gulbranson  
From: B.J. Lyons, PBE Division

Subject: Niosh approval of single hose air vizor

John:

I read your letter and agree that a single hose unit would not only be easier to sell, but would be more likely to be worn in the body shop.

I have sold fresh air systems for ten years and I would say that 60% of them are not used.

The number one reason for this is that most painters say that two hoses are just too hard to move around. There are a lot of ways to attach them, but that seems to cause a whole new set of problems.

I hope the Niosh people can see the importance of this matter and give us some help in cleaning up, and more importantly, help us make the AUTOMOTIVE REFINISH BUSINESS A SAFER PRACTICE!!

Thank you for your concern.



B.J. Lyons  
Motor Supply Co./PBE Division





116 Washington Street • Dover, NH 03820-3763  
(603) 742-2880 • FAX (603) 742-3057

John Gulbranson  
ITW DeVilbiss  
1724 Indian Wood Circle  
Maumee OH 43573-4048

Dear John,

I am writing in regard to your letter on the Air Vizor and the need for a single hose approval from NIOSH/OSHA.

As you know we at Robbins Auto Parts are aggressively selling the Air Vizor in the New Hampshire market. We feel that safety is a number one priority for our customers as well as our own employees. One way of insuring customer safety when working with Isocyanate containing products is the use of a supplied air respirator.

In the many years Robbins has been selling to body shops, one thing that is a major deciding factor is ease of use. We would like to see an approval by NIOSH/OSHA for the use of a single hose delivery to the Air Vizor filter pack and approval for the use of the auxiliary air line from the filter pack.

Lets just think about this for a minute. Robbins still sells considerable amounts of disposable respirators and charcoal cartridge respirators. Now, knowing that 70% of our paint sales are products which contain some sort of hardener wouldn't we be better off to have a painter using a grade "D" supplied air respirator than a cartridge type?

I think the answer is obvious, lets get the necessary approvals for the Air Vizor to be used with a single hose supply, make the product easy for the customer to use and make the painters environment a safe one.

Regards,

A handwritten signature in black ink that reads 'Steve Diers'. The signature is written in a cursive style with a large initial 'S'.

Steve Diers  
PBE Manager



**AUTOMOTIVE SUPPLY ASSOCIATES**

129 Manchester Street/P.O. Box 1254/Concord, N.H. 03301  
(603) 225-4000

October 29, 1996

Mr. John Gulbranson  
*ITW* DeVilbiss  
1724 Indian Wood Circle  
Maumee, Ohio 43537

Dear John,

It was a pleasure meeting you when you visited us recently in New Hampshire with Glen Bresnahan.

As a result of your visit and presentation of your new Air Vizor respirator system we invited Glen to attend our October 18 sales meeting and present the unit to our sales force.

Glen did attend our meeting and did his usual good presentation. As a result, we have begun generating interest in this exciting new product.

John, several of our customers have questioned us concerning the legality of using the unit as a single hose unit and we have had to tell them that they will void the current NIOSH approval if they do so.

We understand this unit is sold successfully in Europe as a single hose system and hope your efforts to get approval for single hose use will be successful in the USA. Hopefully the good folks at NIOSH will recognize the added safety associated with eliminating the second bulky, trip over it hose, and consider amending this regulation.

Please keep us posted as to any changes in the NIOSH approval.

John, thank you again for your visit. We look forward to much success with the Air Vizor and wish you "good luck" in your negotiations with NIOSH.

Sincerely,

Michael W. Loan  
Manager - PBE Division



# PROVIDENCE LACQUER & SUPPLY CENTRE, Inc.

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## FINISHES FOR ALL SURFACES

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October 25, 1996

ITW/Devilbiss  
1724 Indianwood Circle  
Maumee OH 43537

Dear Mr. Gulbranson:

With regard to your request of October 24, 1996,  
I would like to take the opportunity to address  
the benefit of a single hose system.

Most body shops and other finishing concerns do not  
use an air supply system when they should. Today,  
with urethane technology at the forefront of finishes,  
it is becoming imperative that they must.

One major complaint has always been "Gee, just what I  
need, another hose to drag." I feel if we could offer  
a single hose type system, we could provide the proper  
respiratory protection to more end users. Beside, this  
type of system has been used successfully in Europe for  
years.

I strongly believe both OSHA & NIOSH should approve  
this system for use at the small user level. Safety  
would not be sacrificed for the convenience of such a  
proven method.

Sincerely,

Alan Caruolo  
General Manager



Equipment &amp; Supplies Specialists • Autobody • Industrial • Marine

880 EDDY STREET, PROVIDENCE, RI 02905 • 401-481-3442

October 29, 1996

TO: John Gulbranson  
ITW DeVilbiss

FROM: Mark H. Freedman

SUBJECT: NIOSH approval of single-hose air supplied respirators.

Over the past twenty five years in the auto body supply business, I have experienced a constant problem that exists in the auto body refinishing trade, a problem that can be resolved with a solution that would encourage employee safety measures. I am referring to the age old problem of single versus dual hose air supplied respirator units.

Some twenty years ago, my company sold the DeVilbiss model MPH air supplied respirator hood assembly. The unit had a single hose, but had no filters, no safety over-rides, no monitoring devices. Back in those days, urethane products and hardeners were in their infancy. Painters weren't overly concerned about their health and safety.

Then we advanced to the oilless pump air supplied units which required the use of two hoses. Time and time again, after selling a system to a customer, we heard the same complaint; those two hoses are just too difficult and heavy to drag around the booth floor. Therefore, many of the painters would opt not to use the system. All the catalogues from the European manufacturers of direct air supplied systems show single hose units. Our customers want to know why we can not have these systems allowed in the U.S.

If NIOSH officials got out into the "REAL" world and surveyed the painters, they might understand just how important it is for the allowance of single-hose air supplied units. There is no reason for anyone to endanger his or her health and safety if the product manufactured to protect them is easy to use. If you make it less difficult to comply, then the usage will go up.

I hope this letter is of some assistance. Good luck.

Best regards,

Mark H. Freedman, President