

Burning Hose ID and Security Device (BHISD)

This is a brief description of how the BHISD is used during setup.



Employee inspecting BHISD and ID tag at supply end prior set-up.



Employee inspecting and confirming torch end ID number matches supply end.



Employee removing BHISD and connecting a torch.

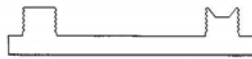
Introduction

MCS's Burning Hose ID and Security Device (BHISD) offers positive identification and secure connection to complement your fuel gas and oxygen safety needs. Hot work operators can rely on the BHISD to prevent unauthorized use and accidental connection to wrong ends, thereby eliminating gas discharging into a space. The BHISD is also used to positively identify both ends of a burning hose.

NAVSEA 009-07 section 3.4. accepts the BHISD as the alternative to removing fuel gas and oxygen hoses on a shift change or lunch break from enclosed spaces, stating "Unless alternate procedures are approved by SupShip." all lines shall be removed from the space. Our BHISD is the only alternative today that has been accepted. This assures employees, contractors or customers will not use the equipment without proper authority and instruction.

BHISD safety features include the improbability of employees hooking to wrong ends and possibly charging burning hoses that could release gases into a space. BHISD's have a pair of locks that come with four keyed alike keys. Only the employee assigned a BHISD can access their device. A single shank lock unique to this device prevents the lock from being used in other applications.

Schematics



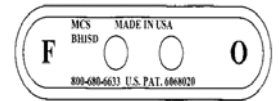
PART A
SIDE VIEW



PART B
SIDE VIEW

Part A, the blank end, with threads and seats, for fuel gas and oxygen hose connections.

Part B, the hasp end, slides over the hose and hose coupling ends, preventing unauthorized use.



PART A
PLAN VIEW

The underside of Part A has an "F" for fuel gas connection and an "O" for oxygen connection. "F" is printed under the left handed threads and "O" under the right handed threads.



BHISD is made of an engineering thermoplastic polyurethane resin, reinforced with fiberglass for toughness and dimensional stability .

Burning Hose ID and Security Device (BHISD)

With your purchase of the BHISD you receive a NAVSEA approved process control procedure. You simply edit with your company name. The procedure meets NAVSEA Standard Items 009-07, 009-35 and 009-70 requirements as an alternate to pulling hoses out of enclosed spaces daily.

Features



After inspecting hose back to gas supply, employee removes the BHISD and makes the connection.



Single shank lock prevents other lock use. In addition, the shank is attached to the BHISD, for convenience.



The BHISD will seat to the hose connection. Do not DROP TEST to the BHISD.



Employee completes tag indicating routed work area.



On the underside is an "O" and "F" employees can use to quickly identify the correct connection.



One side of the tag indicates company name, employee using the line and work area routed.



After the DROP TEST, oxygen and fuel gas equipment is ready to use.



Other side of the tag indicates a brief step-by-step of how to use the BHISD. Employees will always have a reminder on the hose.

Burning Hose ID and Security Device (BHISD)

Page 3 of 4
Rev.1

This is a brief description of the BHISD use during the taking down of the oxygen and fuel gas setup.



Remove hose from supply, wrench tight to BHISD, and secure it.



After removing the torch, wrench tight hose to the BHISD and secure.



It is that easy, both ends are secured and identified.

FAQ's

1. How heavy is the BHISD? One pair of BHISD's with locks and tags weighs one-half pound.
2. How tight can I screw the hose connection to the BHISD? A torch wrench is recommended when tightening a hose connection to the BHISD. Simply tightening the connection as you would any other hose connection is sufficient to seat.
3. Why does the BHISD have two holes between the sleeve guards? One hole is for the unique single shaft lock; the other offers safety personnel or supervisors to secure the hose in the event a discrepancy is discovered.
4. Can I use the BHISD to drop test my torch line? **NO!** We do not recommend a drop test using the BHISD, because a drop test is to ensure the integrity of the fuel gas and oxygen set-up from the supply end to the torch end.
5. How long can we leave the hose lines secured with the BHISD in a confined space or enclosed space? **Never leave any fuel gas and oxygen equipment in a confined space.** However, fuel gas and oxygen hoses, with a approved procedure and our secured BHISD, can be left in an enclosed space until the user returns or whenever the hoses are needed again.
6. What is OSHA's or any other governing body's opinion concerning the use of the BHISD? OSHA has said, "That the procedure for use and the BHISD is an acceptable alternative for future rule making." SUPSHIP Portsmouth VA. has approved the use of the BHISD with the lock and tag. This procedure is available at no cost with the purchase of a BHISD.
7. How can our other shifts' (second or third) mechanics use a fuel gas and oxygen set-up that has already been secured by the day shift? There are four keyed alike keys supplied with each BHISD set-up (including two devices, two single shaft locks and two I.D. tags, etc.), therefore, there is a key for 1st, 2nd, 3rd, shifts and the fourth key for the tool room, or wherever the BHISD is issued.
8. If I do not pull my line back to the manifold or cylinder rack, how will I be able to inspect my line? The procedure requires employees to inspect their hose from the supply to the user end. Briefly explained, the procedure requires the employee to inspect the hose as they are going to the end where they will attach the torch. Inspect the hose on the way back to the supply end to make the connection to the manifold or cylinder regulator. Then drop test the hose.
9. How will the BHISD keep contractors from using my torch line? They will not have a key and therefore cannot access the hose line.
10. Why does the BHISD have a single shaft lock? The single shaft lock offers customers more control of locks. A single shaft is unique and simply cannot be used for anything else, such as locking gang boxes.

Burning Hose ID and Security Device (BHISD)

With the use of the BHISD, a company will enhance their fuel gas and oxygen safety program, as well as experience a direct cost savings as indicated below:

Safety enhancement: The proper use of the BHISD will:

- a. help companies prevent unauthorized use of their fuel gas and oxygen hoses;
- b. minimize damage to the hose and fittings causing potential leakage;
- c. prevent wasted labor time finding fuel gas and oxygen hose used by others;
- d. virtually prevent connection to the wrong end of hose, causing gas to escape into a space;
- e. minimize injuries to employees associated with pulling hoses daily.

Cost savings: Currently NAVSEA requires contractors to pull fuel gas and oxygen hoses back to open air or weather deck. This takes, on average, about 1-hour a day, per user, pulling hoses in and out of enclosed spaces which equates to about \$20.00/hr. labor and overhead, or \$100.00 per week per user. With 5 users, this is \$500.00 per week, etc., which does not even take into account the cost of fire watches and other employee trades waiting for the employee using the fuel gas and oxygen equipment.

Summery: Besides the inherent safety benifites of the BHISD and the cost savings, there is a greater consideration of actually making money with it's usage.

Example:

- Cost for one complete pair (BHISD).....\$97.88/ea.
- Considering the average wage of employee using the BHISD.....\$13.00/hr.
- With a 50% overhead (most companies are greater).....\$6.50/hr.
- The total man-hour cost.....\$19.50/hr.
- Time pulling hoses in and out of enclosed spaces daily per employee.....1/hr.

Calculations:

$\$97.88/ea. \div \$19.50/hr. = 5.02 \text{ hours} = \text{Cost return (ROI) for each pair of BHISD's (1 WEEK)}$

$1 \text{ BHISD @ } \$19.50 \text{ mh/cost} \times 5\text{day/wk} \times 52 \text{ wks} = \$5,070.00 \text{ savings per year.}$

$\$5,070.00/yr. \times 10 \text{ BHISD's} = \$50,700.00$

$\$5,070.00/yr. \times 25 \text{ BHISD's} = \$126,750.00$

$\$5,070.00/yr. \times 50 \text{ BHISD's} = \$253,500.00$

With our economy today, it is difficult to find a product that offers safety benefits, and can return your cost in such a short period of time; and continue to save you MONEY!

Thank you for considering our product and please, do not hesitate to contact us at anytime.