Rocky Forge News

Volume 22, Issue 1 – January, 2023

Next Meeting, January 14, At Ted's Shop

Hope all of you had a happy holiday season and survived the extreme cold snap. There will be a hammer-in at Ted's shop on January 14th.

The coffee will be ready by 8:30 AM along with doughnuts.

There will be a **huge announcement** at this meeting, so I hope many of you will be able to attend.

Our blacksmithing agenda will be to make a trade axe, which can go by many names: Indian axe, throwing axe, trade axe, tomahawk, hawk or hatchet. This project will test several of your Blacksmithing skills and may introduce you to some new skills.

Metal will be supplied.

Bring items for the Iron-in-the-Hat drawing. The table is already loaded with items from Dominick and Ted. However, your donations can make it even more interesting!

Carol is fixing a pot of smoked sausage, green beans and potatoes. Yummmy!!

Looking forward to seeing all you Saturday and to relay some great news.

Ted and Carol

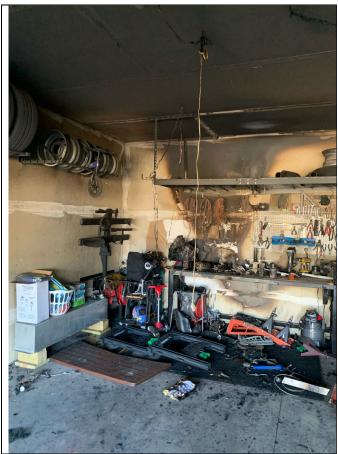
765-491-2194

Interesting Web Sites

Linseed Oil and Spontaneous Combustion https://www.youtube.com/watch?v=9yq6VW-c2Ts How to Properly Dispose of Oil Soaked Rags https://diywithrick.com/2016/07/17/properlydispose-oil-soaked-rags/ Oily Waste Cans https://www.youtube.com/watch?v=0-21rlHrPXM Proper Disposal of Oil Soaked Finishing Rags https://www.youtube.com/watch?v=LXhWBPcMC

<u>9M</u>

Safe Dispose of Oily Rags |Ask This Old House https://www.youtube.com/watch?v=H02uEcR3Ato



Garage shop after spontaneous combustion of rags soaked in an oil-based wood sealer and carelessly placed back into a pile of rags. While this fire and accompanying thick heavy black smoke destroyed most of the contents of the garage, it fortunately was discovered by the homeowner and extinguished by the fire department. This dangerous and expensive event could have been prevented with proper handling of the oil-soaked rags. See article on page 2.

Dates to Remember

Rocky Forge Regular Meeting: Saturday, January 14, 2023.

Contacts

Forgemaster: Ted Stout (stout8525@tds.net, 765-491-2194 cell).

Newsletter Editor: Dominick Andrisani (andrisan@purdue.edu, 765-463-4975

Spontaneous Combustion of Oily Rags and Other Stuff

According to the National Fire Protection Association (NFPA), over 14,000 fires occur annually from spontaneous combustion.

When oily rags, piles of hay, or compost piles interact with the air around them, the oils or wet vegetation reacts with the oxygen in the air. This process is called oxidation. Oxidation gives off heat. Heat can cause combustion.

Hydrocarbon fuel + oxygen + heat buildup → FIRE!

So when the rags or hay are oxidizing, they are slowly giving off heat. And if the temperature of a pile of oily rags reaches the combustion point, the pile of rags will catch fire spontaneously.

It is common in a blacksmith shop to find linseed oil used to put a protective coating on hot metal. It is important to realize that rags soaked in linseed oil can lead to spontaneous combustion if not properly handled. The same is true of any rag soaked in a hydrocarbonbased substance such as paint thinner.

In addition, piles of hay, manure, or compost can also spontaneously combust. You may have noticed that the middle of the pile can be especially warm, evidence of the oxidation process and heat buildup.

To protect yourself from a spontaneous fire consider the following:

- In your shop or at home: never store oil-soaked or chemical-soaked rags in a pile. Spread out the rags outside on concrete securely until the oil evaporates. You'll know the oil has evaporated once the rags become stiff. By spreading out the rags you help prevent the heat from building up and reaching the combustion point. Don't dry the rags in direct sunlight! After evaporation, you can wash the rags for reuse.
- In a professional work setting: dispose of oily rags in an OSHA-approved container and have an industrial cleaning company pick them up.
- On the farm: make sure hay is completely dry before you bale and store it. Also, make sure your barn or storage facility is properly ventilated.
- Around the farm or yard keep piles of compost, leaves, grass clippings, mulch, or manure away from any structures (e.g., garages, barns, or sheds). Make sure the piles are small so that moving air can help dissipate heat. Also, turning your compost, mulch, or manure pile every two weeks can help prevent the heat from building up in the middle of the pile.
- Another option for storing oily rags: Thoroughly dry the rags out. Then, place them in a metal container like an old paint can. Fill the can with water and detergent designed to break down oils. Seal it. You can dispose of the rags at a hazardous waste collection event.

Ref: <u>https://bailyagency.com/blog/spontaneous-combustion-fire-safety/</u>