

# Oilfield Safety Meeting

## **Air Hoist Safety**



Every new Hand Breaking out on a Drilling Rig is silently in awe of the Air Hoist when they first see the weight of the the huge loads this Small but powerful machine can lift. I can still recall the first time I saw an 8" Drill Collar hoisted up into the V-Door and thinking silently to myself "Wow! I got to get me one of these!" It seems with many Hands the awe soon wears off as we take for granted the work this tool preforms safely and routinely, day after day. When we become complacent in this way is usually when an accident seems to occur. So, to begin, lets start with the Basics and outline some General Safety Practices.

When my crew rigs up the Air Hoist during a rig move I want to be there. Regardless of what type of Fastener is used to secure the wire cable to the drum, I want to double check it. If it's a Shim, I want to make sure it's properly installed, If Allen Head Set Screws secure it I want to be there to double check the tightness. My Hands understand this and know that I am looking out for their safety so feelings aren't usually hurt.

Beginning every Tour ,When possible, It's a good practice to examine the Wire Cable, Chain, Hook and Fasteners as throughly as possible. To me, this is **"A MUST"** during rig move. There have been several occasions during rig moves that while examining each individual link of the chain, We have found 1 side of a link broken completely in two! When you see this and think about the loads that have been lifted with a chain in this condition, it will really sober you up to the reality of the Safety Hazards that exist.

Every operation preformed with the Air Hoist has a varying degree of difficulty. The most difficult tasks should be preformed by the most experienced operator on a crew. Instances of this would be operating a Lay-Down-Line or Hoisting Personnel. When Hoisting Personnel the Operator **MUST** stay in constant eye contact with the Hand be lifted. He should not be allowed to be distracted by other Hands. When the Air Hoist operator can't maintain constant eye Contact, an experienced observer **MUST** be used to signal him. The Air Hoist operator **MUST** make sure that the Hand being lifted is free of obstructions **AT ALL TIMES**, Making sure his hands, feet and harness do not become snagged on anything in the Derrick. When Hoisting Personnel, A Tag-line should be attached to the harness of the person being lifted and guided by the Hands below. **ALL** tools have to be tethered to the person being lifted **WITHOUT EXCEPTION**. When ever a Sala or other Anti-Fall Line is present in the Derrick it should be attached and used by the person being lifted. Hoisting Personnel above the Board should be prohibited. The "Boatswain Chair" should be the only harness used when lifting personnel, other harnesses like climbing belts and derrick belts should not be used. **THE ROTARY MUST BE STOPPED WHEN LIFTING PERSONEL!**

Another important practice often overlooked - **"Every Hand Needs To Know Where the Emergency Shut-Off To Whatever Type Hoist Is Being Used, And know How To Operate It"** Lets take this scenario as an example, "Your lifting a man up to service the rig, He signals you to stop, You release the control, but the hoist keeps running!" The control lever has malfunctioned!" Where are you going to shut it off before you crown this guy out?" Every Air hoist I have seen has an Air Cut-Off

Valve located on the air supply at the Hoist. You need to be familiar with this and make all other Hands familiar with it. In the case of a Hydraulic Hoist, The Emergency Cut-Off is located at the Drillers Console. You need to be familiar with it also. If this were to happen, you would only have seconds to react. Something to think about.

Where I work, It is our companies policy that The Rig Manager must be present during **Every Personnel Lift**, That the Boatswain Chair will be kept in his possession, Brought to the Rig Floor by him, And when the lift is completed it will be returned to his house by him. We have "No Exceptions" to this policy. I think this policy has become common place practice on most Rigs drilling in my area. We also have a "LIFT PERMIT" that has to be filled out and signed each time a lift of personnel is preformed which details much of what has been written above, I will try to include that later for your use under the "FREE DOWNLOADS" area of this site. Any Third Party Personnel, (Examples would be Casing Crews and Halliburton Crews) must read, abide by and sign the lift permit before they can be hoisted. As you can see, The policy for lifting personnel is very detailed, That is why **ONLY THE MOST EXPERIENCED HOIST OPERATORS SHOULD BE ALLOWED TO LIFT PERSONEL**. It is the responsibility of the Air Hoist Operator to make sure ALL of the above Safety Practices are met, And if they are not, He most stop the lift until compliance is made. As you can see, its a great responsibility to lift another Hand, His life becomes entirely your responsibility from the moment his feet leave the Rig Floor.



Ok, so now that **YOU** are the Hand operating the Air hoist, We know that **YOU** are one of the most experienced and responsible Hands on the crew. It is now **YOUR** responsibility to make sure loads are fastened properly and securely. Every time you make a lift of Tools, You need to make sure the Hook is fastened to the Chain properly. If it's not, you need to stop operations and calmly explain to the less experienced Hands that it's hooked incorrectly and the dangers involved in lifting a load like this. Know when a Hook needs to be taped and explain this to other Hands. ALL Hands need to understand that when your lifting a load, they need to be clear of it. If Hands are standing under a load, you need to stop, and get them out of the way! If a Hand remains on or in The Catwalk area when lifting tools or pipe in the V-Door, You need to stop the lift, and get the Hands clear before continuing. It is our responsibility as experienced hands to educate those just starting out as Roughnecks and to get them "Broke Out" safely. What you teach them now hopefully will become the practices they use throughout their employment and what you fail to teach them will surely become their unsafe practices of the future. Make sure they stay clear of the V-door area when hoisting loads in, having them move in to tail loads at the last moment. Nothing good can come from unnecessarily stand under or in the way of loads, **Make sure they understand this!** Always use a Tail Rope at the V-Door when handling heavy or difficult to balance loads. Keep Hands away **FROM ANY AREA WHERE THEY CAN BE TRAPPED IN A PINCH POINT BETWEEN TO OBJECTS!** This common sense practice seems to often be overlooked by new Hands.



**Slings are great tools for safely lifting equipment when used properly. Used improperly, they present a danger to everyone's safety. So let's talk some about their use. I was recently reading an accident report that resulted in a fatality when a Sling was used picking up a Whipstock Tool, While being Hoisted the sharp edge of the Whipstock Tool cut the Sling, and a Hand that was under the load was crushed to his death. Obviously this was the wrong application for a Sling, and the fact that**

**the Hand was under the load being lifted just reinforces what we have talked about above. It's a shame that this terrible tragedy could have been avoided. Here are some things to consider when using a sling as posted by SeaBright Insurance;**

**All slings, fastenings and attachments must be inspected for damage or defects daily, before beginning work. You should also be alert for damage that may occur with use throughout the work-shift. Any damaged or defective sling must be immediately removed from service, tagged for repair or disposed of.**

### **Slings of All Types**

**Here are some safe operating practices to consider for *slings of all types*:**

- Slings, which are damaged or defective, must not be used.
- Knots, bolts or other makeshift devices must not be used to shorten slings.
- Slings must be used as designed - avoid kinking or using a kinked sling.
- Slings must not be loaded in excess of their rated capacities.
- Slings used in a basket hitch must have the load balanced to prevent slippage.
- Slings must be securely attached to their loads. Tighten the basket hitch; attach the sling to the load with shackles; etc.
- Slings must be padded or protected from all sharp edges of their loads. This is especially critical for nylon slings.
- Suspended loads must be kept clear of all obstructions.
- Keep all persons clear of suspended loads, including loads that are ready to be lifted. Use tag lines whenever possible.
- Don't place your hands or fingers in harms way, such as between the sling and its load while the sling is being tightened.
- Never shock load a sling.
- Don't pull a sling out from under its load when the load is resting directly on the sling.

### **Synthetic Web Slings**

**Synthetic web slings have several additional safety operating practices. Remember that these must be removed from service if one or more of the following conditions are found. All of the hazards below can damage individual strands of the sling, which can ultimately result in the full failure of the entire sling.**

- Chemical burns. A variety of chemicals can damage synthetic slings and include acids, caustics, and in some cases petroleum based products.
- Heat burns or material melting. Welding and cutting can burn, melt or char synthetic sling material. The process of burning or melting severs the synthetic strands, which weakens the sling and lowers its capacity.
- Snags, punctures, tears or cuts.

- Broken or worn stitching.
  - Distortion of fittings usually indicates individual strand failure. Inspect these carefully.
- In summary, you should have an inspection process for slings and related equipment. Daily documented inspections and observations throughout the work-shift helps to eliminate the use of unsafe slings.**

As is the case with all my safety meetings here, They are not all inclusive and I make no claims as to their completeness, They are just general meetings I hold with my crew concerning safety and posted here for your use. Always consult your Rig's Manager or Driller about Safety Practices specific to your Rig.



[Back To Safety Meeting Page>](#)

**Thanks For Visiting Nomaconline.com**



**Sign Our Guest Book**



**Join Our Forum**