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		fact that it will hold pressure makes it even more dangerous. Once under pressure, the nut half will be blown off and become a projectile of death. This is exactly what happened to the individual mentioned earlier. He replaced a 2" fig 602 nut half with a 2" 1502 nut half containing a mud loggers pressure sensor on the standpipe of his rig. After doing so, he was cleaning up the residual mud that had leaked onto the rig floor. As the driller kicked the pump back on, pressure rose. The union held fine right up to 2000# +. When the union gave way, the nut half took the employee's legs out from under him. The force of the mud slammed him into the derrick leg causing severe head trauma. This employee was pronounced dead three hours later in the hospital, leaving behind the family that he once provided for.

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Authors: M.Anderson/C.Riggs	**Hammer Unions**	Job Safety Analysis Number: **DST/JSA-003**
Date Issued: 09/05/2004		Locations: All Locations
Required Personal Protective Equipment:	Long sleeve shirt (coveralls) safety boots, hard hat, safety glasses, gloves, gas monitor	

Job Steps	**Potential Hazardous Conditions**	**Recommended Actions**
Visual Check. Fig 602/1002/1502	Non makeup Crushing Terminal Impact	Check, Re-Check compatibility Read & discuss disasters past & present Discuss attached paper on Non-Compliance
		This conference was a cross industry discussion on mismatched hammer unions and their potential to kill. The desired outcome was to develop a structure and create a plan of implementation that would prevent another life from being taken by a mismatched hammer union. Many of you may know this, but I would guess there are many of you who do not. A 2" Fig 602 hammer union subs and nuts are completely interchangeable with a 2" fig 1002. When these parts are mixed and matched, the result is a union rated for only 6000# no matter what the stamp on the nut may say. This is dangerous, but it is not the big killer. The big killer is the fact that the female sub end of a 2" fig 602 or 1002 utilizes the same thread pitch as a 2" fig 1502. The female sub of a 2" fig 602 or 1002 union is 5/16" smaller in diameter in the thread area than a 2" fig 1502. This creates the killer. If you attempt to put a 2" fig 602 or 1002 female sub half into a 2" fig 1502 nut half; it will appear to make up tight. IT IS NOT!!!! This contraption will hold pressure, but not for long. The