

Safety Alert From the International Association of Drilling Contractors

ALERT 06 – 44

FORK LIFT TRUCK TIRE EXPLODES RESULTING IN A NEAR MISS

WHAT HAPPENED:

One of the company's yard forklifts had a flat on one of the front tires. The flat consisted of a hole in the tread of the tire. The flat tire was picked up and repaired by a local tire repair shop and put back onto the forklift by the repair shop personnel. Because the tire was repaired the Yard Supervisor had the tire swapped with one of the rear tires. The forklift had been used several times and was sitting idle and all yard personnel had left the yard except for one welder. He was preparing to leave at around 2:30 pm when he heard a loud pop. He then noticed a cloud of dust around the forklift. Inspection showed that the rear tire (the tire that had been repaired) had exploded. The tire rupturing caused considerable damage to the forklift. (As seen in the photos) The tire evidently blew upward separating the step from the mounting bracket and causing it to hit the cab. It is very fortunate that no one was in or around the forklift at the time of this failure. Had some one been near and the tire blew out to the side the results could have been catastrophic.



WHAT CAUSED IT:

It is believed that over-inflation caused this incident. When the tire was repaired and placed back onto the forklift by the repair shop personnel, the tire pressure was checked by yard personnel while the repairman was still tending to the forklift. The tire was inflated to 70 psi. Because the tire had just been repaired, the assumption was made that this was correct and the other tires were inflated to this pressure at that time. After the incident, the repair shop was called back to the yard. At that time the repairman, who is the same person who installed the repaired tire, was asked about the amount of pressure that should be used? He suggested 45 psi. We then consulted the forklift manufacturer as to their recommendations. They recommended the front axle working load pressure at 47 psi and the rear axle load pressure at 21 psi.

CORRECTIVE ACTIONS: To address this incident, this company did the following:

- The incident has been discussed with all yard and trucking personnel.
- All tires on the forklifts have been checked and will continuously be checked to ensure that they are inflated to the manufacturer's recommendations.

The Corrective Actions stated in this alert are one company's attempts to address the incident, and do not necessarily reflect the position of IADC or the IADC HSE Committee.