



Health & Safety ALERT

Alert Title:	FAILURE OF A 3-TONNE LIFTING BELT AND THE RESULTING TELECOMMUNICATION CABLE DAMAGE
Alert Category(ies):	Lessons learned / Lifting operations

1.0	BACKGROUND
	<p>On 10th July 2017 at about 1130 hours while pulling a series of six welded pipes out of the a pipe tunnel on site, a lifting belt that had been fitted on the welded pipe for lifting snapped and ended up resting and exerting pressure on the overlying cable causing its damage.</p> <p>Potential Outcome:</p> <ul style="list-style-type: none"> • Major injury or fatality to the workforce • Damage to the pipe being lifted • Damage to the lifting equipment
2.0	SUMMARY OF FINDINGS & PICTURES
	<ul style="list-style-type: none"> • Six pipes had been welded and partially fitted into the micro tunnel crossing. • Aligning the pipe inside the tunnel became problematic thus a decision was made to pull the pipe out of the micro- tunnel. • An excavator was placed at one end of the pipe section being pulled (nearest to the tunnel), a side boom was placed at the centre of the pipe to hold it and to provide a platform for less frictional pulling while a rock breaker was positioned at the other end for pulling the pipe. The lifting belt attached to the rock breaker was rated at 3 tonnes. • The approximate weight of the six pipes welded in series was 10.8 tonnes. This means that the 3-tonne lifting belt being utilized had far much less capacity compared to the load being pulled. Therefore, the lifting belt succumbed to tensile loading while pulling was underway thus breaking loose. • This caused the pipe being pulled to swing a radius of approximately 2 metres causing a damage (Cut) to a nearby telecommunication cable . <p>Actual Outcome: Property damage (Damage to a telecommunication cable).</p>
3.0	LESSONS LEARNED
	<ul style="list-style-type: none"> • It is always very unsafe to use lifting/pulling belts to lift or pull weights that are above the rated capacity. Always use belts to lift loads within the tolerable limits. • Always inspect all lifting or pulling belts and slings for defects before their actual use. Always prohibit the use of lifting belts with defects. • Always calculate the weight of the load to be lifted to help in choosing the correct lifting belts based on the rated capacities. • The HSE personnel in charge must always be proactive and in the forefront to offer consultative advice with regard to lifting and other work operations.

4.0	ACTIONS
	<ul style="list-style-type: none"> • Inspecting all lifting / hoisting belts or slings for defects (abrasions, hitches, knots, bends etc.) before lifting. • Barring the use of all lifting belts with defects • Calculating the weight of the load to be lifted and using lifting belts with a load rating that conforms to the load being lifted or pulled. • Utilizing the correct lifting procedure as laid down as part of ZIC safe systems work.
5.0	CONCLUSION
	<p>This notice is a safety warning to all potentially affected persons and should serve as a learning and turning point.</p>
6.0	REFERENCES