Humes Pipe Safe Handling Guide

Product weights for new VT pipe

If you are transporting or installing Humes VT pipes, please note that they are heavier than spun pipes of the same diameter. Foot anchor sizes may be different to spun pipes of the same size (see chart below for details). Drivers and contractors need to ensure clutches, chains and lifting equipment are appropriately rated and maintained to safely transport any pipe.

VT Pipe			
Pipe Size (DN)	VT Mass (kg)	VT Wall Thickness (mm)	VT Anchor Size
900	1925	90	2.5
1050	2500	100	2.5
1200	3125	110	2.5
1350	3575	115	2.5
1500	4050	120	2.5
1800	5550	135	5.0
1950	6225	140	5.0
2100	7125	150	5.0
2400	9375	175	10.0

Notes

All masses based on Class 2 rubber ring jointed (RRJ) pipes with pipe density of 2500 kg/m^3

Spun Pipe			
Pipe Size (DN)	Spun Mass (kg)	Spun Wall Thickness (mm)	Spun Anchor Size
900	1363	64	1.3
1050	1875	76	1.3
1200	2125	76	2.5
1350	2370	76	2.5
1500	3100*	82	2.5
1800	4375	101	2.5
1950	5700	140	5.0
2100	5900	126	5.0
2400	8600**	165	5.0

Notes

All masses based on Class 2 rubber ring jointed (RRJ) pipes with pipe density of 2500 kg/m^3

* Represents mass for DN 1600 spun pipe

** Represents mass for DN 2500 skid ring joint spun pipe

All VT pipes are a standard length of 2.5 metres. VT pipes are only available in the North Island.

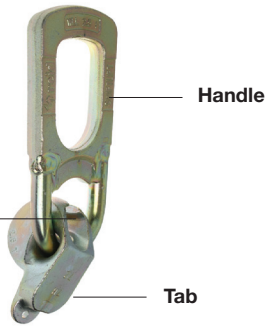
The Health and Safety Act 1992 requires all employees and contractors to follow standard H&S guidelines. The transportation of VT pipes must be completed in accordance with the Humes Transport Manual. For a copy of the Humes Transport Manual contact the Humes Dispatch Department at our Papakura plant.

How Swiftlift™ lifting clutches work

The lifting clutch is attached to the Swiftlift™ anchor by lowering the clutch slot over the anchor and rotating the clutch tab until it rests on the concrete surface. The tab is located on the side that will be uppermost when lifting.

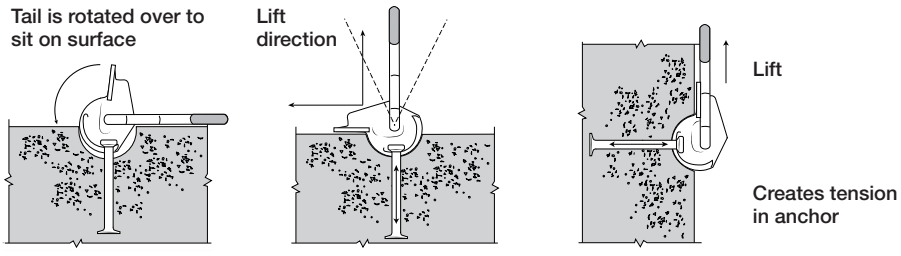
When the load is raised the anchor takes the full load in tension. As the load rotates or is lifted with the anchor in shear, the clutch comes into contact with the concrete. This transfers the lifting force into the concrete and the anchor prevents the clutch slipping out of the recess.

Swiftlift™ clutch



Appropriate clutches for anchor sizes mentioned above should always be used.

Swiftlift™ clutch operation



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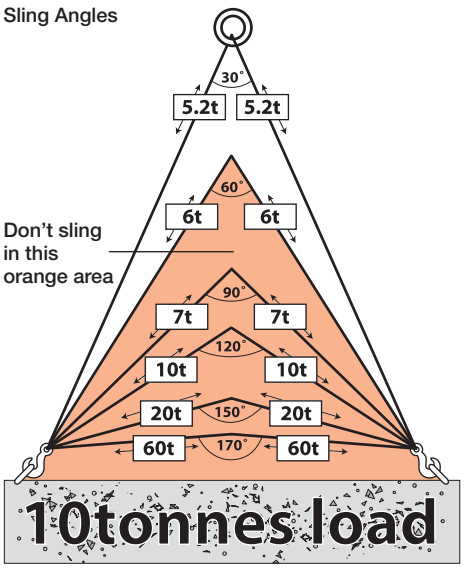
Effective rigging & sling angles

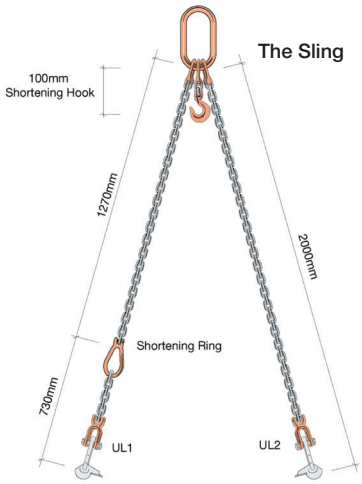
The larger the sling angle the higher the load on the chains. For example at an included angle of 170º the load on each sling is six times the weight of the actual load being lifted.

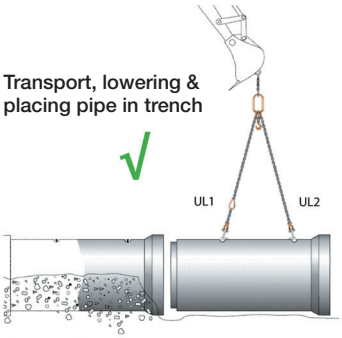
Do not put more than the recommended safe working load on equipment. VT pipes fitted with Swiftlift™ inserts have a safety factor which is well over the industry standard of 3, when slung in the correct manner. However care still needs to be taken when lifting the VT pipe, especially over uneven surfaces. Please note that an insert with a nominal clutch size rating stamped on the head does not necessarily have the same safe working load limit because of the various insert lengths available.

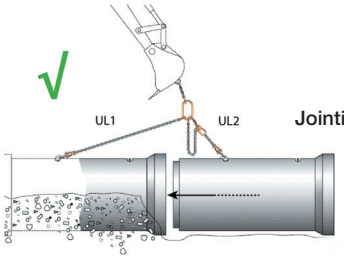


Note: Never make sling length shorter than the distance between two anchors

Correct on-site handling & jointing of pipes



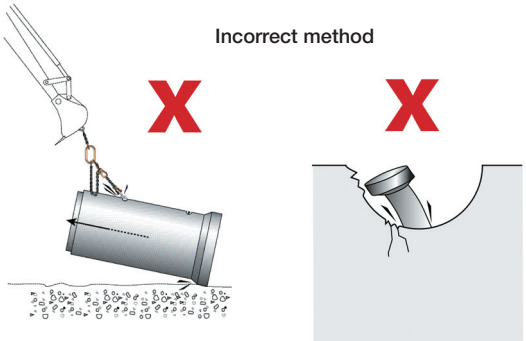




Never make chain length shorter than the distance between two anchors

Using a spreader between two chains will ensure no damage to top edge of the manhole riser

Shock loads resulting from travelling with suspended pipes over rough terrain and uneven ground may exceed designed safety factor load of the lifting systems. It is critical that care is taken during lifting and transporting as additional stresses could result in anchor failure. DO NOT lift the pipes by one anchor during loading, unloading, transportation or in the yard. Lifting in this way could potentially bend the anchor and cause failure. All pipes must be lifted in accordance to the correct on-site handling & jointing of pipes.



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