

Swift Lift System

The Swift Lift System is a quick connect-disconnect system that allows precast concrete elements to be handled repeatedly, with speed, safety and economy. The System is a non-welded system and void of threaded connections. The quality, reusable Swift Lift Lifting Eye's heavy duty construction will provide years of good service.

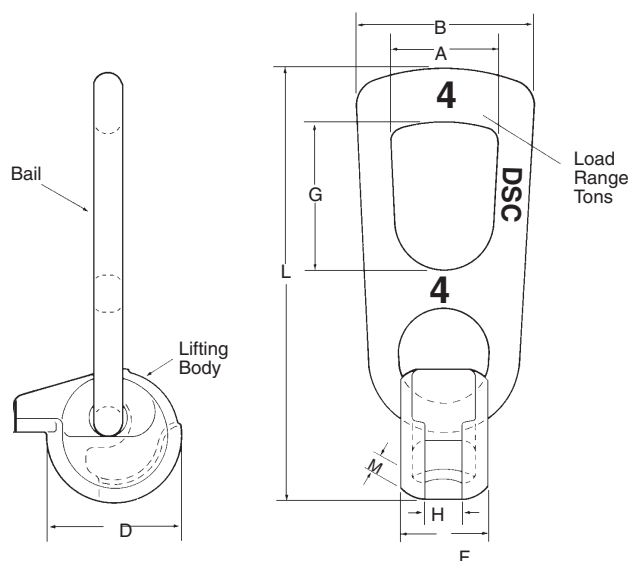
The Swift Lift System is available with safe load ratings of 1, 2, 4, 8 and 20 tons. Each component is clearly marked with its maximum safe working load. The System is extremely versatile and can be utilized for vertical and diagonal pulls. It can be used to lift concrete elements from a horizontal to a vertical position without the aid of a tilting table.

P-50 Swift Lift Universal Lifting Eye

The Swift Lift Universal Lifting Eye (P-50) consists of a flat-sided, spherical lifting body and a high strength bail. The lifting body has a T-shaped slot that permits rapid attachment and release of the head on Swift Lift Anchors.

The design of the P-50 Universal Lifting Eye permits the bail to freely rotate 180°, while the complete lifting eye may rotate through a 360° arc. This design feature allows precast concrete elements to be turned, tilted and/or rotated under load.

Dayton Superior does not recommend the use of this lifting eye for tilting of thin precast concrete panels.



P-50 Swift Lift Universal Lifting Eye Dimensions						
Rated Load Tons	A	B	D	F	G	L
1	1.87"	2.95"	2.20"	1.26"	2.80"	7.40"
2	2.34"	3.58"	2.68"	1.61"	3.41"	9.06"
4	2.76"	4.65"	3.46"	2.22"	3.46"	11.14"
8	3.47"	6.30"	4.41"	2.83"	4.52"	15.79"
20	4.18"	7.09"	6.00"	4.29"	5.31"	20.00"

The rated load provides a factor of safety of approximately 5 to 1 (ultimate to rated load).

Inspection and Maintenance

The P-50 Universal Lifting Eye may be subjected to wear, misuse, overloading and other factors that can affect the lifting eye's rated load. Therefore, it is imperative that the lifting eye be user-inspected at least once a month to determine its general condition and degree of wear.

During the user's monthly inspection, the lifting eye should be checked for evidence of heat application. If evidence of heat application is found, the unit must be scrapped. Check for a bent or twisted bail and discard all units found to have these flaws. Also, check to make certain that the bail rotates freely in all directions.

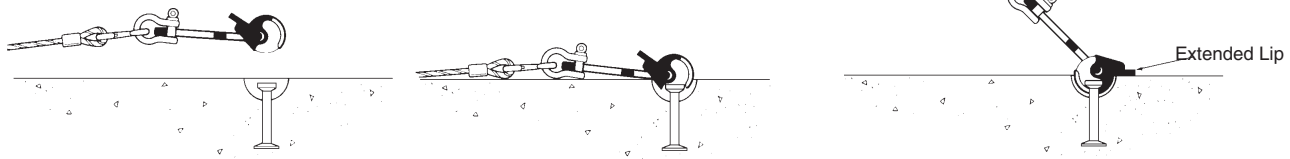
At least once every three months, dimensions "H" and "M" on each unit should be checked. The upper limits are shown in the chart. If either of these limits is exceeded, the P-50 Universal Lifting Eye must be removed from service and destroyed.

The proper method for scrapping a lifting eye is to cut through the bail with a cutting torch to render the unit useless as a lifting device.

No repairs or welding to the P-50 Swift Lift Universal Lifting Eye are permitted.

Limiting Dimensions on P-50 Swift Lift Universal Lifting Eye		
Rated Load (Tons)	H Maximum Width	M Minimum Thickness
1	0.512"	0.217"
2	0.709"	0.236"
4	0.984"	0.315"
8	1.260"	0.472"
20	1.811"	0.709"

How to Use the P-50 Swift Lift Universal Lifting Eye

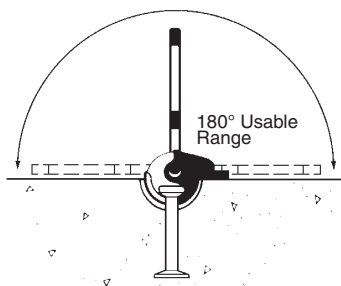


1. To install the P-50 lifting eye, hold the unit upside down with the T-shaped slot directly over the head of the Swift Lift anchor.

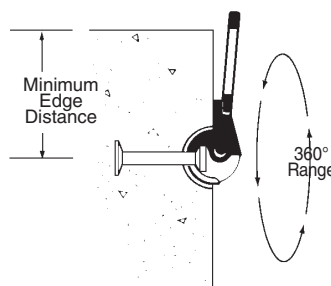
2. Lower the lifting eye down onto the anchor until the T-slot engages the head of the anchor.

3. Rotate the lifting eye until the extended lip of the body touches the horizontal surface of the concrete.

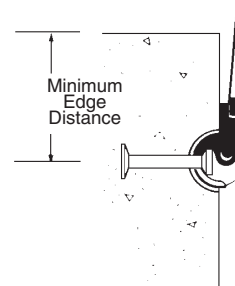
Note: Prior to lifting a precast element, apply an initial cable tension to make sure that the bail and body of the lifting eye are aligned in the direction of the cable pull.



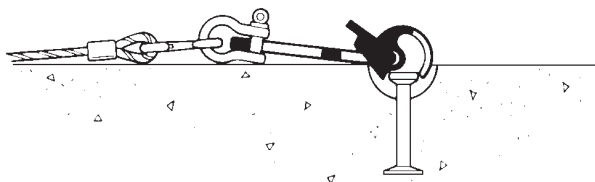
The bail of the P-50 lifting eye can move through a 180° usable range.



The main body of the lifting eye has a 360° rotational range.



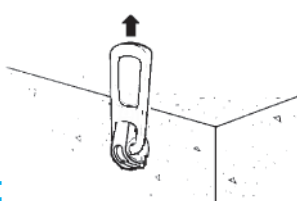
The P-50 lifting is used with the T-shaped slot facing toward the direction of the applied load.



To disengage the lifting eye, the crane hook is lowered and the body removed by rotating the extended lip upward.

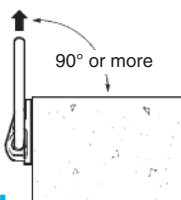
Do's and Don'ts of the P-50 Swift Lift Universal Lifting Eye

Right



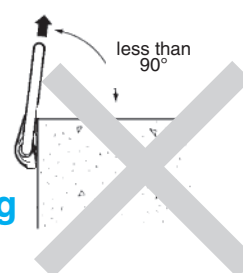
Prior to lifting a precast element, apply an initial cable tension to make certain that the bail and body of the lifting eye are aligned in the direction of the cable pull.

Right



When applying the initial cable tension on edge lift applications, make sure that the cables are at a 90° angle (or larger) to the surface of the precast element.

Wrong



Warning: Do not allow the crane lines to form an angle less than 90° during an edge lift application. This condition can bend the lifting eye bail and could lead to a premature failure.

Warning: The crane line and bail of the lifting hardware must be turned in the direction of the cable forces before the lifting operation begins. The crane line must not be allowed to apply a sideward force on the bail. This condition is dangerous and could lead to premature failure of the hardware or insert.

Warning: Do not modify, weld or alter in any way the Swift Lift Universal Lifting Eye.