

The purpose of this form is to provide SLAC with a brief summary of deviations from drawings or specifications for each undulator assembly being delivered by ANL.

Undulator Assembly No. 14

Name of Assembly Organization: Metalex Manufacturing Inc.

ANL PO#: 5A-10359

No.	Deviation	Reported by	Reporting method	Disposition	Disposition by
1	ATI Wah Chang would like to provide titanium forgings in accordance with latest ASTM revision, ASTM B381-05.	Metalex, R. Schuermann	SDR 3801-001	Accept as is.	G. Lawrence
2	(4) 5/8-11 tapped holes and (2) .6250" diameter holes are requested to be added to each end of strongbacks to aid the manufacturing process.	Metalex, R. Schuermann	SDR 3801-004	Deviation is allowed.	G. Lawrence
3	(3) .2500" diameter tooling holes were added to Strongback datum B to aid the inspection process.	Metalex, R. Schuermann	SDR 3801-008	Holes were suggested by E. Trakhtenberg as a result of first article acceptance.	E. Trakhtenberg
4	Permission to reduce the frequency of Pole inspection from 100% to every 5 th Pole.	Hi-Tech , A. Volcheck	SDR 01	Reject at this time. Deviation was allowed following the acceptance of the first Article.	G. Lawrence
5	Permission to control the position of the #6-32 tapped holes using a special "Go" Fixture.	Hi-Tech , A. Volcheck	SDR 02, 10-25-05	Accepted after visit by to review the fixture.	G. Lawrence, T. Barsz
6	Permission to perform final machining following annealing.	Hi-Tech , A. Volcheck	SDR 02, 11-2-05	Rejected.	G. Lawrence
7	The supplier did not inspect the 6.00 +.00/-.05 dimension per ANSI Y14.5 M section 2.7.1.2(a). The supplier established one side of the size boundary using 3 coplanar pins instead of a flat surface and may have omitted the highest points from its measurement process. The supplier reported that the annealing process had caused the surface contacting the pins to become .004mm concave thereby adding to the measurement uncertainty.	T. Barsz, LCLS QA	ANL Report of Nonconformance 475	Accept as is. Supplier to use this lot of poles for its assembly of the LCLS Magnet Assembly and send the next lot of poles to Metalex after adding the flatness measurement mentioned below. Accept as is. Supplier to add a flatness measurement to its CMM inspection program as a way of monitoring the measurement uncertainty introduced by the 3 pin method.	G. Lawrence G. Lawrence