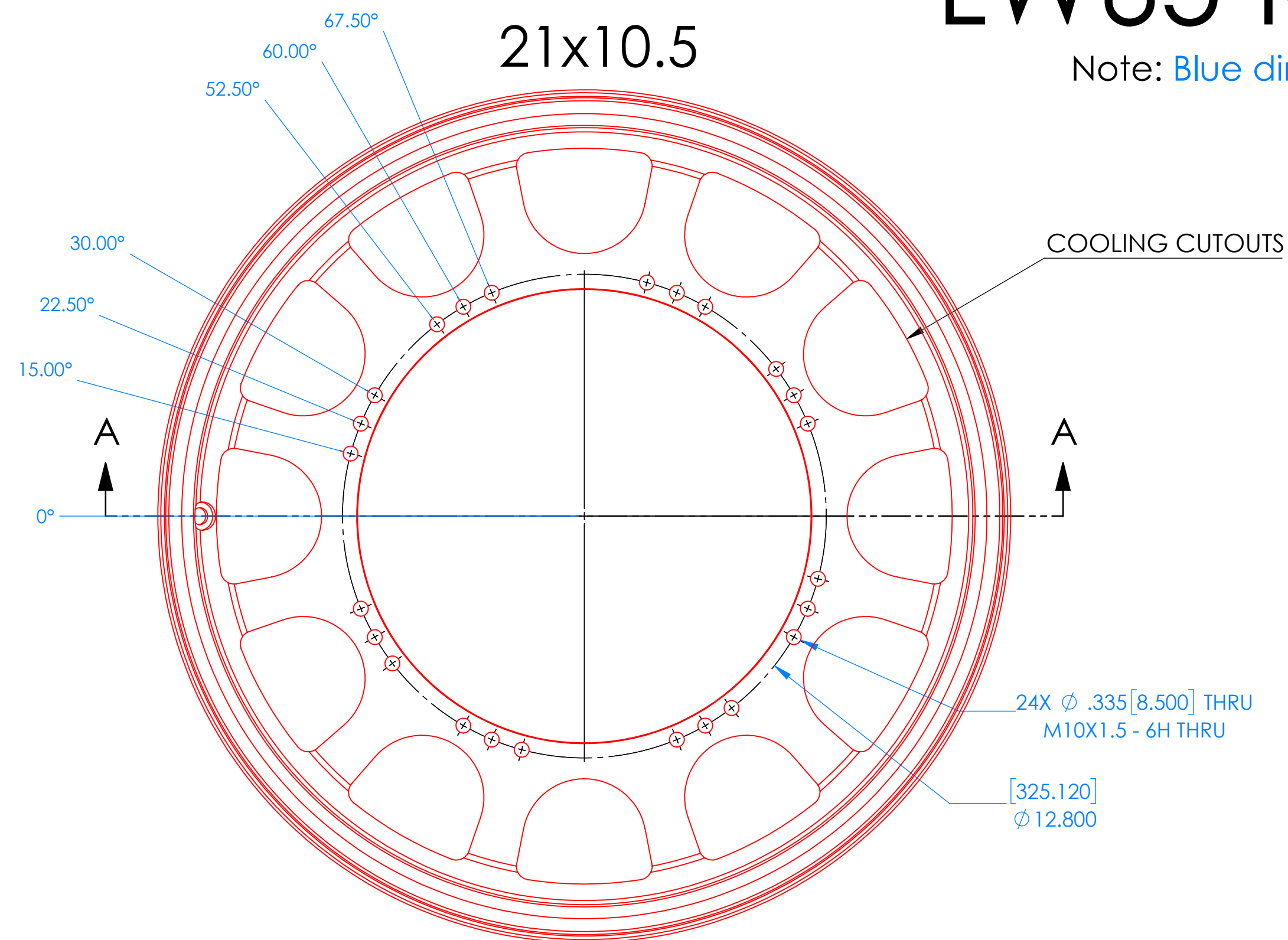


LW65 RIM ADAPTER DESIGN GUIDE

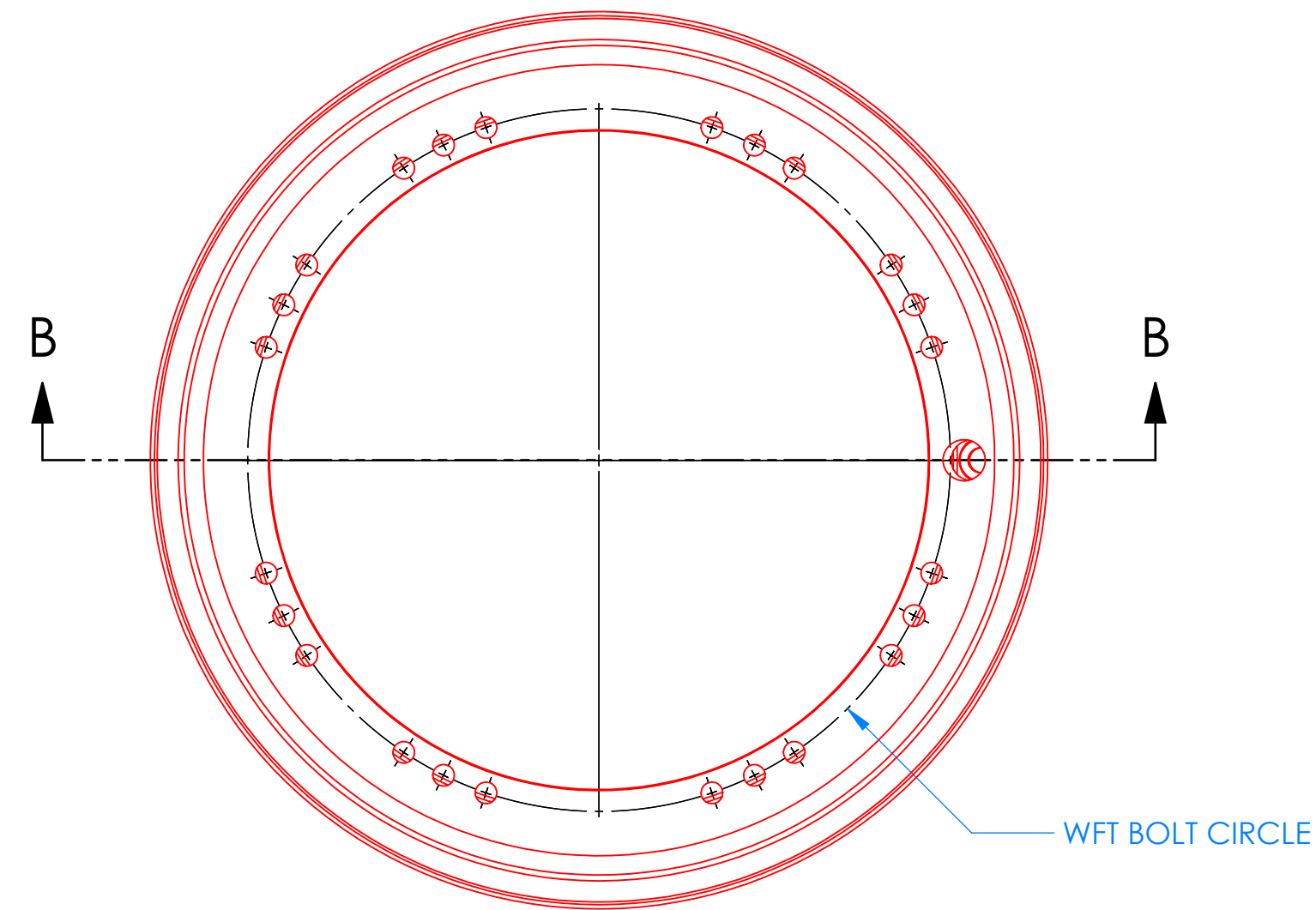
Note: Blue dimensions are CRITICAL and CANNOT change.

Black dimensions can change.

21x10.5

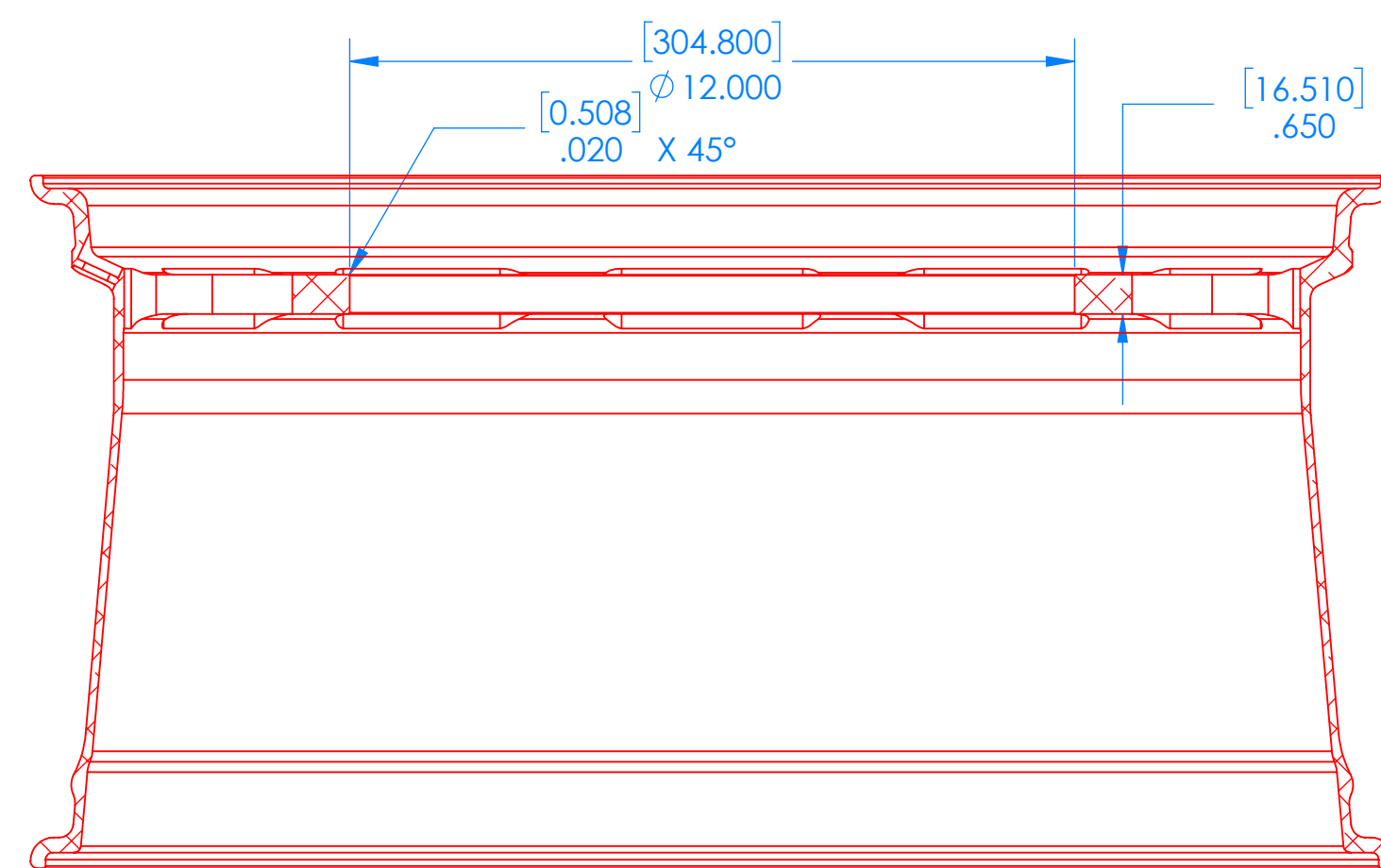
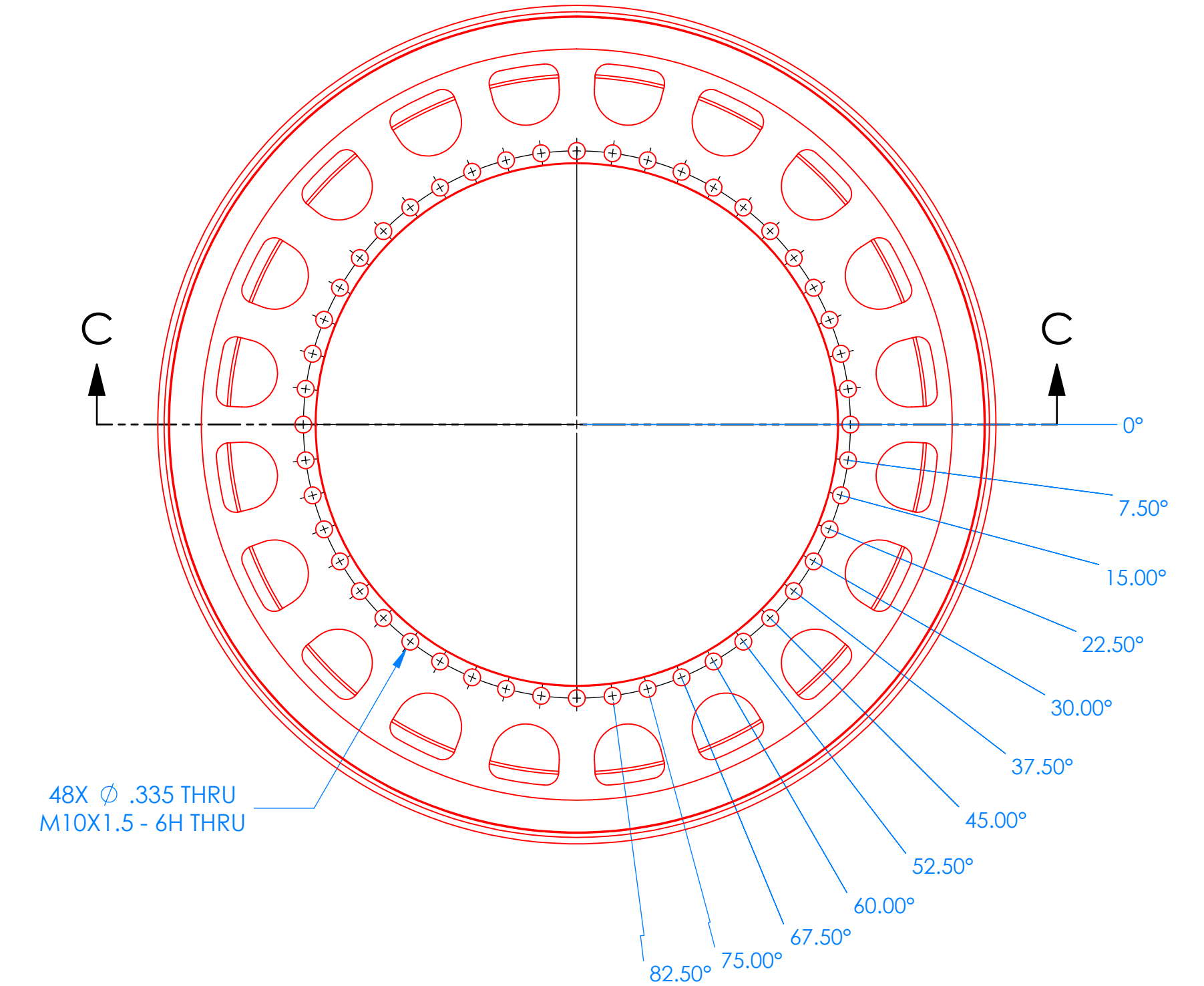


15x8

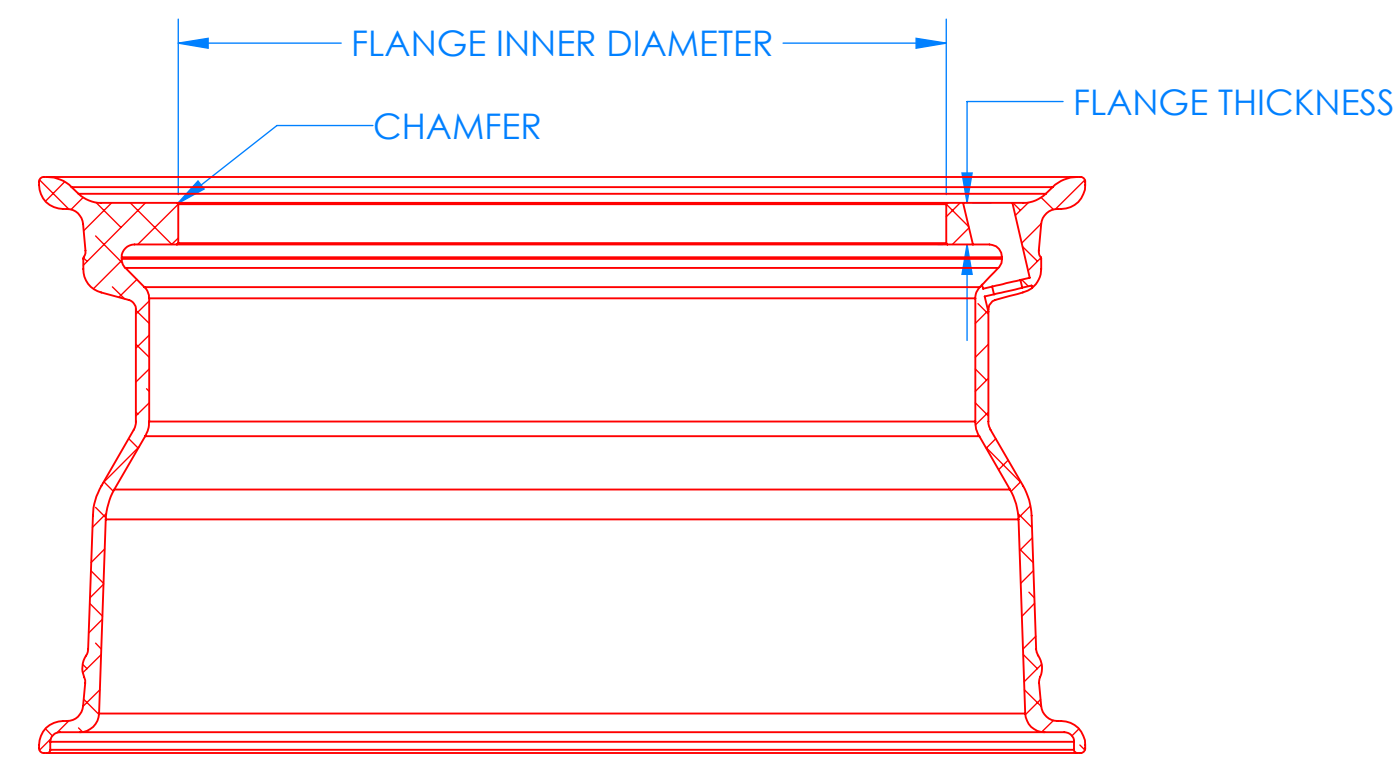


18x7.5

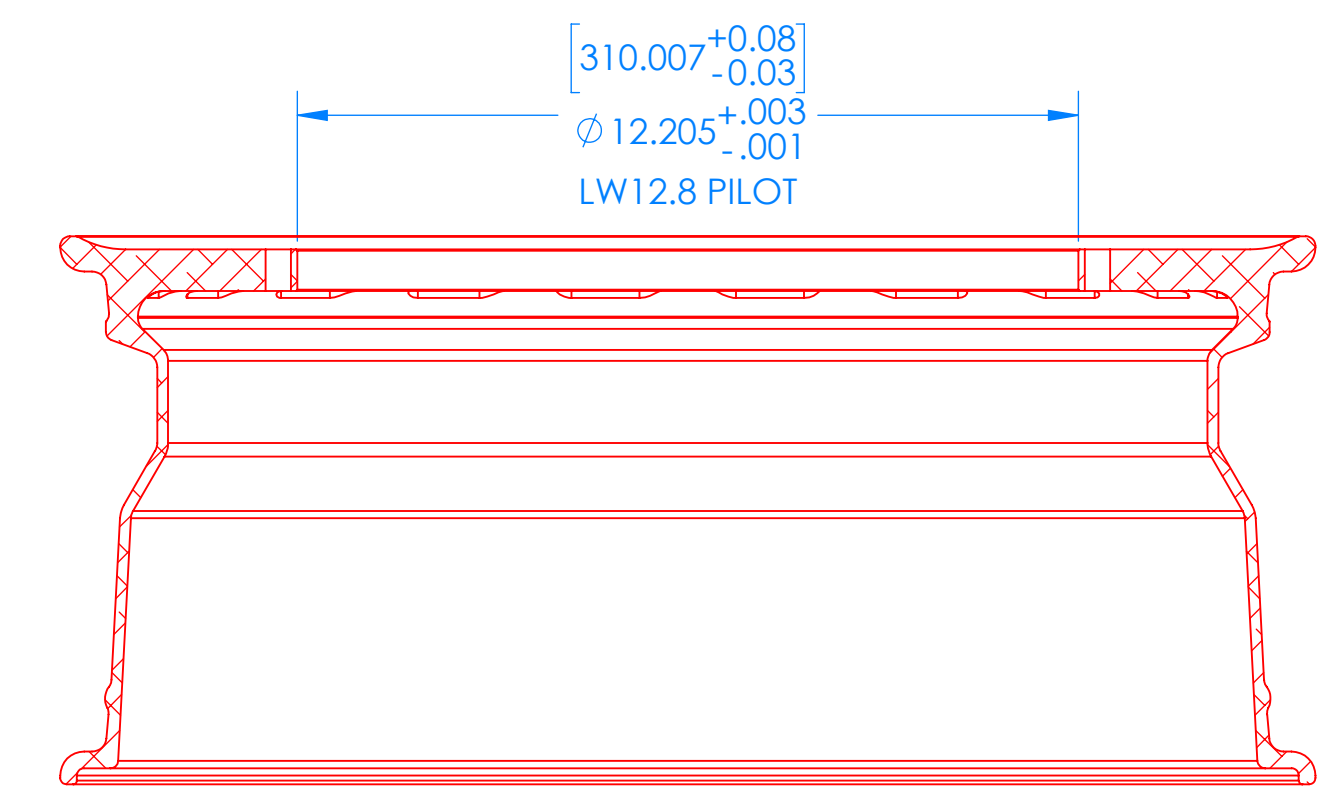
Compatible with LW12.8-50 & -60
Maximum static loading of 1225kg



SECTION A-A



SECTION B-B



SECTION C-C

It is essential that the adapters match the recommended guidelines. This will ensure the system can withstand the rated loads and provide the most accurate results.

Michigan Scientific Corporation (MSC) prefers to use the test vehicle's Original Equipment Manufacturer (OEM) wheel profile as the basis of the rim adapter design. If 3D wheel models or drawings of the OEM wheel are not available, MSC recommends using The Tire and Rim Association or ISO standards as a design basis for the tire mounting profile.

MSC machines rim adapters from 6061-T6 aluminum forgings. These forgings have consistent yield strength and hardness throughout. If 'bar stock' or 'billet' is used, the heat treatment may not be consistent through the section, resulting in a lower yield strength and hardness than published. The material must have a yield strength of at least 40 ksi (275 MPa) if the examples above are followed. If a weaker material is used, the thickness of the rim adapter sections might need to increase.

The "COOLING CUTOUTS" allow for airflow to the brakes and reduce the weight of the adapter system. MSC refines the size and shape of the cutouts for each adapter design. Typical cutouts are shown. The pattern of the cutouts should be aligned away from the Wheel Force Transducer (WFT) mounting holes as shown.

The "FLANGE THICKNESS" must be 0.650 in (12.700 mm). The M10x1.5 fasteners must pass completely through the flange to ensure complete thread engagement.

MSC verifies all rim and hub adapter assemblies using FEA to simulate the SAE J328 wheel durability standard. This should be done with all adapters to verify the load ratings and fatigue life of the adapters. A LW65 transducer has a SAE J328 static load rating of 2900 lb (1320 kg). This should not be exceeded. The lateral stiffness of the rim adapter should match that of the adapter MSC uses to calibrate the transducer for the best accuracy. MSC can check your adapter design at no cost. Contact MSC online at michsci.com/contact-us or via phone at 1-231-547-5511.

Details and specifications provided in this document are purely for informational purposes and are subject to alterations. No liability is accepted for errors or omissions.
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UNLESS OTHERWISE SPECIFIED:		DATE	NAME	MICHIGAN SCIENTIFIC CORPORATION 8500 ANCE ROAD CHARLEVOIX, MICHIGAN 49720 www.michsci.com	
DIMENSIONS ARE IN INCHES		DRAWN	09/01/20	JPB/rlw	
TOLERANCES:		CHECKED	-	-	
XXXX ±.0010		ENG APPR	-	-	PRODUCT LINE: LW65
XXX ±.005		MFG APPR	-	-	CUSTOMER CODE: PROJECT CODE:
XX ±.01					
FRACTIONAL ±					
ANGULAR: MACH ±					
BEND ±					
WEIGHT					
MATERIAL		<small>PROPRIETARY AND CONFIDENTIAL</small> <small>THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF MICHIGAN SCIENTIFIC CORPORATION. ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF MICHIGAN SCIENTIFIC CORPORATION IS PROHIBITED.</small>		DESCRIPTION: Rim Adapter Design Guide SIZE: DWG. NO. LW65 Rim Adapter Design Guide SCALE: 1:3	
FINISH		REV		SHEET 1 OF 2	