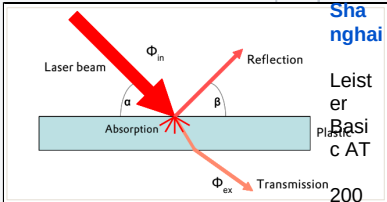
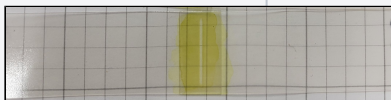
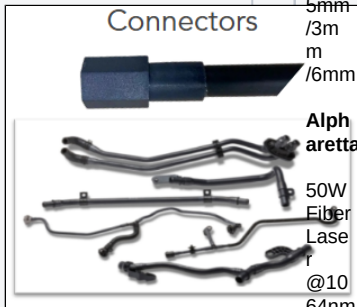
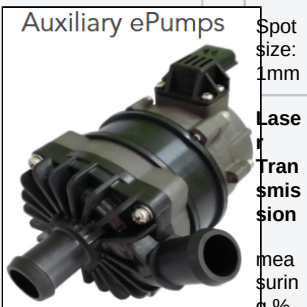
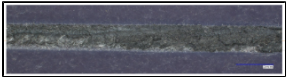


Laser Welding OLD

LASER TRANSMISSIVE MATERIALS			THEORY, KNOWLEDGE, & MODELS		CAPABILITIES		
Commercial Laser Transmissive "Black" Grades	Thicknesses	Absorbing Layer	Introduction to Laser Welding		Shanghai Leister Basic AT 200W Fiber Laser @1070nm		
R-3-410BL LZT	1mm	R-4-270BL, BR11BL		Laser Welding Database	Ongoing updated database that contains historical data, laser settings, laser transmission values, etc		Equipment
	1.5mm	R-4-270BL, R-4-240BL					
A-1130 HS LZT BK979	2mm	R-4-270BL, R-4-240BL	Target Applications	Hermetically sealed parts, electrical connectors, sensors, switches, e-water pump, e-ATF pump, slot liners	Alpha		
	1mm	A-1625 HS BK324					
AE-8940 LZT BK979	2mm	A-1625 HS BK324					
	1mm	AE-8940					
A-1145 HS LZT BK979	2mm	AE-8940					
	1mm	A-1625 HS BK324					
AE-8930 LZT (inactive)	2mm	A-1625 HS BK324					
	1mm	AE-8935, AE-8940, AE-8950, AE-9933, AE-9950					
Laser Welding Transmissive on Transmissive using "clearweld" dye	2mm	AE-8935 BK					
							
			Connectors				
			Auxiliary ePumps				
			High voltage coolant heater - heat resistant coolant chamber				

Weld Strength Lap shear testing for weld strength	
Microscopy Imaging to analyze cohesion at weldline	

Laser Welding Team			
Alpharetta	Emmanuel David	Jacob Brooker	Elias Irick
Shanghai	Hanson Li	Lingjun Rao	Neil Liang