

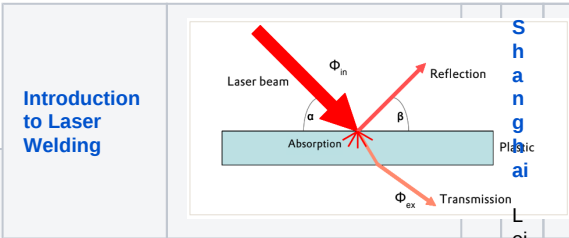
Laser Welding

APPLICATIONS

Target Applications: hermetically sealed parts, electrical connectors, sensors, switches, e-water pump, e-ATF pump, slot liners



THEORY, KNOWLEDGE, MODELS & DATA



Laser Welding Database

Ongoing updated database that contains historical data, laser settings, laser transmission values, etc

LASER TRANSMISSIVE MATERIALS

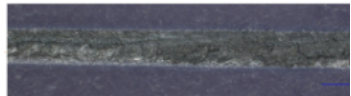
Commercial Laser Transmissive "Black" Grades	Thicknesses	Absorbing Layer
R-3-410BL LZT	1mm	R-4-270BL , BR11BL
	1.5mm	R-4-270BL, R-4-240BL
	2mm	R-4-270BL, R-4-240BL
A-1130 HS LZT BK979	1mm	A-1625 HS BK324
	2mm	A-1625 HS BK324
AE-8940 LZT BK979	1mm	AE-8940
	2mm	AE-8940
A-1145 HS LZT BK979	1mm	A-1625 HS BK324
	2mm	A-1625 HS BK324
AE-8930 LZT (inactive)	1mm	AE-8935, AE-8940, AE-8950, AE-9933, AE-9950
	2mm	AE-8935 BK

CAPABILITIES

Shanghai Laser 2000W Fiber Laser @ 1070nm Spot size: 0.6mm / 1mm / 1.5mm / 3mm / 6mm



Laser Welding Transmissive on Transmissive using " clearweld" dye		Al p h a r e t t a	
		5 0 W F i b e r L a s e r @ 1 0 6 4 nm S p o t s i z e: 1 mm	
		L a s e r T r a n s m i s s i o n m e a s u r i n g % t r a n s m i s s i o n a t s p e c i f i c w a v e l e n g t h s	Alpharetta: Perkin Elmer Lambda 950 Shanghai: LPKF TMG3 

T e s t i n g	W e l d S t r e n g t h L a p s h e a r t e s t i n g f o r w e l d s t r e n g t h	
	M i c r o s c o p y I m a g i n g t o a n a l y z e c o h e s i o n a t w e l d l i n e	

Laser Welding Team			
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