

Materials List for:

Production of Single Tracks of Ti-6Al-4V by Directed Energy Deposition to Determine the Layer Thickness for Multilayer Deposition

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Materials

Name	Company	Catalog Number	Comments
Ti-6Al-4V powder	Xi'Tianrui new material		As starting material
ISOMET precision cutter	Bohler		To cut the samples
Polishing machine	Presi		To polish the samples
EpoFix resin	Presi		To mount the samples
Diamond paste	Presi		For polishing
Optical Microscope	Leica		Microstructural observation
Field emission scanning electron microscope	Merlin-Zeiss		Microstructural observation
Stereo microscope	Leica		
LEC1- CS444 ANALYSER	IncoTest		Chemical analysis
LEC3 - ELTRA OHN2000 ANALYSER	IncoTest		Chemical analysis
LEC2 - LECO TC436AR ANALYSER	IncoTest		Chemical analysis
ICP	IncoTest		Chemical analysis
IRB 4600	ABB		Antropomorphic robot
GTV PF	GTV		Powder feeding system
YW 52	Precitec		Laser head
Nozzles	IRIS		Nozzle for feeding powders
YLS 3000	IPG Photonics		Laser source