



LIGHT RESIN TRANFER MOLDING - CERTIFIED COMPOSITES TECHNICIAN (CCT -LRTM)

TOPIC	Resource	Body of Knowledge %
Module 1 General Composites Knowledge	CCT Basic Composites Manual	5%
History and basic understanding of the composites industry		
Why composites are unique		
Advantages of Composites		
Module 2 Composites Manufacturing Processes	CCT Basic Composites Manual	10%
Open Molding		
Closed Molding		
Manufacturing process recognition		
Module 3 Composite Materials Identification	CCT Basic Composites Manual, CCT LRTM Study Guide	10%
Materials, reinforcement, selection, orientation, advantages		
Resin systems , initiators, curing agents, measurements, applications		
Core materials and laminate bulkers		
Module 4 Light Resin Transfer Molding (LRTM) Process and Production	CCT LRTM Study Guide	20%
Darcy's Law		
Light Resin Transfer Molding Process		
Light Resin Transfer Molding Production Cycle		
Module 5 Tooling and Equipment for Light Resin Transfer Molding (LRTM)	CCT LRTM Study Guide	20%
Design for Light Resin Transfer Molding		
LRTM Tooling, tool building basics, tooling materials, plug or master to build tooling, construction of tooling		
Standard and accessory fittings		
Vacuum Pumps		
The vacuum system		
Mix and metering delivery of resins		
Module 6 Materials for Light Resin Transfer Molding	CCT LRTM Study Guide	15%
Reinforcements, resins, initiators and curing agents		
Fillers		
Core materials and laminate bulkers		
Module 7 Gel Coat Application		10%
Introduction to Gel Coating		
Gel Coating Safety, use, storage, handling		
Raw material quality assurance		
Spray gun setup, spraying technics		
Gel coat application methods, spraying technics		
Gel coating for Light Resin Transfer Molding		

