

Selling CompanyABC Materials

4 DOOR OUTLINE

COURSE OUTLINE

Non-linear, self-study, curated course with various levels of completion.

- Think About It (introduction)
- Learn It (main materials content)
- Sell It (selling-focused content)
- Share It (social aspect)
- Practice It (reviews, KCs, study guides) (fully developed by us)
- Get Certified (certification exam) (fully developed by us)

COURSE OBJECTIVES

1. Recognize the **importance** of being knowledgeable about materials when selling CompanyABC printers.
2. Use **resources** to gain knowledge of materials.
3. Use **terminology** correctly to describe, compare, and contrast materials and their properties.
4. Differentiate between the CompanyABC materials used in 3D printing, including the:
 - a. 3D printing **technologies** that use a material
 - b. **Key material property** strengths and weaknesses they're known for
 - c. **Effect** of each property on the performance of parts built with that material
 - d. **Type of parts** a material can be used to build
 - e. Suitable **applications** a material is used for
 - f. Class (**group**) of materials to which material belongs
 - g. **Post-processing** and/or **secondary processing** options (not processes or steps) a material supports
 - h. 3D **printers** a material is used with, and
 - i. **Industries** a material is most likely used in
5. Explain what each material **property** means and why it is important when selecting a material in a particular scenario.
6. Apply an organized and efficient **approach** to questioning and gathering information when helping a customer select an appropriate material.
7. Compare and contrast CompanyABC materials against similar **competitor** 3D materials and similar **traditional** manufacturing materials.
8. Evaluate scenarios involving customer part requirements and CompanyABC materials to **determine the appropriate material/printer solution**.

THINK ABOUT IT

Asset #	Title	Deliverables and File Names	Team
1.	Brief SME video . Explain key concepts: 1) Customers buy the part, not the printer. Materials matter significantly because they help define the part. Materials are the driver. They're selling printers. All based on customer need. 2) Sales reps must know the materials well enough to help customers print the part they need. 3) How does knowing about material characteristics matter to software sales reps? ??? there may be special considerations for software when working with specific materials 4) How does it matter to printer sales reps? They are selling printers, but first they are selling the part, which relies on the materials.	video	Laura John
2.	SME Video – tell a story that demonstrates how a particular material was valuable to a customer (why a particular property value was important to their part production).	video	Laura John Aaron and Alex
3.	Key points to convey as the purpose of this course (and in SME video) – introductory video to STATE that these topics are important – NOT to teach on these topics and provide content: Feeling confident enough about materials that you know the capabilities of the material and printer and you know what will meet the customer need. Knowing what questions to ask, and what follow up questions to ask.	video	Laura John Aaron
4.	Course objectives	Text on initial page	Laura Paul / Charmaine
5.	Using the Discussion Board	Video	Charmaine
6.	Discussion question . Provide at least one personal reason for taking this course.	Link to Discussion Board	Laura Paul / Charmaine
7.	Visual of completion options with clear explanations – what to do, and what you'll get - certification, just take it w/o certification, or audit certain parts. Job aid to help them determine how to complete this course. end goal on visual, which should tie into next visual. Just tell them to think about it. No activity. Identify the type of completion or certification you hope to get from this course.	Visual put on Think About It home page; clickable pop ups that provide visuals (below) (do this in Rise?)	Paul Laura
8.	Visual of suggested paths (end goals shown, smaller, but at the end) – 2-3 paths (ideas for ways to complete course) – depends on what kind of credit you want to get. How to take this course – suggested path. Describe how the course is set up. Determine your intended path or a possible path towards your personal completion of this course.	Visuals (or eL or pdf?) of each path that appear when user clicks completion option (above) Attached/downloadable job aid with both completion options and suggested paths	Paul Laura

DISCUSS BOARD

Asset #	Title	Deliverables and File Names	Team
1.	5 Think About It, Provide at least one personal reason for taking this course.	Question posted	Charmaine
2.			

LEARN IT

Asset #	Title	Deliverables and File Names	Team
1.	Link to terminology sites... Use terminology to describe, compare, and contrast materials and their properties. Refer/link to terminology course.	Links to glossaries https://all3dp.com/1/3d-printing-terms-terminology-glossary/ https://www.3dhubs.com/knowledge-base/definitive-3d-printing-glossary/ https://i.materialise.com/blog/en/3d-printing-beginners-dictionary/ Link to terminology course	Laura Charmaine
2.	Explain why it's important to understand the different properties of materials, even if you're selling printers or software. SME video explaining why it's important to understand the different properties of materials and the materials themselves, even if you're selling printers or software. How does knowing about material characteristics matter to software sales reps? How does it matter to printer sales reps? Provide 2-3 examples. Include an explanation of why certain property characteristics might matter to a customer.	Video	Laura John Aaron
3.	Explain how the material may impact the way you design a jig, tool, or fixture (provide a real example).	Video	Laura John Aaron
4.	Directions on how to search for the data sheet, SDS, use the material finder, use the infocenter, etc.	Screen video for data sheets (tech and SDS)	Laura (screen videos) with Aaron's approval of script
5.		Screen video for material finder	Laura (screen videos) with Aaron's approval of script
6.		Screen video to use the infocenter	Laura (screen videos) with Aaron's approval of script
7.		Screen video for finding webinars	
8.	Each technology will have its own page or location in some sort of interactive tool (interactive meaning a clickable visual, not searchable necessarily, unless we can do that). Differentiate between CompanyABC materials by technology and printers that support them. Describe the key material properties each material is known for; its strengths (as well as weaknesses) that it's known for. Describe how each material's key properties affect the performance of parts built with that material. Describe the type of parts a material can be used to build and the best applications that material is suitable for.	Material family pages Material pages with links Material quizzes Scenario-based interactive walk-throughs Search activity	Laura, material quizzes 4 Will – pages and page contents (links, images, verticals, etc.) Product managers or

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	Classify materials by technology, printer families, individual printers, material family, verticals in which each material/family is used, key properties. Each page/material will include a link to its datasheet and its material page (from materials finder page). Example: https://www.3dsystems.com/materials/duraform-prox-ex-nat These pages include will indirect this information (linked, or directly in the LMS): • Visual of materials (a part or something that uniquely represents that material) • Short statement – what makes this material unique? • A pdf of the data sheet to download (or link to?) (sample https://www.3dsystems.com/sites/default/files/2019-05/3d-systems-duraform-prox-ex-nat-datasheet-usen-2019-05-01-a-print.pdf) Pam owns Infocenter. How is that content managed? Is there a process of notifying people of updated content in infocenter? Are links auto updated when sheets are updated? • A link to an article or story on the material; press releases • Existing marketing/training videos • Key properties that are important to certain applications, certain industries, or certain types of parts, with explanations (why?) • Printers that each material works with, and technology (and why) – or do we rely on the datasheets? We will provide: • Competitors with like materials (including objection handling and why ours is better). Be able to explain the value of using ours instead. Anticipated objections and responses. • Traditional materials compared to our like materials (why 3E materials and printing are better) • Possible post-processing needs or recommendations or possibilities – can we find a link to this? is this on the data sheets? • Verticals in which the materials are most used, and why – can we link to this info somewhere on the Internet? Rely on datasheets? • 1-2 Examples of a part, why that material was chosen, what properties mattered when making the part, and why • Link to files in Sales Tools in salesforce if there are any (content is not always current, what to do?) in the video, mention to check the date of the material. How can we be notified of new material that replaces existing? What's new? Need report • Links to webinars on that material (or that material's class) • Link to the material on the infocenter • A quiz only about this material. • Best applications this material is suitable for, and why/how – rely on data sheets?		other person for SLA, SLS, DMP, (other?) for #11 Charmaine, Paul, and John to assist, as this is the bulk of the course
9.	Activity where learner searches for a particular data sheet.		
10.	Present a few examples of parts that require certain materials for certain reasons (durability, flexibility, color) and explain how it's important that certain parts are created using certain materials. What unique qualities of the material are the customer taking advantage of in this particular scenario and application.	Videos or links to videos	
11.	Knowing when to bring in the AE. Whenever your opp starts to involve talk about material properties (details), involve your AE. 1. Benefits of using an AE 2. What the AE does once they're involved	video	Laura John Alex
12.	Explain what each material property means and why it is important when selecting a material.	Materials properties glossary (Rise?)	Laura

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	A visual materials property glossary, separate from the other glossary, will be used to chart out each material property. Each material property definition will include: • A clickable image (on the home page) that leads to a definitions page for that property • Definition of the property ◦ https://en.wikipedia.org/wiki/List_of_materials_properties ◦ https://www.chegg.com/homework-help/definitions/mechanical-properties-of-materials-5 ◦ http://web.mit.edu/course/3/3.225/book.pdf ◦ https://www.lifewire.com/specs-on-3d-printing-materials-2232 ◦ https://formlabs.com/blog/how-to-choose-the-right-3D-printing-material/ • Description of values (good and bad, and for which applications) – why this property, at a particular value, is important when selecting a material • Define any terms used in the values explanation • List materials that are high in this property (or good), or low (which is good or bad), with descriptions, maybe, of the implications • An image of a completed part that helps define that property – could use descriptive images from https://formlabs.com/blog/how-to-choose-the-right-3D-printing-material/ • Applications in which that property would be beneficial or important (industries in which it's most valued) (applications that are ideal for each material).		
13.	Identify post-processing options and requirements for each material. eLearning – images, explanations, text, describing the various post-processing or secondary processing methods/options available and recommended for each material or material family. And why does all this matter? 1. Post-processing methods/options 2. Possibilities for materials with secondary processes 3. What to ask customers about post-processing 4. What materials may require which type of post processing? 5. Post-processing is bigger in metals. V1 of this course covers plastics.	eLearning AND/OR we could mention this briefly, per material, on the material pages	2 Will Laura
14.	Describe the status of AM in manufacturing today. Assigned reading (brief text on screen). Links to current articles.	2-5 links to articles	3 Will

SELL IT

Asset #	Title	Deliverables	Team
1.	Apply an organized and efficient approach to questioning and gathering information when helping a customer select an appropriate material. Describe the process for selecting the appropriate material for a customer application. Identify questions to ask a customer to determine the key material properties that are required for their part. Interactive workflow where learners click each part of the workflow or other components of the visual. The workflow explains how materials fit into the workflow and ecosystem. There's an incentive to sell the materials in order to sell the printer, so you must know materials.	Workflow,	Laura SME
2.	List of narrowing questions – application, part, properties, materials, and printers Downloadable job aid (based on interactive visual) that presents an organized and efficient approach to questioning and gathering information when helping a customer select an appropriate material. First set of questions/topics help you determine what part you want and have some idea of the material characteristics, keeping in mind the printer that the customer has, has a budget for, or might need to purchase based on the material characteristics. Or is there a required technology, printer, material already chosen/known by the customer? Second part includes narrowing down the possible materials based on key properties that were identified (consider surface finish, lead time, color, etc.) and the printer(s) under consideration. Third steps is choosing the solution. This checklist-like job aid will be written by a SME based on a proven approach.	Narrowing questions Job aid	Laura, Paul
3.	video of SME discussing the differences between selling to customers who know what they want and those who have no idea.	Video or audio file	Laura John Alex
15.	Scenario-based, interactive walk-throughs will be used where a sales rep determines the best material to print the part (based on the customer's need and part requirements). There should be at least 2 per material 'group.'		Laura, 1 Will SMEs
4.	Use webinars to learn more about materials Link to seminars or how to find seminars; how to be notified and stay in the loop.	Questions	Will Laura SME
5.	Apply selling strategies and best practices with customers. eLearning/storyline-created scenarios of customer needs and part requirements to explain why a particular material is appropriate. Describe the key properties of that material that makes it fit for this customer's need. Identify press mentions of applicable materials to the customer's need/application (that match the scenarios, if possible).	Customer stories and press releases	Will Laura SME
6.	Provide answers to common questions. Q&A of commonly asked questions in the discussion board, answered by SMEs. Encourage learners to ask more questions, or to respond to the SME answers.	Q&A	Will
7.	Ask learners to share a story where they won/lost a materials sale.	Discussion Board question	Laura
8.	eLearning? Rise ? Can we use some other interactive tool in Docebo? – general information on all materials. 1) Describe the different target audiences of material sales – which industries, which applications, and the types of people you'd be selling to, and why. What is most common? 2) What opportunities are new that we're not taking advantage of (jigs, tools, and fixtures. 3) we need to get updated material data sheets for service bureaus, to increase their business and increase our materials sales). 4) Materials are often created to fill a gap or need - Quick statement on the process by which new materials are developed; to fill a gap or need	Rise	?
9.	Downloadable cheat sheet for each material that provides sales-based information - what you should know about each material at a minimum, to sell it. The most important properties for each material to know, and why. Key customer stories (summarized). Key information for selling (different than data sheet; more words that explain the key points of a data sheet).	Material cheat sheets DO WE NEED THIS?	

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10.	Curate general information on why AM is better than traditional methods of manufacturing. News articles on advantages of CompanyABC materials.	Information	Laura
11.	Compare and contrast CompanyABC materials against similar competitor 3D materials and similar traditional manufacturing materials. How do we compare. How should we compare to competitor materials. Explain the value of using our materials instead of a customer's proposed material. Respond to objections to our materials. Examples with an introduction that explains the concept that sales reps should be prepared to handle situations in which customers want to use their own material.	Examples, customers use own materials	Will , SMEs

SHARE IT

Asset #	Title	Deliverables and File Names	Team
1.	Create a blog for learners to contribute: - New material information and data sheets and SDSs - Customer stories, wins and losses - Questions to get answers from others - other Blog is different from announcements (I think?). Announcements is shorter; key statements, releases. Will be used less often. For SMEs and Academy only. The blog is for everyone.	Blog or widget where people can share resources	Laura Need SME to maintain
2.	Locate at least 5 applicable resources from different locations. Provide articles (in a blog or article link widget?) where learners can view the article.	exercise	Laura
3.	Screen video demonstrating how to find various resources including: - A particular document in the Salesforce Sales Tools portal - A list of materials that can be used with a certain printer using the printer web site - A list of all materials in a particular family/technology (materials web site)	Screen videos	Laura
4.	Exercise where they locate different resources from different sites (walk-through instructions). They're asked to answer questions that get them to explain the ways different marketing materials can be used by sales reps. This includes having them find the marketing materials in the Salesforce Sales Tools. Have learners search marketing materials to match specific customer part requirements with a material.		Laura
5.	Ask the Expert – discussion board or other option (channel or blog?) where they can get questions answered by a SME.		
6.	An announcements area that provides news and links (or videos of) ongoing webinars on new / changes to materials.	DO WE NEED THIS?	Paul
7.	Share at least 1 best practice with your colleagues. Ask them to post this on the blog.		
8.	Share at least 1 experience when you sold materials. Ask them to post this on the blog.		
9.	Respond to at least 2 discussion questions. Discussion board.		
10.	Read at least 5 responses/posts of others to gain knowledge. Ask them to post this on the blog.		

PRACTICE IT

Asset #	Title	Deliverables and File Names	Team
1.	50 KCs (quizlet or rise) (questions about data/properties) on all materials.	KCs on quizlet or Rise	Laura
2.	10 SLA KCs, in relation to materials Materials per printer family KCs	Rise	Laura
3.	10 MJP/CJP KCs, in relation to materials Materials per printer family KCs	Rise	Laura
4.	10 SLS KCs, in relation to materials Materials per printer family KCs	Rise	Laura
5.	10 Figure 4 KCs, in relation to materials Materials per printer family KCs	Rise	Laura
6.	30 Plastics KCs • Rigid (includes Flex, Tough, Pro, SLS PA, EX, most SLA, most MJP) • Elastic & Soft (includes FIG4 rubber & elast, MJP elastomeric, SLS Flex & TPU) • Sacrificial (includes FIG4 & SLA castable resin, MJP wax and castable plastic, eggshell, SLS Castform PS) • Mineral & Specialty-Filled (includes CJP, SLA Bluestone, HPC, SLS AF+, GF, HST, Ceramax, FR1200)	Rise Quizlet	Laura
7.	Properties KCs	Rise and Quizlet	Laura
8.	Application KCs KCs about materials related to possible uses and applications – what app are they best for, why, etc.	Rise Quizlet	Will
9.	KCs where learner is given requirements and learner needs to determine which material is best.	Rise Quizlet	Laura
10.	250 MC questions (150 chosen randomly for the practice certification exam) A practice certification exam (with constructive and prescriptive feedback)	Practice certification exam, Storyline or Rise	Laura
11.	50 MC questions (70 chosen randomly for the practice course assessment) - A practice course assessment . ? Not for certification, but general completion? (with constructive and prescriptive feedback)	Practice course assessment, Storyline or Rise	Laura
12.	Pseudo-guided inquiry KCs that demonstrate how to determine the best material. We guide them through these scenarios and they have to choose the right answer or step to move forward. Lots of feedback. Use example scenarios of customer needs and part requirements to explain why a particular material is appropriate. Describe the key properties of that material that makes it fit for this customer's need.	Inquiry KCs	Laura
13.	Quiz where learners are given requirements, and they have to search materials finder or other resource to match specific customer part requirements with a material.	Activity quizzes, Rise	Laura

GET CERTIFIED

Certification exam. 150 MC questions (250 created as a pool)