

Wood Moisture Solutions, How To Dry Lumber For Quality And Profit

	Modules		Slides	Topics	Quizzes	Narration	
	Lessons					Required	Optional
	1	GETTING STARTED	54	3	3	0:29:07	01:30
1	1A	Course introduction	20	1	1	10:33	01:30
2	1B	Why wood is dried	15	1	1	07:44	00:00
3	1C	Safety	19	1	1	10:50	00:00
	2	WOOD, THE MATERIAL TO BE DRIED	120	9	9	0:36:27	36:06
4	2A	Softwood structure	22	2	2	16:31	02:22
5	2B	Hardwood structure (optional)	15	1	1		10:19
6	2C	Moisture content	18	2	2	10:03	02:07
7	2D	Oven-dry method (optional)	14	1	1		07:17
8	2E	Moisture content samples (optional)	31	2	2		13:32
9	2F	Wood variability	20	1	1	09:53	00:29
	3	WOOD IN THE KILN ENVIRONMENT	53	6	4	0:33:32	01:44
10	3A	Measuring temperature and humidity	19	2	1	10:05	01:44
11	3B	Psychrometrics, EMC	17	2	2	13:42	00:00
12	3E	Shrinkage and strength	17	2	1	09:45	00:00
	4	HOW A BOARD DRIES	37	6	2	0:16:23	05:51
13	4A	Water movement in wood	16	3	1	07:09	00:00
14	4B	Factors affecting the drying rate	21	3	1	09:14	05:51
	5	STRESS AND DEFECTS	49	6	4	0:35:18	07:22
15	5A	Stress development and relief	21	3	2	13:50	07:22
16	5B	Wood defects	28	3	2	21:28	00:00
	6	SCHEDULES	250	28	12	1:34:21	1:29:52
17	6A	Air drying and predrying (optional)	55	4	3	00:00	22:45
18	6B	Types of schedules	16	1	1	13:08	00:00
19	6C	Time-based schedules	20	1	1	18:34	00:00
20	6D	Moisture-based schedules (optional)	41	2	2	00:00	30:50
21	6E	Equalization	21	1	1	17:43	00:00
22	6F	Conditioning and cooldown	22	1	1	11:56	03:17
23	6G	Selecting an air velocity	12	1	1	09:20	00:00
24	6H	Additional schedule considerations	19	3	1	16:43	00:00
25	6I	Other schedule considerations	24	12	0	00:00	24:17
26	6J	High-temperature drying	11	1	1	06:57	00:00
27	6K	Continuous kiln schedules (Optional)	9	1	0	00:00	08:43
	7	HOW KILNS OPERATE	139	8	8	1:20:45	0:14:07
28	7A	Kiln designs	24	1	1	13:13	06:29
29	7B	Steam	13	1	1	09:18	00:00
30	7C	Steam-heated kilns, steam delivery	19	1	1	14:37	00:00
31	7D	Steam-heated kilns, condensate return	17	1	1	08:56	00:00
32	7E	Direct-fired kilns (optional)	14	1	1	00:00	06:33
33	7F	Venting and humidification	15	1	1	11:52	00:00
34	7G	Fan systems	16	1	1	08:58	01:05
35	7H	Baffling	21	1	1	13:51	00:00
	8	PREPARING A CHARGE	79	4	4	0:28:33	0:15:05
36	8A	Sorting in the sawmill	14	1	1	08:48	00:00
37	8B	Stacking	22	1	1	09:57	01:01
38	8C	Loading the kiln	26	1	1	09:48	01:01
39	8D	Sorting at the planer (optional)	17	1	1	00:00	13:03
	9	RUNNING A CHARGE	88	9	5	1:06:34	0:03:33
40	9A	Preparing to dry	14	1	1	10:51	00:00
41	9B	Starting and running a charge	27	3	2	21:05	00:00
42	9C	Moisture meters	26	4	1	14:14	02:06
43	9D	Measuring MC	21	1	1	20:24	01:27
	10	MAINTENANCE	111	10	7	1:10:29	0:00:54
44	10A	Maintenance, mechanical 1	21	3	1	12:40	00:00
45	10B	Maintenance, mechanical 2	24	2	1	14:12	00:00
46	10C	How the controller works	23	2	2	12:50	00:54
47	10D	Maintenance, control system	26	2	2	20:54	00:00
48	10E	Measuring airflow	17	1	1	09:53	00:00
	11	OPERATING EFFICIENTLY	55	4	3	0:26:55	0:08:43
49	11A	Cost of drying	23	1	1	06:47	07:09
50	11B	Energy	17	2	1	09:49	01:34
51	11C	Minimizing downtime	15	1	1	10:19	00:00
	12	Continuous improvement	52	3	3	0:40:04	0:00:42
52	12A	Describing data	17	1	1	12:42	00:42
53	12B	Measuring and organizing data	19	1	1	14:15	00:00
54	12C	Analysis techniques	16	1	1	13:07	00:00