



Satuan Acara Pengajaran

MTB82152 - Proses Pelapisan & Inhibisi

Pengajar

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Prof. Dr. Ir. Johny Wahyuadi Mudaryoto DEA.

Minggu 1

Materi INTRODUKSI: (Chap 1 ref 1, Chap 4 ref 2)
- Penjelasan SAP, Sistim Perkuliahan & penilaian
- Prinsip Proteksi Korosi
- Organik coating, metalik coating, proteksi katodik

Media LCD

Referensi 1. Coating and Painting, 2005
2. Chatterjee U.K., Bose S.K., Roy S.K., Environmental Degradation of Metals, Marcel Dekker Inc., New York, 2001.
3. Kenneth Graham A., Electroplating Handbook, 3rd.
4. Frederick A. Lowenheim, Modern Electroplating, 3rd, The Wiley International
 Publs., New York, 1974.
5. Denny A Jones, Principles and Prevention of Corrosion, Hearle, 2nd,
 Macmillan
 Publs. Co., New York, 1992.
6. Nathan C.C., Corrosion Inhibitor, NACE, Houston, 1997.

Aktivitas Kuliah dan Diskusi

Minggu 2

Materi Prinsip pelapisan : (Chap 2 ref 1)
rheology
surface chemistry
sagging and slumping
leveling

Media LCD

Referensi

1. Coating and Painting, 2005
2. Chatterjee U.K., Bose S.K., Roy S.K., Environmental Degradation of Metals, Marcel Dekker Inc., New York, 2001.
3. Kenneth Graham A., Electroplating Handbook, 3rd.
4. Frederick A. Lowenheim, Modern Electroplating, 3rd, The Wiley International
Publs., New York, 1974.
5. Denny A Jones, Principles and Prevention of Corrosion, Hearle, 2nd,
Macmillan
Publs. Co., New York, 1992.
6. Nathan C.C., Corrosion Inhibitor, NACE, Houston, 1997.

Aktivitas Kuliah dan diskusi

Minggu 3

Materi Teori Adhesi 1 (Chap 3 ref 1)
Jenis ikatan
Pengujian adhesi
Jenis kerusakan pada pelapisan

Media LCD

Referensi

1. Coating and Painting, 2005
2. Chatterjee U.K., Bose S.K., Roy S.K., Environmental Degradation of Metals, Marcel Dekker Inc., New York, 2001.
3. Kenneth Graham A., Electroplating Handbook, 3rd.
4. Frederick A. Lowenheim, Modern Electroplating, 3rd, The Wiley International
Publs., New York, 1974.
5. Denny A Jones, Principles and Prevention of Corrosion, Hearle, 2nd,
Macmillan
Publs. Co., New York, 1992.
6. Nathan C.C., Corrosion Inhibitor, NACE, Houston, 1997.

Aktivitas Kuliah dan diskusi

Minggu 4

Materi Teori Adhesi 2 (Chap 3 ref 1)
Jenis korosi akibat pelapisan organik
Tahapan proses korosi

Media LCD

Referensi

1. Coating and Painting, 2005
2. Chatterjee U.K., Bose S.K., Roy S.K., Environmental Degradation of Metals, Marcel Dekker Inc., New York, 2001.
3. Kenneth Graham A., Electroplating Handbook, 3rd.
4. Frederick A. Lowenheim, Modern Electroplating, 3rd, The Wiley International
Publs., New York, 1974.
5. Denny A Jones, Principles and Prevention of Corrosion, Hearle, 2nd,
Macmillan
Publs. Co., New York, 1992.
6. Nathan C.C., Corrosion Inhibitor, NACE, Houston, 1997.

Aktivitas Kuliah dan diskusi

Minggu 5

Materi Persiapan permukaan (Chap 4 ref 1, Part I ref. 3)
Persiapan logam dasar
Persiapan permukaan logam
Persiapan permukaan non logam
Aplikasi 1

Media LCD

Referensi

1. Coating and Painting, 2005
2. Chatterjee U.K., Bose S.K., Roy S.K., Environmental Degradation of Metals, Marcel Dekker Inc., New York, 2001.
3. Kenneth Graham A., Electroplating Handbook, 3rd.
4. Frederick A. Lowenheim, Modern Electroplating, 3rd, The Wiley International
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5. Denny A Jones, Principles and Prevention of Corrosion, Hearle, 2nd,
Macmillan
Publs. Co., New York, 1992.
6. Nathan C.C., Corrosion Inhibitor, NACE, Houston, 1997.

Aktivitas Kuliah

Minggu 6

Materi - Komposisi cat (Chap 5 & 6 ref 1)
- Material Pelapis Non Logam
Pemilihan pelapis (Chap 7 & 8 ref 1)
Aplikasi 2

Media LCD

Referensi 1. Coating and Painting, 2005
2. Chatterjee U.K., Bose S.K., Roy S.K., Environmental Degradation of Metals, Marcel Dekker Inc., New York, 2001.
3. Kenneth Graham A., Electroplating Handbook, 3rd.
4. Frederick A. Lowenheim, Modern Electroplating, 3rd, The Wiley International
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5. Denny A Jones, Principles and Prevention of Corrosion, Hearle, 2nd, Macmillan
Publs. Co., New York, 1992.
6. Nathan C.C., Corrosion Inhibitor, NACE, Houston, 1997.

Aktivitas Kuliah dan diskusi

Minggu 7

Materi Ujian Tengah Semester

Media

Referensi

Aktivitas

Minggu 8

Materi Pelapisan Logam (Chap 10 ref 1)

Media

- Referensi**
1. Coating and Painting, 2005
 2. Chatterjee U.K., Bose S.K., Roy S.K., Environmental Degradation of Metals, Marcel Dekker Inc., New York, 2001.
 3. Kenneth Graham A., Electroplating Handbook, 3rd.
 4. Frederick A. Lowenheim, Modern Electroplating, 3rd, The Wiley International
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 5. Denny A Jones, Principles and Prevention of Corrosion,Hearle, 2nd,
Macmillan
Publs. Co., New York, 1992.
 6. Nathan C.C., Corrosion Inhibitor, NACE, Houston, 1997.
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Aktivitas

Minggu 9

Materi Conversion coating, Cementitious coating, monolithic (Chap 11, 12, 13 ref 1)
Comparative resistance coating and painting (Ch 9 & 14 ref 1)

Media

- Referensi**
1. Coating and Painting, 2005
 2. Chatterjee U.K., Bose S.K., Roy S.K., Environmental Degradation of Metals, Marcel Dekker Inc., New York, 2001.
 3. Kenneth Graham A., Electroplating Handbook, 3rd.
 4. Frederick A. Lowenheim, Modern Electroplating, 3rd, The Wiley International
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 5. Denny A Jones, Principles and Prevention of Corrosion,Hearle, 2nd,
Macmillan
Publs. Co., New York, 1992.
 6. Nathan C.C., Corrosion Inhibitor, NACE, Houston, 1997.
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Aktivitas

Minggu 10

Materi Anodizing (Part I Chap 14 E ref 3)

Media

- Referensi**
1. Coating and Painting, 2005
 2. Chatterjee U.K., Bose S.K., Roy S.K., Environmental Degradation of Metals, Marcel Dekker Inc., New York, 2001.
 3. Kenneth Graham A., Electroplating Handbook, 3rd.
 4. Frederick A. Lowenheim, Modern Electroplating, 3rd, The Wiley International
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 5. Denny A Jones, Principles and Prevention of Corrosion,Hearle, 2nd,
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Publs. Co., New York, 1992.
 6. Nathan C.C., Corrosion Inhibitor, NACE, Houston, 1997.
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Aktivitas

Minggu 11

Materi Introduction Inhibitor (Chap 15 ref 5, ref 6)
Mekanisme inhibitor (Ref 6)

Media

- Referensi**
1. Coating and Painting, 2005
 2. Chatterjee U.K., Bose S.K., Roy S.K., Environmental Degradation of Metals, Marcel Dekker Inc., New York, 2001.
 3. Kenneth Graham A., Electroplating Handbook, 3rd.
 4. Frederick A. Lowenheim, Modern Electroplating, 3rd, The Wiley International
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 5. Denny A Jones, Principles and Prevention of Corrosion,Hearle, 2nd,
Macmillan
Publs. Co., New York, 1992.
 6. Nathan C.C., Corrosion Inhibitor, NACE, Houston, 1997.
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Aktivitas

Minggu 12

Materi Aplikasi inhibitor
Presentasi

Media

- Referensi**
1. Coating and Painting, 2005
 2. Chatterjee U.K., Bose S.K., Roy S.K., Environmental Degradation of Metals, Marcel Dekker Inc., New York, 2001.
 3. Kenneth Graham A., Electroplating Handbook, 3rd.
 4. Frederick A. Lowenheim, Modern Electroplating, 3rd, The Wiley International
Publs., New York, 1974.
 5. Denny A Jones, Principles and Prevention of Corrosion, Hearle, 2nd,
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Publs. Co., New York, 1992.
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Aktivitas

Minggu 13

Materi Presentasi

Media

Referensi

Aktivitas

Minggu 14

Materi Presentasi

Media

Referensi

Aktivitas

Minggu 15

Materi Ujian Akhir Semester

Media

Referensi

Aktivitas
