



Satuan Acara Pengajaran

MTB82152 - Proses Pelapisan & Inhibisi

Pengajar

Prof. Dr. Ir. Johny Wahyuadi Mudaryoto DEA.

Minggu 1

Materi 10/2/07
INTRODUKSI: (Chap 1 ref 1, Chap 4 ref 2)
- Penjelasan SAP, Sistem Perkuliahan & penilaian
- Prinsip Proteksi Korosi
- Organik coating, metalik coating, proteksi katodik

Media LCD

Referensi

1. Philip A. Schweitzer, P.E., "Coating and Paintings" Application and Corrosion Resistance, CRC Press, Taylor & Francis Group, 2006.
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.
7. Satoshi Kawai, "Anodizing and Coloring of Aluminium", ASM, MFIS Ltd., UK, 2002

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Minggu 2

Materi 17/2/07
Prinsip pelapisan : (Chap 2 ref 1)
- rheology
- surface chemistry
- sagging and slumping
- leveling

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Referensi

1. Philip A. Schweitzer, P.E., "Coating and Paintings" Application and Corrosion Resistance, CRC Press, Taylor & Francis Group, 2006.
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.
7. Satoshi Kawai, "Anodizing and Coloring of Aluminium", ASM, MFIS Ltd., UK, 2002

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Minggu 3

Materi 24/2/07
Teori Adhesi 1 (Chap 3 ref 1)
- Jenis ikatan
- Pengujian adhesi
- Jenis kerusakan pada pelapisan

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Referensi

1. Philip A. Schweitzer, P.E., "Coating and Paintings" Application and Corrosion Resistance, CRC Press, Taylor & Francis Group, 2006.
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.
7. Satoshi Kawai, "Anodizing and Coloring of Aluminium", ASM, MFIS Ltd., UK, 2002

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Minggu 4

Materi 3/3/07
Teori Adhesi 2 (Chap 3 ref 1)
- Jenis korosi akibat pelapisan organik
- Tahapan proses korosi

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Referensi

1. Philip A. Schweitzer, P.E., "Coating and Paintings" Application and Corrosion Resistance, CRC Press, Taylor & Francis Group, 2006.
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.
7. Satoshi Kawai, "Anodizing and Coloring of Aluminium", ASM, MFIS Ltd., UK, 2002

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Minggu 5

Materi 10/3/07
Persiapan permukaan (Chap 4 ref 1, Part I ref. 3)
- Persiapan logam dasar
- Persiapan permukaan logam
- Persiapan permukaan non logam
- Aplikasi 1

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- Referensi**
1. Philip A. Schweitzer, P.E., "Coating and Paintings" Application and Corrosion Resistance, CRC Press, Taylor & Francis Group, 2006.
 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.
 7. Satoshi Kawai, "Anodizing and Coloring of Aluminium", ASM, MFIS Ltd., UK, 2002
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Minggu 6

- Materi** 17/3/07
- Komposisi cat (Chap 5 & 6 ref 1)
 - Material Pelapis Non Logam
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- Referensi**
1. Philip A. Schweitzer, P.E., "Coating and Paintings" Application and Corrosion Resistance, CRC Press, Taylor & Francis Group, 2006.
 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.
 7. Satoshi Kawai, "Anodizing and Coloring of Aluminium", ASM, MFIS Ltd., UK, 2002
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Minggu 7

- Materi** 24/3/07
- Pemilihan pelapis (Chap 7 & 8 ref 1)
 - Aplikasi 2
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- Referensi**
1. Philip A. Schweitzer, P.E., "Coating and Paintings" Application and Corrosion Resistance, CRC Press, Taylor & Francis Group, 2006.
 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.
 7. Satoshi Kawai, "Anodizing and Coloring of Aluminium", ASM, MFIS Ltd., UK, 2002
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Minggu 8

Materi 7/4/07

Ujian Tengah semester

Media

Referensi

Aktivitas

Minggu 9

Materi 14/4/07

Pelapisan Logam (Chap 10 ref 1)

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- Referensi**
1. Philip A. Schweitzer, P.E., "Coating and Paintings" Application and Corrosion Resistance, CRC Press, Taylor & Francis Group, 2006.
 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.
 7. Satoshi Kawai, "Anodizing and Coloring of Aluminium", ASM, MFIS Ltd., UK, 2002
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Minggu 10

Materi 21/4/07
Conversion coating
Cementitious coating
Monolithic (Chap 11, 12, 13 ref 1)

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- Referensi**
1. Philip A. Schweitzer, P.E., "Coating and Paintings" Application and Corrosion Resistance, CRC Press, Taylor & Francis Group, 2006.
 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.
 7. Satoshi Kawai, "Anodizing and Coloring of Aluminium", ASM, MFIS Ltd., UK, 2002
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Minggu 11

Materi 28/4/07
Comparative resistance coating and painting (Ch 9 & 14 ref 1)

Media

- Referensi**
1. Philip A. Schweitzer, P.E., "Coating and Paintings" Application and Corrosion Resistance, CRC Press, Taylor & Francis Group, 2006.
 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.
 7. Satoshi Kawai, "Anodizing and Coloring of Aluminium", ASM, MFIS Ltd., UK, 2002
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Aktivitas

Minggu 12

Materi 5/5/07
Anodizing (Part I Chap 14 E ref 3)

Media LCD

- Referensi**
1. Philip A. Schweitzer, P.E., "Coating and Paintings" Application and Corrosion Resistance, CRC Press, Taylor & Francis Group, 2006.
 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.
 7. Satoshi Kawai, "Anodizing and Coloring of Aluminium", ASM, MFIS Ltd., UK, 2002
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Aktivitas

Minggu 13

Materi 12/5/07
Introduction Inhibitor (Chap 15 ref 5, ref 6)

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- 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.
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Aktivitas

Minggu 14

Materi 19/5/07

Mekanisme inhibitor (Ref 6)

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- Referensi**
1. Philip A. Schweitzer, P.E., "Coating and Paintings" Application and Corrosion Resistance, CRC Press, Taylor & Francis Group, 2006.
 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.
 7. Satoshi Kawai, " Anodizing and Coloring of Aluminium", ASM, MFIS Ltd., UK, 2002
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Aktivitas

Minggu 15

Materi 26/5/07

Aplikasi inhibitor

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- Referensi**
1. Philip A. Schweitzer, P.E., "Coating and Paintings" Application and Corrosion Resistance, CRC Press, Taylor & Francis Group, 2006.
 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.
 - 7.Satoshi Kawai, " Anodizing and Coloring of Aluminium", ASM, MFIS Ltd., UK, 2002
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Aktivitas

Minggu 16

Materi 2/6/07

Minggu Tenang

Media

Referensi

Aktivitas

Minggu 17

Materi 9/6/07

Ujian Akhir Semester

Media

Referensi

Aktivitas
