

**MODUL AJAR VIDEO MATA KULIAH
SIFAT-SIFAT DASAR KAYU (SSDK)**

**SIFAT-SIFAT MEKANIKA KAYU
“CARA MEMBACA GRAFIK PENGUJIAN KETEGUHAN
LENGKUNG STATIS (MODULUS OF ELASTICITY (MoE)
DAN MODULUS OF RUPTURE (MoR))”**

**VIDEO CREATOR / PENYUSUN :
IRVIN DAYADI, S.HUT, M.P.**

**FAKULTAS KEHUTANAN
UNIVERSITAS MULAWARMAN
SAMARINDA
2021**

KATA PENGANTAR

Puji syukur kehadirat Allah SWT. Atas segala limpahan rahmat dan karunia-Nya, maka penyusunan Modul Ajar Video mata kuliah Sifat-sifat Dasar Kayu (SSDK) sub materi Sifat-sifat Mekanika Kayu “Cara Membaca Grafik Pengujian Keteguhan Lengkung Statis” meliputi pengujian Modulus Elastisitas (Modulus of Elasticity/MoE) dan pengujian Keteguhan Patah (Modulus of Rupture/MoR) dapat saya selesaikan tepat waktu pada Semester Ganjil Tahun Ajaran 2021/2022.

Pembuatan Video Modul Ajar ini dimaksudkan sebagai Pedoman Pembelajaran Perkuliahan, dan juga sebagai Acara Praktikum Daring (online) mata kuliah Sifat-sifat Dasar Kayu dalam acara Pengujian Sifat-sifat Mekanika Kayu. Video Modul Ajar Pengujian Sifat Fisika dan Mekanika Kayu lainnya juga telah saya berikan videonya pada channel Youtube IRVIN DAYADI yaitu video Penggunaan & Pembacaan Alat Ukur Dimensi (Kaliper & Mikrometer), Pengujian Kadar Air dan Kerapatan Kayu Solid, Pengujian Sifat Pengembangan & Penyusutan Kayu Solid, Pengujian Keteguhan Pukul Kayu Solid, Pengujian Keteguhan Geser Sejajar Serat Kayu Solid, Pengujian Keteguhan Tekan Sejajar Serat Kayu Solid, Pengujian Keteguhan Lengkung Statis (Static Bending Strength Test), dan Pengujian Kekerasan Kayu Solid. Ke depannya akan saya lengkapi lagi Youtube Channel saya ini dengan Pengujian-pengujian lainnya baik untuk kayu solid maupun untuk produk-produk panel kayu dan produk-produk papan majemuk.

Saya menyadari bahwa pada Video Modul Ajar ini masih terdapat kekurangan, sehingga masukan, saran, dan kritik yang membangun sangat saya harapkan. Semoga video modul ajar ini dapat membantu mahasiswa dan bagi yang bergelut pada bidang rekayasa dan pengujian sifat-sifat fisika dan mekanika kayu.

Samarinda, 01 November 2021

Penyusun,

Irvin Dayadi, S.Hut, M.P.

DAFTAR ISI

Halaman Utama Youtube Channel IRVIN DAYADI
Pembacaan Alat Ukur Dimensi (Kaliper & Mikrometer)
Pengujian Kadar Air dan Kerapatan Kayu Solid
Pengujian Sifat Pengembangan & Penyusutan Kayu Solid
Pengujian Keteguhan Pukul Kayu Solid
Pengujian Keteguhan Geser Sejajar Serat Kayu Solid
Pengujian Keteguhan Tekan Sejajar Serat Kayu Solid
Pengujian Keteguhan Lengkung Statis (Static Bending Strength Test)
Pengujian Kekerasan Kayu Solid
Cara Membaca Grafik Pengujian Keteguhan Lengkung Statis

Halaman Utama Youtube Channel IRVIN DAYADI

URL : https://www.youtube.com/channel/UC48jxFtD_QIBSjEnYQHoDWQ/videos

The screenshot shows the YouTube channel page for IRVIN DAYADI. The channel has 29 subscribers. The page displays a grid of video uploads, including:

- Cara Membaca Grafik Uji Keteguhan Lengkung Statis** (9:59) - 81 views • 2 months ago
- Pengujian Kekerasan Kayu Metode Janka (Janka...)** (8:17) - 104 views • 8 months ago
- Pengujian Keteguhan Lengkung Statis (Static...)** (15:33) - 85 views • 8 months ago
- Pengujian Keteguhan Tekan Sejajar Serat Kayu Solid.** (17:20) - 217 views • 1 year ago
- Pengujian Keteguhan Geser Sejajar Serat Kayu Solid.** (8:43) - 159 views • 1 year ago
- Pengujian Keteguhan Pukul Kayu Solid.** (5:02)
- Pengujian Sifat Pengembangan dan...** (17:10)
- Pengujian Kadar Air dan Kerapatan Kayu Solid.** (13:36)
- Pembacaan alat ukur Kaliper (Jangka Sorong) dan...** (11:11)

The interface includes a search bar, navigation menu (Home, Explore, Subscriptions, Library, History), and a 'SIGN IN' button. The 'BEST OF YOUTUBE' section lists categories like Music, Sports, Gaming, Movies, and News.

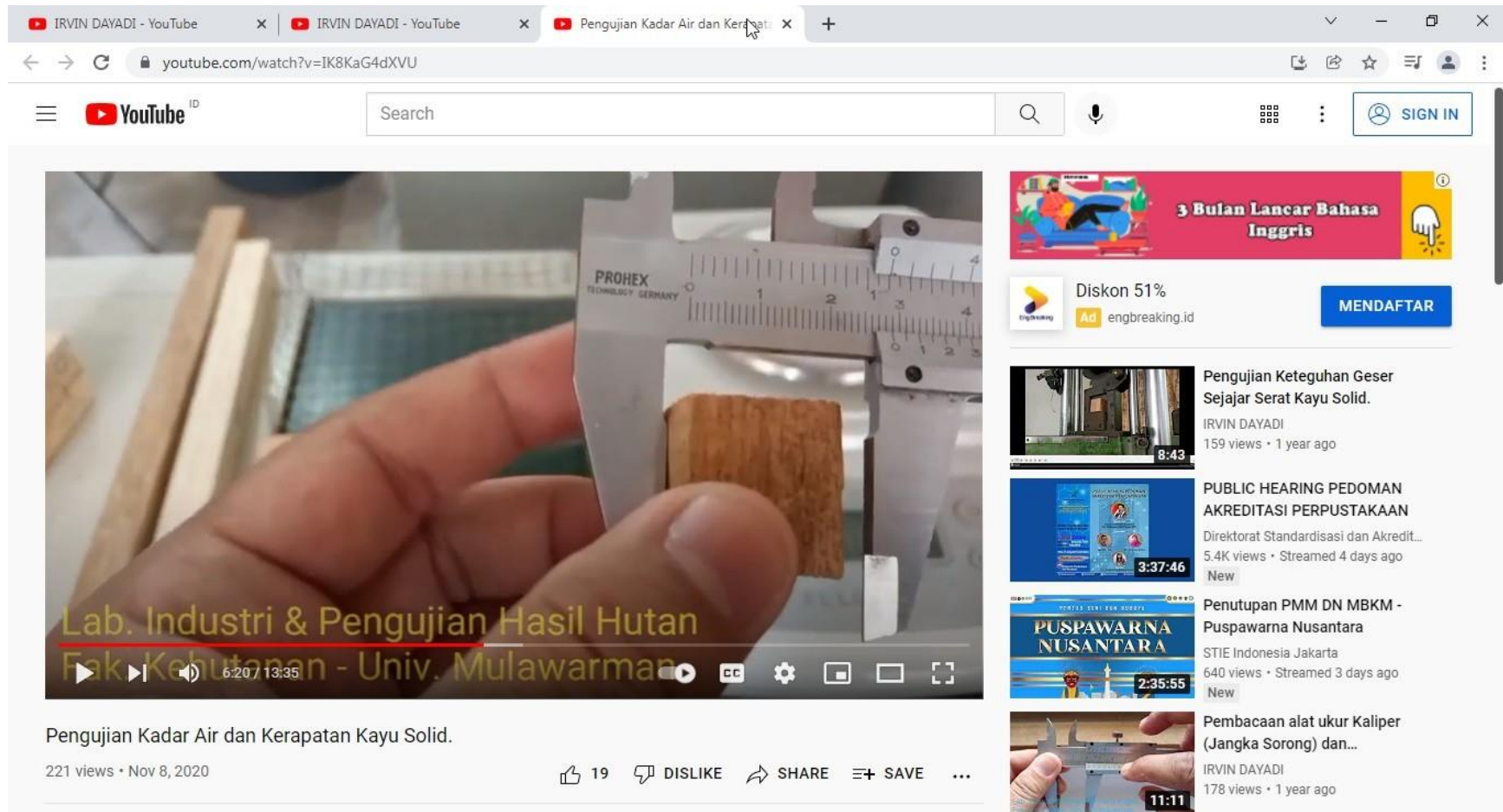
Pembacaan Alat Ukur Dimensi (Kaliper & Mikrometer)

URL : <https://www.youtube.com/watch?v=yHHDh4q5hWo>

The screenshot shows a web browser with three tabs: 'IRVIN DAYADI - YouTube', 'IRVIN DAYADI - YouTube', and 'Pembacaan alat ukur Kaliper (Jan...'. The address bar shows 'youtube.com/watch?v=yHHDh4q5hWo'. The YouTube interface includes a search bar, a 'SIGN IN' button, and a video player. The video title is 'Pembacaan alat ukur panjang Kaliper/Jangka Sorong & Mikrometer sekrup'. The video player shows a hand holding a vernier caliper against a metal surface. The video description is 'Pembacaan alat ukur Kaliper (Jangka Sorong) dan Mikrometer Sekrup.' Below the video, there are 13 likes, a dislike button, share, save, and more options. The video has 178 views and was uploaded on Nov 8, 2020. To the right of the video player, there is an advertisement for 'Edit Faster' by Grammarly, and a list of recommended videos including 'Pengujian Sifat Pengembangan dan Penyusutan Kayu Solid.', 'New Music Mix 2021 Remixes of Popular Songs', 'Sosialisasi Penerimaan Mahasiswa Baru Tahun 2022...', and 'Webinar: Strategi Menyusun Kurikulum dan Rancangan...'

Pengujian Kadar Air dan Kerapatan Kayu Solid

URL : <https://www.youtube.com/watch?v=IK8KaG4dXVU>



The screenshot shows a YouTube browser window with three tabs. The active tab is titled "Pengujian Kadar Air dan Kerapatan Kayu Solid". The address bar shows the URL "youtube.com/watch?v=IK8KaG4dXVU". The YouTube interface includes a search bar, a "SIGN IN" button, and a video player. The video player shows a close-up of a hand holding a piece of wood against a "PROHEX" brand vernier caliper. The video title is "Pengujian Kadar Air dan Kerapatan Kayu Solid." and it has 221 views as of Nov 8, 2020. The video player controls show a progress bar at 6:20 / 13:35. To the right of the video player is a list of recommended videos:

- 3 Bulan Lancar Bahasa Inggris** (Advertisement)
- Diskon 51%** (Advertisement for engbreaking.id)
- Pengujian Keteguhan Geser Sejajar Serat Kayu Solid.** by IRVIN DAYADI, 159 views, 1 year ago, 8:43
- PUBLIC HEARING PEDOMAN AKREDITASI PERPUSTAKAAN** by Direktorat Standardisasi dan Akredit..., 5.4K views, Streamed 4 days ago, New, 3:37:46
- Penutupan PMM DN MBKM - Puspawarna Nusantara** by STIE Indonesia Jakarta, 640 views, Streamed 3 days ago, New, 2:35:55
- Pembacaan alat ukur Kaliper (Jangka Sorong) dan...** by IRVIN DAYADI, 178 views, 1 year ago, 11:11

Pengujian Sifat Pengembangan & Penyusutan Kayu Solid

URL : <https://www.youtube.com/watch?v=1gSa8vcNrJc>

The screenshot shows a YouTube video player with the following details:


- Video Title:** Pengujian Sifat Pengembangan dan Penyusutan Kayu Solid.
- Views:** 142 views
- Upload Date:** Nov 8, 2020
- Engagement:** 10 likes, 0 dislikes, 0 shares, 0 saves.
- Thumbnail:** A hand holding a vernier caliper against a piece of wood. A watermark for 'Lab. Industri & Pengujian Hasil Hutan' and 'Fak. Kehutanan - Univ. Mulawarman' is visible.

On the right side of the page, there is an advertisement for 'Better Writing' by Grammarly and a list of recommended videos:

- Pengujian Keteguhan Tekan Sejajar Serat Kayu Solid.** IRVIN DAYADI, 217 views • 1 year ago, 17:20
- Pengujian Keteguhan Lengkung Statis (Static Bending Strengt...** IRVIN DAYADI, 85 views • 8 months ago, 15:33
- Pengujian Keteguhan Geser Sejajar Serat Kayu Solid.** IRVIN DAYADI, 159 views • 1 year ago, 8:43
- PUBLIC HEARING PEDOMAN AKREDITASI PERPUSTAKAAN** Direktorat Standardisasi dan Akredit..., 5.4K views • Streamed 4 days ago, 3:37:46
- Penuaian Kadar Air dan**

Pengujian Keteguhan Pukul Kayu Solid

URL : <https://www.youtube.com/watch?v=pW9maV6Nvfc>



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Fak. Kehutanan Univ. Mulawarman

Pengujian Keteguhan Pukul Kayu Solid.
127 views • Nov 8, 2020

5 DISLIKE SHARE SAVE ...

- Pengujian Keteguhan Geser Sejajar Serat Kayu Solid.**
IRVIN DAYADI
159 views • 1 year ago
8:43
- Pengujian Kekerasan Kayu Metode Janka (Janka Hardnes...**
IRVIN DAYADI
104 views • 8 months ago
8:17
- Pengarahan TUSI Oleh Inspektur Wilayah IV dan...**
Humas Kemenkumham Gorontalo Yanvaldi
525 views • Streamed 2 days ago
New
9:18:20
- BSTB BRAVE TUNAS BANGSA JHS - DAY 5**
SMP IPBS TUNAS BANGSA OFFICIAL
971 views • Streamed 3 days ago
New
3:33:19
- Membuat Aplikasi Excel Akuntansi Terbaru 2019 - Part ...**
Sarjayadi Awe
762K views • 2 years ago
1:07:10
- Lounge Covers Popular Songs - Cool Music 2021**
Music Brokers
111 views • Streamed 2 days ago

Pengujian Keteguhan Geser Sejajar Serat Kayu Solid

URL : <https://www.youtube.com/watch?v=qU1PXoteT7o>

IRVIN DAYADI - YouTube x | IRVIN DAYADI - YouTube x | Pengujian Keteguhan Geser Sejai x +

youtube.com/watch?v=qU1PXoteT7o

Search

YouTube ID

Search

SIGN IN

Lab. Industri & Pengujian Hasil Hutan
Fak. Kehutanan - Univ. Mulawarman

7:42 / 8:42

Pengujian Keteguhan Geser Sejajar Serat Kayu Solid.

159 views • Nov 8, 2020

10 DISLIKE SHARE SAVE ...

Pengujian Keteguhan Tekan Sejajar Serat Kayu Solid.
IRVIN DAYADI
217 views • 1 year ago
17:20

Cara Membaca Grafik Uji Keteguhan Lengkung Statis
IRVIN DAYADI
81 views • 2 months ago
9:59

SolidWorks Tutorial # 356 : Sheet Metal Plate Cutting...
SolidWorks Tutorial
109K views • 1 month ago
3:03:00

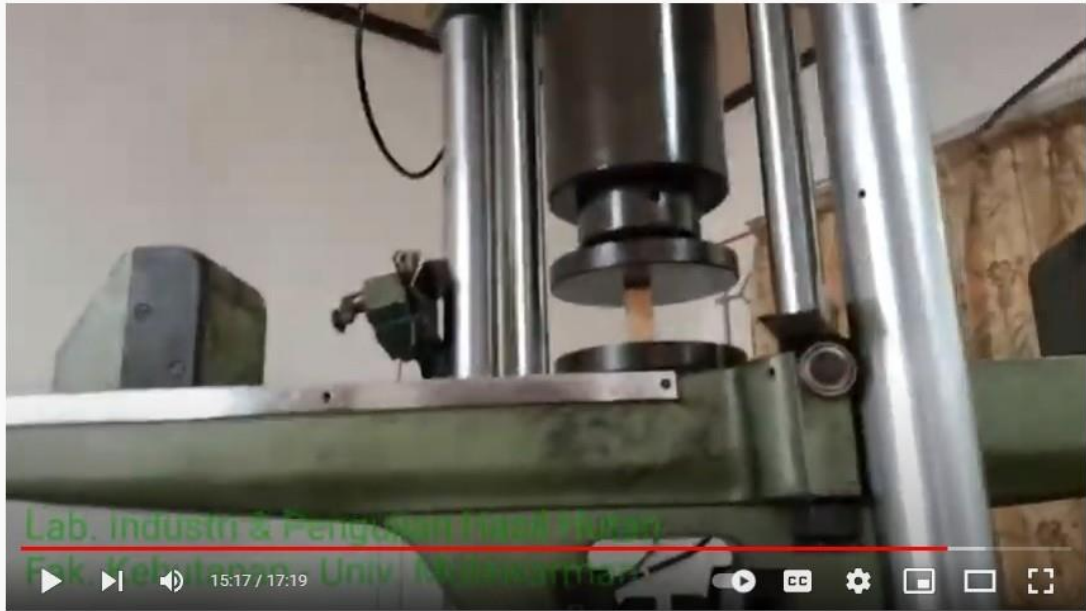
Pengujian Kekerasan Kayu Metode Janka (Janka Hardnes...
IRVIN DAYADI
104 views • 8 months ago
8:17

1800 basic mechanical principles - animation 2 - King...
KING MECHANICAL
204K views • 2 months ago
2:00:38

SolidWorks Tutorial # 357 : C-clamp with simulation analysis
SolidWorks Tutorial
62K views • 2 weeks ago

Pengujian Keteguhan Tekan Sejajar Serat Kayu Solid

URL : <https://www.youtube.com/watch?v=rpetwjDAmjc>



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Fak. Kehutanan, Univ. Negeri Semarang

Pengujian Keteguhan Tekan Sejajar Serat Kayu Solid.

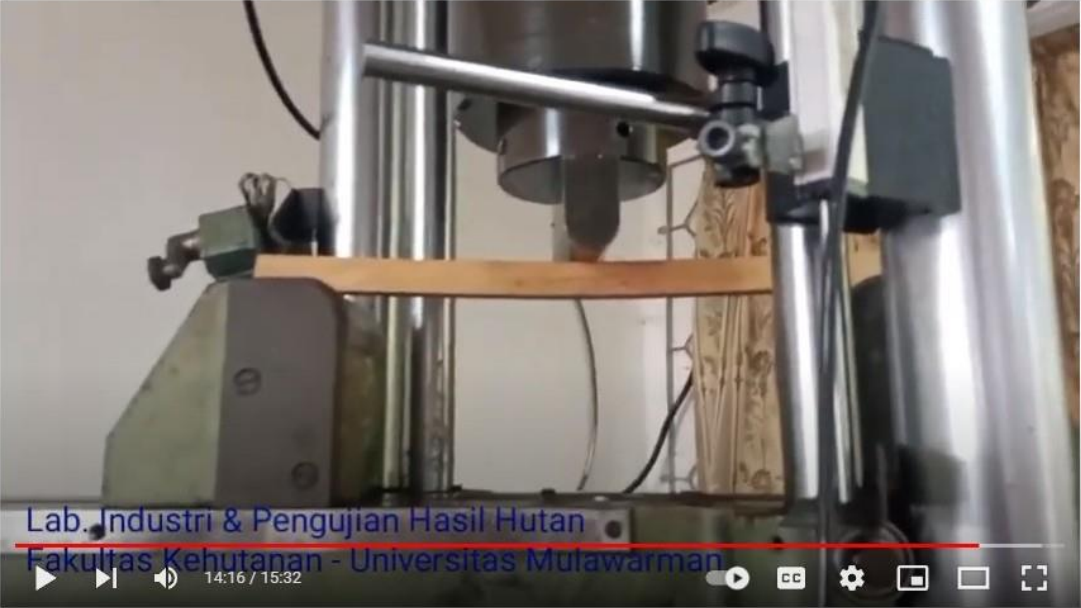
217 views • Nov 8, 2020

11 DISLIKE SHARE SAVE ...

- Pengujian Kekerasan Kayu Metode Janka (Janka Hardnes...**
IRVIN DAYADI
104 views • 8 months ago
8:17
- TUTORIAL NODEJS DASAR (BAHASA INDONESIA)**
Programmer Zaman Now
65K views • 3 weeks ago
3:48:04
- MODUL 4 UJI KUALITAS BRIKET PRAKTIKUM PROSES...**
Prak Prosmant2020
885 views • 1 year ago
2:51
- Belajar Online Design Layout PCB di EAGLE PCB - ...**
Anak Agung Duwi Arsana
45K views • Streamed 1 month ago
2:38:36
- Sosialisasi Update NAR : PPLN - sgtf - wgs**
DTO Kemkes
1.8K views • Streamed 2 days ago
New
2:30:16
- 1800 basic mechanical principles - animation 2 - King...**
KING MECHANICAL
704K views • 2 months ago
1800 Mechanical Principles

Pengujian Keteguhan Lengkung Statis (Static Bending Strength Test)

URL : <https://www.youtube.com/watch?v=JUMJFNSQbFg>



The video shows a laboratory setting where a wooden beam is supported by a metal frame. A weight is applied to the center of the beam, causing it to bend. The video is titled "Pengujian Keteguhan Lengkung Statis (Static Bending Strength Test)" and is from the channel "Lab. Industri & Pengujian Hasil Hutan Fakultas Kehutanan - Universitas Mulawarman". The video has 85 views and was uploaded on April 26, 2021.

Lab. Industri & Pengujian Hasil Hutan
Fakultas Kehutanan - Universitas Mulawarman

Pengujian Keteguhan Lengkung Statis (Static Bending Strength Test)

85 views • Apr 26, 2021

1 DISLIKE SHARE SAVE ...

Pengujian Kekerasan Kayu Metode Janka (Janka Hardnes...
IRVIN DAYADI
104 views • 8 months ago
8:17

Sketchup House Design 6 EXT INT + Enscape 2.4 Realtime...
Rio Ryne
1.8M views • 2 years ago
3:35:43

TUTORIAL NODEJS DASAR (BAHASA INDONESIA)
Programmer Zaman Now
65K views • 3 weeks ago
3:48:04


Anugerah Inovasi Madrasah Digital 2021
Jaringan IDN
15K views • Streamed 13 days ago
2:10:30

SLOW BLUES
Best Blues Music | Beautiful Relaxing Blues Music | The Be...
SLOW BLUES MUSIC
7.4M views • 1 month ago
2:02:57

Cara Membaca Grafik Uji Keteguhan Lengkung Statis
IRVIN DAYADI
81 views • 2 months ago

Pengujian Kekerasan Kayu Solid

URL : https://www.youtube.com/watch?v=ITZE_4qzzW0



Lab. Industri & Pengujian Hasil Hutan
Fakultas Kehutanan - Universitas Mulawarman

Pengujian Kekerasan Kayu Metode Janka (Janka Hardness Test)

104 views · Apr 26, 2021

3 DISLIKE SHARE SAVE ...

REFLEKSI 2021 ; PROYEKSI TAHUN 2022
Mustanir Media
10K views · Streamed 9 days ago

Unterwegs im U-Boot: Auf Transifahrt mit U 31 | die...
NDR Doku
6.6M views · 4 years ago

lofi hip hop radio - beats to sleep/chill to
Lofi Girl
7.6K watching
LIVE NOW

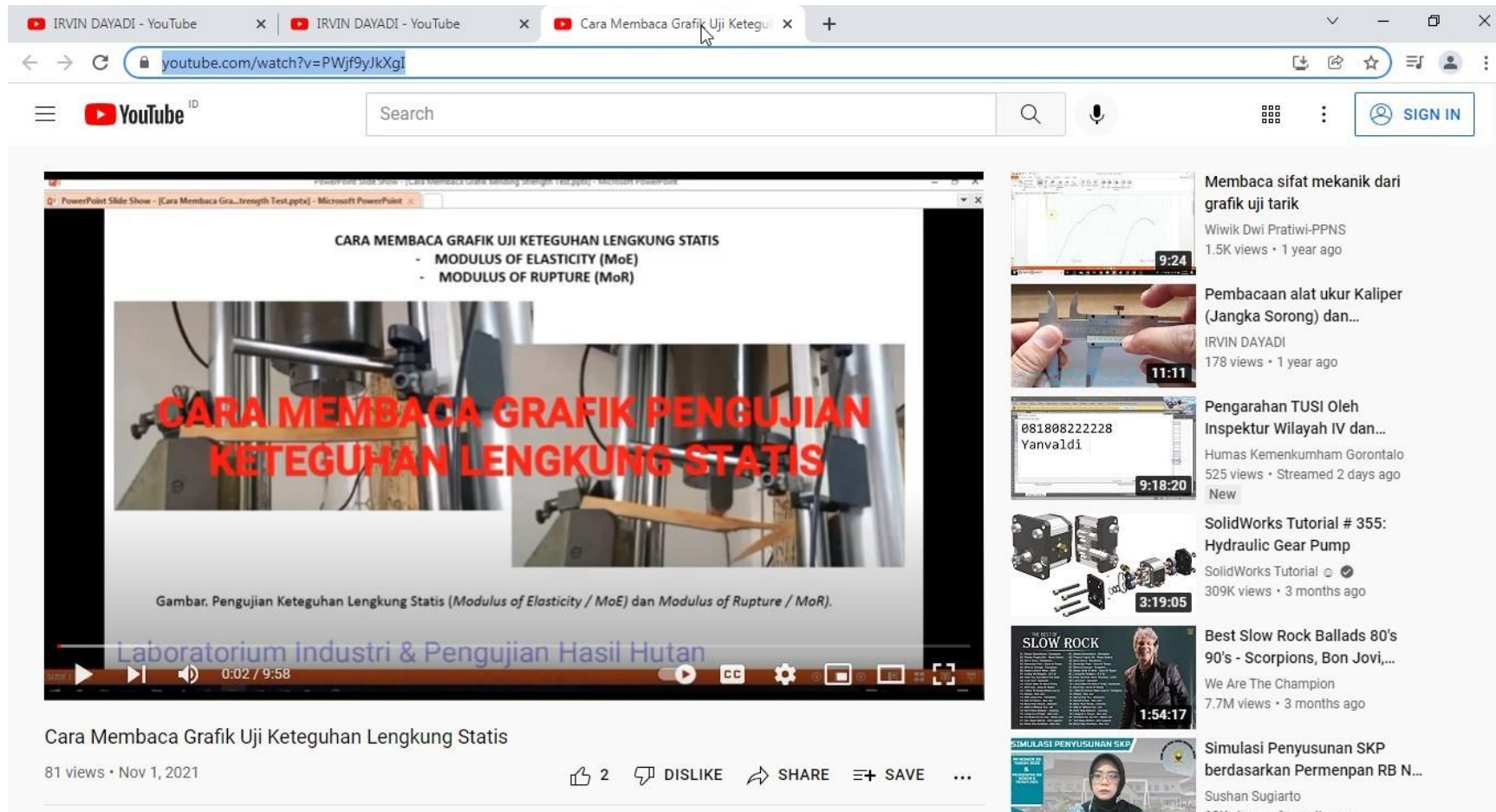
Pengarahan TUSI Oleh Inspektur Wilayah IV dan...
Humas Kemenkumham Gorontalo
525 views · Streamed 2 days ago
New

4. perekaman Usulan UP, SPM UP, SPM GUP, SPM GUP KKP, TRANSAKSI BENDAHARA, LP, SPBy dan KWITANSI DI PANDU SAKTI 2021
URHA CHARISMA
14K views · 4 months ago

ASTM.D1037.50 - JANKA BALL INDENTER WITH DIAL GAUGE
Material Testing Technology

Cara Membaca Grafik Pengujian Keteguhan Lengkung Statis

URL : <https://www.youtube.com/watch?v=PWjf9yJkXgI>



The screenshot shows a YouTube video player with a browser window. The browser tabs include "IRVIN DAYADI - YouTube", "IRVIN DAYADI - YouTube", and "Cara Membaca Grafik Uji Keteguhan Lengkung Statis". The address bar shows the URL "youtube.com/watch?v=PWjf9yJkXgI". The video player displays a PowerPoint slide with the following content:

CARA MEMBACA GRAFIK UJI KETEGUHAN LENKUNG STATIS

- MODULUS OF ELASTICITY (MoE)
- MODULUS OF RUPTURE (MoR)

CARA MEMBACA GRAFIK PENGUJIAN KETEGUHAN LENKUNG STATIS

Gambar. Pengujian Keteguhan Lengkung Statis (Modulus of Elasticity / MoE) dan Modulus of Rupture / MoR).

Laboratorium Industri & Pengujian Hasil Hutan

The video player shows a progress bar at 0:02 / 9:58. Below the video, the title "Cara Membaca Grafik Uji Keteguhan Lengkung Statis" is displayed, along with 81 views and the date "Nov 1, 2021". Interaction buttons for "Like" (2), "Dislike", "Share", "Save", and "More" are visible.

On the right side of the video player, there is a list of recommended videos:

- Membaca sifat mekanik dari grafik uji tarik** by Wiwik Dwi Pratiwi-PPNS, 1.5K views • 1 year ago, 9:24
- Pembacaan alat ukur Kaliper (Jangka Sorong) dan...** by IRVIN DAYADI, 178 views • 1 year ago, 11:11
- Pengarahan TUSI Oleh Inspektur Wilayah IV dan...** by 08180822228 Yanvaldi, 525 views • Streamed 2 days ago, 9:18:20
- SolidWorks Tutorial # 355: Hydraulic Gear Pump** by SolidWorks Tutorial, 309K views • 3 months ago, 3:19:05
- Best Slow Rock Ballads 80's 90's - Scorpions, Bon Jovi,...** by We Are The Champion, 7.7M views • 3 months ago, 1:54:17
- Simulasi Penyusunan SKP berdasarkan Permenpan RB N...** by Sushan Sugiarto, 19K views • 1 month ago

REFERENSI

- Scharai-Rad. 1986. Petunjuk Praktikum Mekanika Kayu. Jurusan Teknologi Hasil Hutan, Fakultas Kehutanan, Universitas Mulawarman. Samarinda.
- Suprpto, B. 1988. Diktat Kuliah Mekanika Kayu. Jurusan Teknologi Hasil Hutan, Fakultas Kehutanan, Universitas Mulawarman. Samarinda.