

LINKS Unidade 10 – Propriedades Mecânicas II

U. Toronto – Mechanism for plastic deformation in metals

<https://www.youtube.com/watch?v=Ie34MNfojAA>

U. Colorado Boulder – Dislocations and Plastic Deformation

<https://www.youtube.com/watch?v=cpvTwYAUeA8>

Strategies for Strengthening Metals

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

Solid Solution Strengthening

<https://www.youtube.com/watch?v=I t WlfSWY0>

Strengthening Materials

<https://www.youtube.com/watch?v=pJ6jIrsVvEg>

Elastic & Plastic Deformation on the Atomic Scale {Texas A&M: Intro to Materials (MSEN 201)}

<https://www.youtube.com/watch?v=vNny2bVKeNE>

U. Kiel – ...algo um pouco mais avançado: Mecanismos de Endurecimento de Aços

<http://www.tf.uni-kiel.de/matwis/amat/iss/> - Itens 8.3 e 8.4

8.3.1 – Endurecimento por solução sólida e por precipitação; 8.3.2 – endurecimento por refino de grão; 8.3.3 – encruamento; 8.4 – têmpera e revenido.

The screenshot shows a web browser window with the URL www.tf.uni-kiel.de/matwis/amat/iss/. The page content is as follows:

- 8. Tuning Carbon Steel**
 - 8.1 Keeping Dislocations at Bay**
 - [8.1.1 Being a Drag](#)
 - [8.1.2 A Closer Look at the Second Law](#)
 - 8.2 Outwitting the Second Law**
 - [8.2.1 Strategies for Winning](#)
 - [8.2.2 Tempering and Ostwald Ripening](#)
 - [8.2.3 It's a Long way to Nirvana](#)
 - 8.3 Hardening Steel - the First**
 - [8.3.1 Forming your Battle Line: Solid Solution and Precipitation Hardening.](#)
 - [8.3.2 Size Matters](#)
 - [8.3.3 Bang it!](#)
 - 8.4 Be Cool!**
 - [8.4.1 Martensite](#)
 - [8.4.2 Multiculti in Steel](#)
 - [8.4.3 Feeling Stressed?](#)

The browser interface includes a navigation bar with 'tfr' and 'AMAT' logos, a 'fullscreen' button, and a 'Iron, Steel and Swords Script' title. The left sidebar contains a 'Steel and Swords' menu with items like '1. Introduction', '2. Swords', '3. Properties', '4. Second law', '5. Real Crystals', '6. Phase diagrams', '7. Iron PD', '8. Carbon steel', '9. Real Steel', '10. Steel history', and '11. Sword making'. Below this is a 'News' section and a utility area with options like 'open all folders', 'close all folders', 'white background', and 'print friendly'. The Windows taskbar at the bottom shows the search bar, taskbar icons, and system tray with the date '19/04/2017' and time '16:23'.