

Tips for Projecting Nitrate Prints at London's NFT

Mark Trompeteler came across these interesting safety procedures on his recent NFT visit, and reminds us that compliance with all the Health and Safety instructions is vitally important whenever you are showing nitrate film

- Inform the cinema usher and duty house manager that a nitrate print will be in the projectors.
- Make important adaptations to your Cinemeccanica Victoria 8 projectors.



Nitrate adapted projector

- Transport nitrate prints to and from the box in heavy duty thick metal rectangular boxes as opposed to traditional cans.



Nitrate reels in heavy metal boxes at top

- Ensure that once you have laced up the film you shut the "doors" on the full and take up reels thus enclosing both reels.



Reel Compartment

- Remember that there are two cylinders of carbon dioxide under pressure connected by hose to the gate and loop compartment of the projector. Make the two plungers on the carbon dioxide cylinders operable by the withdrawing the securing pins at the top of both cylinders.



Withdrawing pins - activating CO2 plungers

- Also remember that above the gate (photo right) is a piece of gun cotton that burns faster than nitrate and above that is a piece of "cat gut" which is connected to a micro switch. As you start the show you need to switch on the nitrate switch on the projector.

- In the event of a fire in the gate and loop compartment – the gun cotton burns, this melts the "cut gut" which trips the switch. Gates close which will isolate both reels of nitrate above and below the projector and isolating just the two feet of film "in" the projector. You must immediately push down both the plungers on the carbon dioxide cylinders so that carbon dioxide will be drawn very rapidly to the gate and loop compartment.

- The usher, either from the rear of the auditorium, or your fellow projectionist, if he or she is still there, will operate a lever that moves metal doors that will come down and cover all of the projection ports of the box. This will reassure you that the audience is now much safer. Stand back from the projector and wait for the carbon dioxide to do its work. You can now relax and be safe in the knowledge that the box has a very good explosion vent and that these days digital restoration of old prints is a truly wonderful thing.

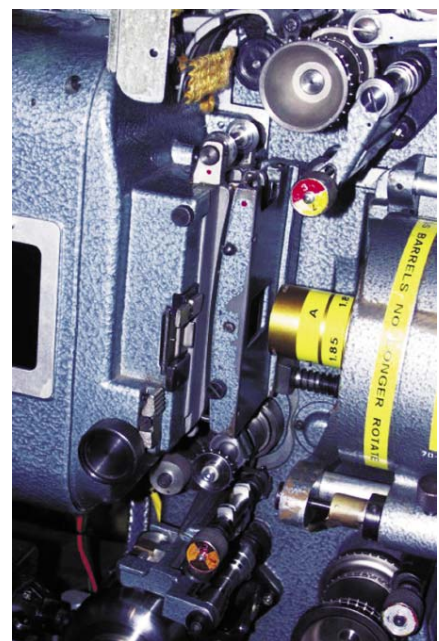
Seriously though – as we should all know, cellulose nitrate is extremely dangerous and anyone having to handle this material must read the health and safety executive's basic safety information first – web address given below.

(With thanks to BFI / NFT management and the projection team for allowing me into the box.)

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www.hse.gov.uk/pubns/cellulose.pdf#search



Gun cotton pad at top of gate