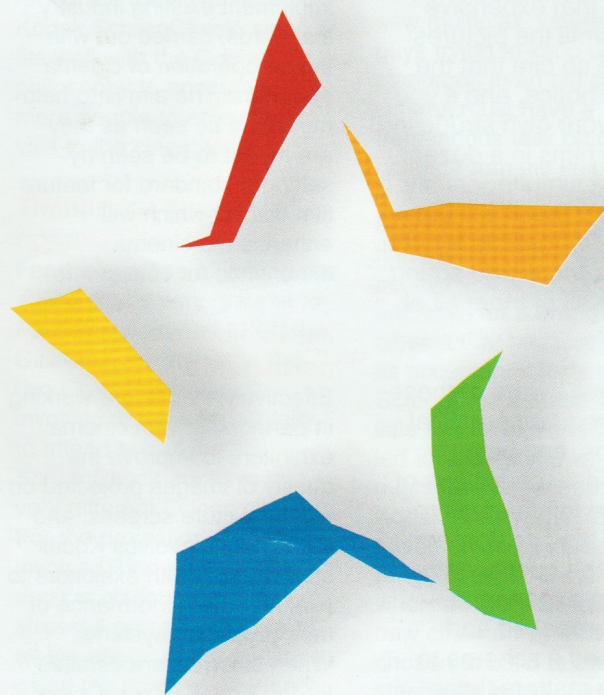


# Cinema Technology checks out...



**Kodak**

**SCREENCHECK**  
E X P E R I E N C E





# Cinema Tech checks out the Kodak ScreenCheck™ experience

**Jim Slater visits Odeon cinemas in Salisbury and Southampton as they undergo the critical examination that can lead to certification.....**

It is probably fortunate for many older cinemas that the single most important factor in a customer being satisfied with the quality of the picture is the programme content - if the programme material is interesting enough, the quality of the images becomes secondary. The shabby-raincoat brigade will put up with the noisiest multiple-copied VHS images of pornography, and important news items from impossible locations shot on amateur equipment are shown repeatedly on TV, even though the technical quality is dreadful.

Over the past decade, however, it has become increasingly apparent that if the cinema is to survive, and increasing attendances suggest that it is not only surviving but thriving, then cinema patrons will expect something special from their visit - at the very minimum, high quality pictures and sound, delivered in attractive and comfortable surroundings.

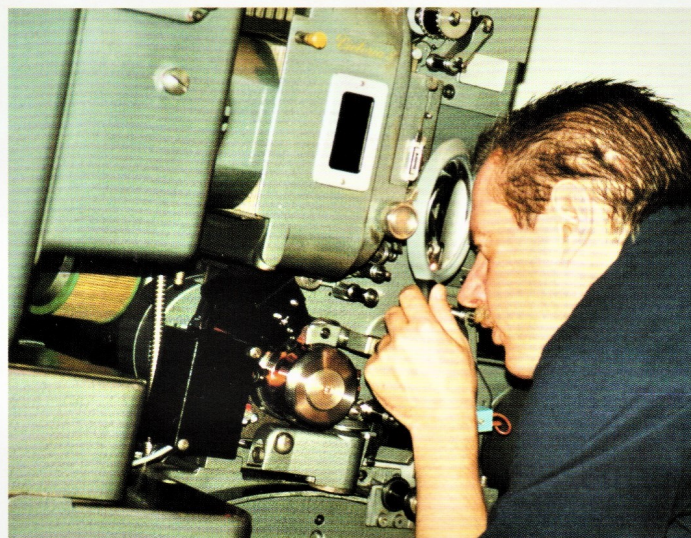
Operators can no longer afford to be complacent about quality, even if they have got away with it in the past, and they must remember that they are in constant competition for a customer's leisure time and money with increasingly high quality digital TV, DVD and home cinema displays.

The thousands of cinema projectionists who are *Cinema Technology* readers can be expected to be rather more discriminating than most in their technical quality requirements, and whenever a

group of 'Chiefs' comes together, the problems that they have in delivering the best quality images and sound in their theatres are always keenly discussed. In an era of increasing competition in the business there are often very good reasons why films are not always delivered as the Director of Photography would have liked - if your management is constantly on your back to cut costs, then you are likely to be under pressure not to replace that expensive Xenon until the pictures become so dim that the patrons notice, and if you are on your own struggling to show films in a dozen auditoria simultaneously, it is unlikely that it will prove physically possible for you to check focus and sound levels in all of them all of the time.

Being well aware of these all too frequent practical problems, and being increasingly conscious of the need for cinemas to provide their customers with a high quality entertainment experience, Kodak proposed and developed a scheme to improve matters, later approaching a number of operators to participate in a pilot programme.

The result of many discussions in the US and in Europe was the introduction of *The Kodak ScreenCheck Experience*, which was launched at ShowWest in Las Vegas and at Cine Expo in Amsterdam in 1999. Over 1000 screens have been Kodak ScreenCheck certified to date.



## Quality assurance

The Kodak *ScreenCheck Experience* is a quality assurance scheme to implement existing industry standards, carried out with the co-operation of cinema operators. The aim is to help movies to be seen as they are meant to be seen by setting a standard for feature film display which will enhance the cinema experience for consumers.

## An Exhibition partnership

Effectively, Kodak are working in partnership with cinema exhibitors to improve the quality of images projected on motion picture screens, and the scheme involves Kodak staff working with exhibitors to evaluate the performance of their projection systems. When cinemas are certified for the Kodak ScreenCheck Experience, it means that the sound and vision qualities have been audited by Kodak representatives to ensure that these conditions are the best possible for the audience.

Cinemas which 'pass' the ScreenCheck inspection are awarded certification, and Kodak then provides trailers and posters for use in the entrance lobbies to assure the patrons that a cinema with the Kodak ScreenCheck logos will offer the best

environment for enjoying the movie experience. Cinemas are encouraged to implement a regular maintenance schedule, and in order to ensure that the high standards are maintained, the scheme includes quarterly follow-up visits.

Cinemas which do not initially meet the very high standards set by the ScreenCheck inspection, but which show potential for improvement, are helped with advice and suggestions for solutions to the particular problems that have been uncovered, and recommendations for bringing screens up to par.

Kodak can also arrange for its ScreenCheck technicians to provide training for projection staff, to enable them to get the very best possible results out of the cinemas of which they are usually so proud. Hands-on training seminars are designed to fit specific needs, and typical courses can include:

- Basics of film handling
- Troubleshooting power
- Troubleshooting sound
- Preventive Maintenance





The Kodak ScreenCheck team (L-R) - Denis Kelly, Glenn Seaton, Richard Boastë

### An ongoing commitment

For the Kodak ScreenCheck experience to work properly, cinemas must be prepared to match Kodak's ongoing commitment, both in terms of time and of finance. The initial ScreenCheck inspection is free of charge to cinemas, but those which satisfy the requirements and pass the audit must pay for the quarterly follow-up visits in order to be allowed to keep displaying the ScreenCheck logos and trailers.

Kodak is keen to point out that it doesn't currently make any profit from the scheme, and that the charges made, which are negotiable (but around £100 per screen per quarter might be typical), are more than outweighed by the costs of the audit team, the show material, and the ScreenCheck trailers.

### The UK ScreenCheck team

The Kodak ScreenCheck team in the UK currently consists of three people.

**Denis Kelly**, Kodak Cinema Operations Manager for Europe, oversees the scheme and is responsible for its successful rollout.

**Glenn Seaton** is Kodak ScreenCheck Experience manager for the Cinema Operations Group in Europe, and he works with **Richard Boastë**, ScreenCheck Auditor, visiting cinemas throughout the UK to carry out the inspections and to report on the state of the equipment in the cinemas.

### The exhibitor's role

The ScreenCheck scheme can obviously only work properly if cinema exhibitors are prepared to back the project, and Odeon Cinemas have taken the lead in the UK in achieving ScreenCheck certification. Paul Schofield, Odeon Cinemas Technical Executive and a prominent member of the BKSTS Cinema Technology Committee says that Odeon recognise the advantages of Kodak ScreenCheck, since it fits well with the Odeon philosophy to encourage more people to enjoy their visit to the cinema.

### Thanks for the opportunity

For the purpose of writing this article, I was very grateful to Paul Schofield and to Odeon Cinemas, as well as to the two Chief Projectionists involved, for the opportunity to attend two of the ScreenCheck audits in two very different Odeon cinemas. For the projection staff involved, undergoing such an audit is obviously a fairly stressful process, in spite of all the efforts of the auditor to make the process as friendly as possible, and I appreciate that the process wasn't made any easier by having the Editor of *CT* constantly in attendance! Even the hardy ScreenCheck auditor might have found it distracting to be asked questions every five minutes about 'why' and 'why not' as he went about his duties, so my special thanks to Richard Boastë, who allowed me to act as his 'shadow' for two days.

Jim Slater

### Tale of two cities

When I first spoke with Denis Kelly about the possibility of shadowing a ScreenCheck Auditor, I asked if it might be possible to go along to see the process in action for two different types of cinema - one a typical modern multiplex, the other an old converted cinema, since I felt that the process was likely to be very different in each case. Surely, I thought, there won't be any problems with a brand new multiplex, whereas the guys trying to keep up standards in an old converted cinema must have a tremendous task on their hands. From my first conversation I learned that life is not nearly as simple as I had thought, and, would you believe it, it is not actually unknown for a brand new cinema that has just passed its acceptance tests to fail the ScreenCheck audit! With a little further explanation, I was led to understand why this might be - in general, the Kodak ScreenCheck tests are based on compliance with a range of SMPTE standards, whereas those building the new cinema might not have chosen to build to those standards in every instance.

As it happened, the convenient dates for my visits coincided with Kodak plans for Richard Boastë to carry out the first ScreenCheck at my local cinema, The Odeon, Salisbury, a very old cinema that has been much converted over the years, and then, a few days later, I again met Richard at the very different Odeon multiplex in Southampton's Leisure World complex.



The Odeon Salisbury, showing its 400 year old frontage and foyer



### Before we start...

The whole ScreenCheck process is carefully documented, and prior to each visit Richard had called the theatre management to verify the appointment date, time and location. He had also outlined the basic inspection procedure on the phone, and ensured that the Chief would be available to operate the equipment during the inspection. On arrival, which is often at about 8.30am so as to allow time for all the multiplexes to be



checked out and be ready for their normal lunch-time opening, Richard introduced himself to Odeon Chief Andy Rowlands, and I was fascinated to see how quickly Richard was able to create a strong rapport with the Chief. It obviously helped that Richard had been a projectionist for many years, with ABC, EMI, Cannon and MGM, his last 'proper' job being as Chief at Ealing, and his demeanour made it plain that he was there as a very experienced fellow projectionist, anxious to help, and not as some 'suit' from head office trying to pick faults. Richard obviously considered it very important to give explanations to the projectionist, which had the effect of bringing him fully into the process, and it was made clear that Richard wasn't there to criticise the projectionist, but to confirm that standards were being met, and to provide any advice or help that proved necessary.

Richard showed Andy the detailed forms which must be filled in as part of the ScreenCheck process, and explained the procedure that he would be undertaking. I was interested to see just how much fine detail there is on the forms, which run to some 40 pages, and include headings such as

- Lamphouse inspection
- Projector and soundhead
- Platters
- Sound system
- Optical components
- Film damage test
- Screen
- Seating and sight-lines
- Luminance
- Projector alignment
- Resolution

Although there are, inevitably, numerous sections of the forms to be completed, Richard was keen to tell me that this is far from being just a box-ticking exercise ("I told them I wouldn't take the job if that was all it involved...") but that he is constantly having to use his judgement to make realistic assessments of the state of the equipment and whether the various parameters meet the audit requirements.



*Richard Boast (r) explains the ScreenCheck procedures to Odeon Chief Andy Rowlands, and examines the Odeon maintenance log.*

*Below: Sample page from inspection report*

### 5.2 Lamphouse Inspection

*Using proper safety equipment and procedures (turn off power supplies, use Xenon lamp safety equipment), have operator open up lamphouse. Examine condition of lamp, reflector, wiring, etc.*

#### 5.2.1 lamphouse Information

Make..... Model.....

#### 5.2.2 Xenon Lamp Information

Date of Install..... Wattage of bulb..... Bulb Make.....  
Meter reading at install..... Current meter reading.....  
Total hours on bulb..... Amps..... Volts.....

#### 5.2.3 Xenon Lamp (Important/4 pts possible)

A = Excellent condition, minor electrode wear, minimal blackening, no crystallisation of quartz, contacts show no evidence of overheating

B = Very good condition, some electrode wear, some blackening, slight discoloration of contacts

C = Good condition, moderate electrode wear or bulb blackening, some discoloration of contacts

D = Lamp near end of life, normally worn electrodes, normal blackening, some discoloration of contacts, advise that lamp replacement is needed soon

F = Abnormal operation, severely or abnormally worn electrodes, severe blackening, crystallisation of quartz, severely discoloured contacts showing overheating, advise that lamp is in danger of immediate explosion

#### 5.2.4 Condition of reflector (Important/4 pts possible)

A = Like new condition, very clean

B = Good condition, slight haze or pitting, minor dust

C = Fair condition, some haze, pitting or scratches, or needs thorough cleaning

D = Poor condition, moderate amounts of haze, pitting or scratches, unlikely to clean up well, should be replaced

F = Reflector broken or severely damaged, obvious loss of light or likelihood of failure

#### 5.2.5 Condition of lamphouse interior (Important/4 pts possible)

A = Very clean, obviously maintained regularly

B = Light coating of dust

C = Moderate build up of dust

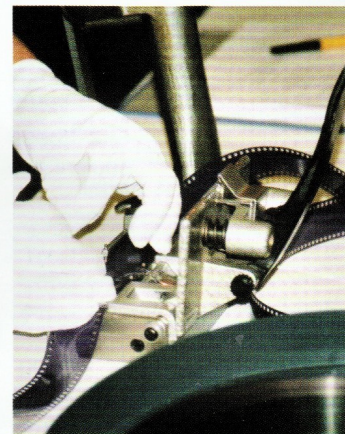
D = No evidence that lamphouse interior is ever cleaned until bulb is changed

F = No evidence that lamphouse interior is ever cleaned (lots of dirt or quartz debris)

### In the projection room

We began in the projection box of Screen One, where Richard made a start by checking out the general cleanliness of everything from the floors to the film-handling surfaces. He asked to see the toolkit and about the spares that are kept, noting that there was no extraneous stuff stored in the projection room, and made comments on the access to the box (only for the fit and able!). He noted the 'no smoking' policy and checked that safety equipment (masks and gloves) was available, advising that a special safety vest is now recommended when working on lamp-houses. Richard looked through the maintenance log, noting such items as when the portholes and lenses were cleaned, when dashpots were topped up and when fire drills had been carried out - everything was very much in order, but Richard expressed surprise that 'standard' Odeon maintenance record charts were not used.

Richard asked about the availability of film splicers (four on site to serve the five screens, but the boxes for screens four and five are very close together) and then went on to examine and use the splicer to make a few test splices, and to join a length of virgin film stock to the end of the test films which he had brought. Having made each splice he then examined it carefully, explaining that he was looking for good joins, cut cleanly at the sides, and for any possible damage, but he declared everything satisfactory in this area. The



*Richard makes a test splice before examining the results*



same procedure was gone through in each of the other projection boxes. Regular followers of the ongoing 'how do you mark splices?' debate in *Cinema Technology* may be interested to know that Andy and his men use a single line of Chinagraph pencil to mark just one frame.

Having noticed when we first entered the box how clean and tidy everything was, with each platter cover in place, I cynically asked whether it was always this tidy! After being assured that it was (of course!) this led to later discussions on this topic with the ScreenCheck team. They know, of course, that cinemas will clean up specially when they know that an audit is due, but the general feeling is that since the audits are carried out quarterly, this can be no bad thing, since it must mean that things are cleaner for a much higher percentage of the time than they would otherwise have been. The same goes for technical adjustments - if the fact that the cinema knows an inspection is due means that



*Richard takes a close up view with the magnifier*

standards are kept high, then that has to be regarded as a major benefit of the ScreenCheck process.

### Lamphouse, optics, film path

Richard then brought out his huge magnifying glass (can he really be that blind or is this just a gimmick, I thought at first, but, sure enough, there in the instruction manual it says 'examine teeth with 15X magnifier!') to examine the lamphouse, reflector, and lamp.

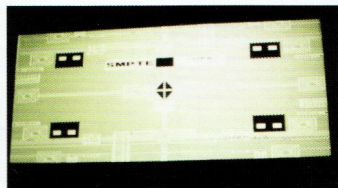
He then checked out the film path of the projector, particularly looking for faults that might damage the film, such as worn or hooked sprocket teeth, pad rollers, gate, intermittent etc. and checked the oil levels and that no oil had got anywhere that it shouldn't have done.

Andy was then asked to load up the test films that Richard had brought, although I was interested to see that Andy did in fact have access to his own test films from Odeon. It was decided to run these reel to reel, rather than from the platter, so Andy made the necessary arrangements, and we went down to the Screen One auditorium, ready to watch the test films. These consisted of two two hundred foot lengths of the SMPTE 35-PA projector alignment film (for Scope and flat) RP40, the Dolby Jiffy film, and a Kodak sound film. Also on the reel was a length of 20 ft of 'virgin' film stock, which had never before been through a projector, which Richard would later examine carefully to look for any signs of marking or wear due to its having passed through the projector.

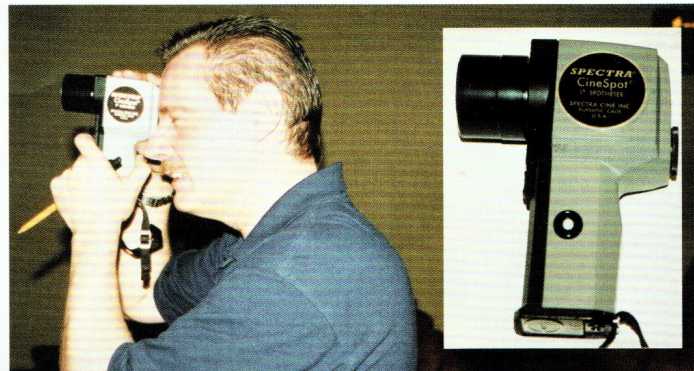
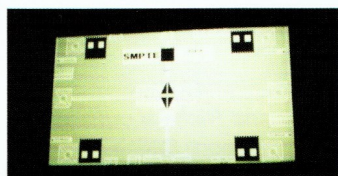
Andy had previously explained to Richard which sound systems were available in each auditorium.

### To the auditorium

I was surprised when Richard took out his tape measure and started to measure up the seat widths, spacings and sight-lines, and I asked if this was really necessary or fair for a ScreenCheck, since it is surely something that the cinema has little control over? Richard pointed out that the



*Test films are shown for both 'Scope and flat*



*Richard Boast checking screen luminance with the Spectra Cinespot light meter (inset)*

audit is meant to check whether the cinema meets the requirements of the various SMPTE standards, and since such items form part of the SMPTE standards, they must be included.

He then went on to measure up the screen, noting its type and its condition, and I was horrified to learn that it is not unusual these days for screens to be stained due to members of the audience throwing drink cans or even hot dogs.

With the auditorium lighting set to normal levels, Richard checked the ambient lighting for any stray light hitting the screen, or any distracting shadows.

### Brightest and best?

Measurements of screen luminance were then taken for both 'Scope and flat screens, the screen being illuminated 'open gate' with the appropriate lens and aperture plate in place. Richard explained what he was doing, as he used the Spectra Cinespot light meter, saying that although the SMPTE standard specifies a minimum of 12 ft lamberts, ideally he was looking for 16-18 ft lamberts at the centre, and then he gave details of how the standard requires minimum levels at the corners and at four points of a diamond, and that there should be no more than four ft lamberts difference between the measurements at the corners and the diamond points.

Knowing the importance of the calibration of such measuring equipment if consistent standards are to

be maintained, I later asked the ScreenCheck team what steps they take to make sure that the light meter is calibrated accurately, and was assured that it is sent away to the manufacturers for regular calibration.

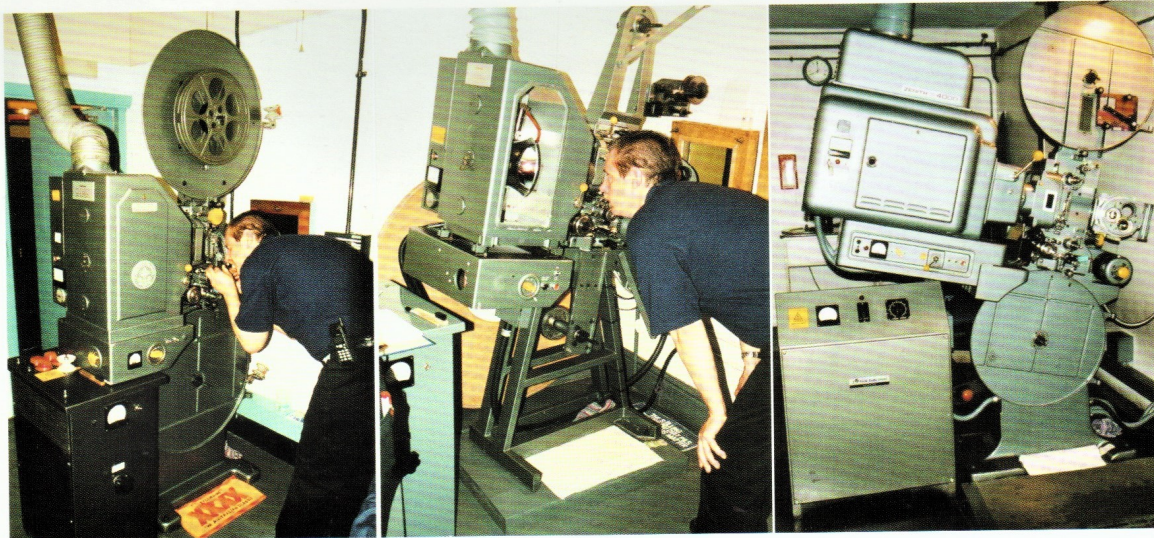
Just for interest, it turned out from our tests that several of the screens in the Odeon Salisbury were brighter than the maximum recommended, and where this was feasible, adjustments were made to the lamp voltage to bring the screen luminance within spec. I put forward the old 'surely you can't have a cinema picture that is too bright...' argument to Richard, but he quite rightly pointed out that the aim of any cinema should be to show the film as closely as possible to what the director of photography wanted, so 'too bright' is certainly not acceptable.

The SMPTE 35-PA test films were used to assess projector alignment, image size, symmetry and resolution in all parts of the picture, and Richard carefully filled in the assessment forms for features such as field flatness, focus stability, chromatic aberration, vertical steadiness, weave, lens alignment, and ghosting, his expert and experienced eye quickly noting all the relevant details.

### Sound

Before beginning subjective listening tests, the general acoustics of each auditorium were considered, listening for echoes and obvious reverberations from various locations in the seating area as one person clapped loudly whilst standing in front of the screen. Background noise





*ScreenCheck engineers need to be able to deal with a wide range of different equipment at cinemas like the Salisbury Odeon*

was assessed by listening carefully with the projector running film, but no sound playing.

The overall noise of the sound system was then assessed by listening carefully to an analogue sound track at fader setting 7, but without the projector running. Richard explained that he was listening for any sound system noise such as hum, hiss, crackle, pops, clicks, etc. With the sound system on, but again without the projector running, the Xenon arc was turned off and then re-struck, whilst listening in the auditorium. Only the slightest of clicks could be heard.

Richard then checked out the speaker installation, checking their positioning, rigging, and the presence of baffles and sound absorption. The appropriate test films were then played, and the results

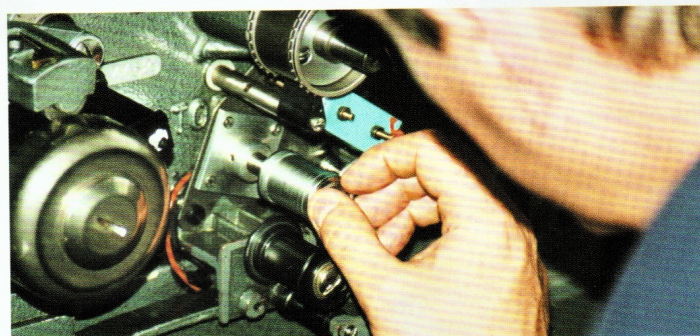
carefully noted regarding channel identification, pink noise, rattles, sympathetic vibrations and any distortions. The analogue subjective listening tests were carried out first, followed by the appropriate digital sound tests. Richard noted the sound processor makes and models, and recorded the fader settings.

#### **The de-brief**

Although Richard had stayed in touch with Andy throughout the whole process, sometimes by mobile intercom between box and auditorium, it was good to see that when the series of tests for the first screen had finished Richard found the time to talk in detail about all the things that he had found, and which he would be putting in his report. Andy was invited to comment on any of the findings, the idea being that there should be no surprises for anyone when

the results are published. The Salisbury Odeon has a mixture of projection equipment in its different boxes, so it was no surprise to find that some screens gave better results than others. One interesting finding came from one of the smaller

SDDS data would live in real life. Richard carefully examined every inch of the film path, eliminating all the various rollers and sprockets, and eventually his skilled fingers found a tiny blemish on the alarm 'stop' roller. It spun freely enough, but Richard pointed out that there was just a slight roughness to be felt at a certain point in its rotation, almost as though it were not quite cylindrical. Richard suggested that at some time in the past the roller might have jammed, causing a 'flat' to form, but Andy was having none of this, pointing out that since it was an alarm stop roller, with a centrifugally operated microswitch inside the roller, the projector would have stopped immediately in



*Richard's skilled fingers examine the rotation of the alarm stop roller*

Salisbury projection rooms when the piece of 'virgin' film was examined at the end of the tests. A careful visual examination showed rub marks on the film edge, on the film base side only, where

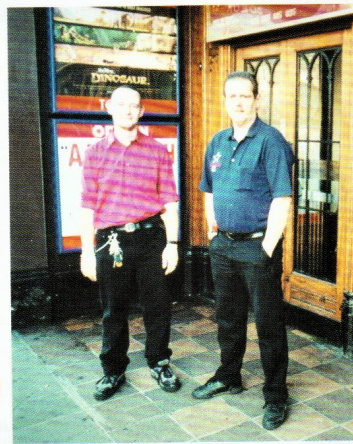
the case of any form of jamming affecting that roller. Both agreed, however, that they could feel something untoward at one point in the roller's rotation, and the evidence from the 'virgin' film was indisputable, so it was agreed that Odeon engineers should be asked to take a look at this very minor problem. Richard agreed to leave the film as evidence for the service engineer.

#### **And then again.....**

I think that perhaps the most surprising thing to me about the whole ScreenCheck process, although it shouldn't have been, was that once we had done the first auditorium and projection box, 'poor Richard' had to start all over again, doing just the same for



*Richard discusses the ScreenCheck results with Chief Andy Rowlands during the de-brief session*



*Andy and Richard outside the Odeon, Salisbury*





the other four screens, under enormous time pressure, knowing that the job must be finished before the lunchtime cinema opening. I confess that I crept away after first three! When I expressed my commiserations to Richard, he gently pointed out that our next task was the 13 screen multiplex at Southampton's Leisure World, for which two whole half days had been allocated.

It was agreed that I would go down there to watch the last of the 13 screens being ScreenChecked, and that Denis Kelly would also be in Southampton to talk about the ScreenCheck programme for *Cinema Technology*.

### On to Southampton, and a natural link

We were greeted at the Southampton Odeon by Chief Projectionist Bob Bregazzi, and it turned out that he used to work at the Salisbury Odeon and that he still lives in Salisbury, just to the rear of the cinema, so we had no difficulty in linking the two

ScreenCheck visits, just as Bob had no difficulty in telling us how very different things are at his latest, state of the art multiplex. The technical equipment for all 13 screens, which range from 540 to 103 seats, is virtually identical, with VIC 5s and SRD in all the auditoria, and SDDS in screen 2.

A quick chat with Richard, as he completed the paperwork for the last of the thirteen screens, indicated that all had gone well with this new multiplex, and after a tour of the technical areas and a poke into a couple of the auditoria, where both sound and pictures were great, I was able to sit in as Richard debriefed Bob as to what he had found. As an aside, I happened to mention to Bob that I was delighted with the bright, sharp, clean, scratch and noise free pictures that I had seen in one of the auditoria, and I supposed that they must get through quite a few new print copies at a cinema like that. Bob replied that the same print had been



*Above and below - more like a dance hall than a projection 'box' - the facilities at the Southampton Odeon are certainly very different from those at the Salisbury Odeon, but both have benefitted from the ScreenCheck experience*



shown for some three months - surely a compliment to the careful way in which he and his team treat their precious programme material.

### ScreenCheck Certified

Since the results were very good, and Denis had been appropriately briefed by Richard by telephone before he left that morning, Denis was able to congratulate Bob on gaining ScreenCheck

certification for the Southampton Odeon, and he was also able to hand over copies of the the three 35mm ScreenCheck trailers that the cinema is now able to show at the start of each performance, advertising the cinema's success in gaining recognition for its high quality pictures and sound, and giving customers the confidence that they are enjoying cinema at its best.



*Bob Bregazzi, Chief Projectionist at the Southampton Leisure World Odeon, adjusting a VIC 5*



*Richard Boast, Bob Bregazzi, and Denis Kelly discussing the ScreenCheck results*



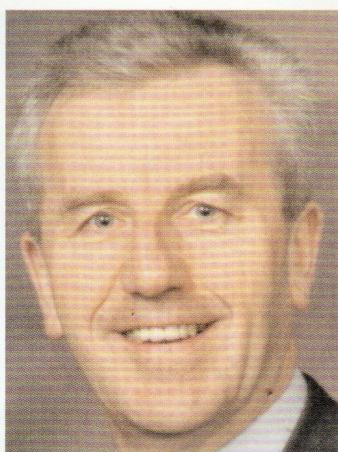
## The ScreenCheck Philosophy - an interview with the boss!

Denis Kelly, as Kodak Cinema Operations Manager for Europe, played a major role in the setting up of the ScreenCheck programme in the UK, and so it was good to be able to ask him some of the basic questions about the programme and the part that it plays in Kodak's approach to cinema in this new millennium. I began by asking why there had been this 'sudden' interest in the exhibition business from Kodak, who, to my knowledge have just one cinema in the whole world, and that is the *Kinomir* in the centre of Moscow, mainly renowned for having cloak-rooms big enough to cope with 500 heavy fur coats!

Denis responded to my leg-pull by saying that in fact Kodak are opening and managing a state of the art four screen multiplex cinema in Shanghai, and that he is currently responsible for setting up other Kodak cinemas in parts of Eastern Europe; Kodak have decided to invest in cinemas in countries where other cinema chains have not yet become involved. Yes, they would like to make money out of such investments, but it is also important for the future success of the industry to spread the word about modern cinema, and to introduce people in Eastern Europe to the idea of visiting high-quality cinema entertainment venues. This also fits in with the ScreenCheck aim to help movies to be seen as they are meant to be seen, by setting high standards for feature film display which will themselves enhance the cinema experience for consumers.

### Digital competition

Another reason for the birth of the ScreenCheck programme was that digital cinema is most definitely coming over the horizon, with its as yet



unfulfilled promise of 'every time a perfect picture'. Kodak believes that digital cinema will have a great future, and, as the change of name to Kodak Entertainment Imaging implies, intends to be a major part of it, but Kodak also believes that high quality film presentation will carry on for decades ahead, and that film must be seen to compete in the quality stakes. The ScreenCheck programme is intended to ensure that the public knows what high standards properly projected film can achieve.

### Not the quality police!

Kodak do **not** want their ScreenCheck teams to be thought of as a 'quality police', but they want to be seen as helping the industry to improve. This is put into practice day by day, and the ScreenCheck auditors frequently help to put right some minor problem that they discover during the audit, rather than simply failing the screen on a small technicality.

### Not a branding exercise

Denis said that another thing that Kodak is **not** trying to do with ScreenCheck is to introduce a Kodak branding scheme for cinemas. It is genuinely aiming to set up partnerships with cinema operators which will significantly improve exhibition standards, and this should be for the good of the whole cinema industry.

It just happens that because the Kodak name is instantly recognisable worldwide as a sign of high quality film, the brand name provides a significant benefit for the cinema operators, and is in itself a valuable marketing tool to assure audiences of the good intentions of the ScreenCheck Experience. Cinemas which are certified also benefit from marketing support which includes trailers which can be seen before all feature films, together with banners and posters for use in the cinemas to reinforce the quality message. It is hoped that cinemas will be proud to advertise their 'ScreenChecked' status in the local press, thus endorsing the message about high quality cinema entertainment.

### Can projection improve?

Following a discussion that had taken place at IBC we spoke of the possibility of improving 35mm projection so as to keep pace with and even overtake the ongoing developments in digital projection. Denis said that Kodak strongly believe that the next logical step is to improve projection technology by partnering with manufacturers, getting them to incorporate improved technology. Kodak labs are looking at several new developments in 35mm projectors, whose basic technology has remained unchanged for many decades. Improvements in the optical path could enable far more light to be passed through the whole area of the film frame, and it might even be possible to do away with the crude mechanics of the intermittent mechanism which gives projected film such a hard life - telecine machines have worked with continuously moving 35mm film for many years, so it should not be impossible to adopt similar mechanical techniques to 35mm projectors. This type of work will fit in well with what the company is trying to

achieve with the Kodak ScreenCheck Experience.

### Why Odeon?

I then asked 'why Odeon?' - Are they the only UK cinema chain that have agreed to participate in the ScreenCheck experience? Denis said that it is great that Odeon have agreed to have all their cinemas audited, but that they are by no means unique, and already some pilot trials have taken place involving Warner Village Cinemas, resulting in some of their screens being certified. Negotiations are ongoing with other cinema chains throughout Europe.

### What have you learned from ScreenCheck?

- ScreenCheck audits show that light intensity and light uniformity issues make up 80% of the identified problems.
- It is common to find speakers and sub-woofers that just aren't working, and audio channel phasings are regularly found to be wrong.
- Kodak have benefitted enormously from the feedback from Odeon, raising several print issues which we have been able to resolve.
- We have learned to work with projectionists, and always to tread carefully - there is no point in just saying 'this is wrong', we understand the real world constraints that low manning levels and increased numbers of showings exert.
- We have learned to avoid the simple concept of pass/fail for a site, and always offer to help cinemas to improve in order to meet the high ScreenCheck standards.
- We have learned that the introduction of uniform standards to the cinema projection industry world wide provides tremendous benefits.
- ScreenCheck has provided an extra channel of communication between all those in the exhibition industry.

Jim Slater

**Kodak**

TAKE PICTURES. FURTHER.™

**The Kodak ScreenCheck Experience:**  
**See, Hear, Feel & Experience the Difference!**

