



...for the latest news from I Holland



Our People

Our Customers

Our Company

Our Products

New Products for

ACHEMA 2009

Hall 3, Stand N1-P1

Have we got news for you!

We would like to welcome you to our special Achema Edition of PunchLine. We are pleased to announce that the PunchLine subscriber list has now reached over a thousand people and we are hoping to see as many of you as possible at the I Holland stand. In this issue we bring you selected highlights of our case studies, seminars and featured products to enable you to catch up on what has been happening since we spoke to you at the highly successful Interpack 08.

As always, we welcome your feedback and comments, questions or suggestions, these can be sent to info@iholland.co.uk.

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OUR PEOPLE

The I Holland Achema Team

Steve Deakin - Sales, Marketing and Business Development Director

Steve heads up the Achema team and having started as an apprentice with I Holland in 1977 knows the business from the ground floor up. Steve has a wealth of technical knowledge in tablet compression tooling and, during his time with I Holland, Steve has visited all corners of the globe, supporting customers and speaking at many prestigious venues and seminars.



Ray Griffiths - Senior Account Manager

Ray Griffiths has been with the company for 8 years, prior to his current role he spent more than 30 years with a leading tablet press manufacturer in various technical and sales roles. With such a large resource of experience Ray has an excellent knowledge of the many challenges encountered during the production of quality tablet products.

UK, Australasia, Brazil, China, Colombia, Indonesia, Iran and Russia.

Andy Dumelow - Account and Product Manager

Andy Joined I Holland in 2000 as a PharmaCare™ Service Engineer. Since then Andy has been responsible for the ongoing development of the PharmaCare™ product range, as well as giving technical support to customers all over the world. Recently he has been instrumental in the development of the I Holland PharmaCare™ 7 Step Process. Andy is responsible for...

UK, India, The Middle East, Africa, Pakistan and Spain.



Clare Taylor - Business Development Manager

Clare has been with the company since 2005, she spent two years as Marketing Manager developing the I Holland brand and putting together an integrated range of customer information, including PunchLine! She is a fluent German speaker and now, as Business Development Manager, looks after I Holland's global supplier contracts alongside markets in...

UK, Austria, Argentina, The Baltics, Mexico, Switzerland and Germany.

Zoe Gascoigne - Area Account Manager

Zoe is a fluent French speaker and joined I Holland in 2007. Since then she has been putting her in-depth knowledge of Pharmaceutical Manufacturing, gained as a Production Manager for a leading UK Pharma company, to work for I Holland's customers in...

UK, Scandinavia, France, Belgium, Canada, Italy, Portugal, Egypt and North Africa.



Luke Hoskin - Area Account Manager

Luke has a very strong background in manufacturing and engineering design, having gained excellent engineering qualifications he joined I Holland in 2006 as a Product Support Group Engineer. In 2008 he moved into the sales department, further developing I Holland's already strong technical sales team. Luke is currently providing sales and technical support to customers in...

UK, The Netherlands, USA, Puerto Rico, Hungary, Poland and Romania.

I Holland Multi-Tip

I Holland have been manufacturing multiple-tip tooling for over 25 years and we understand that the demand for increased production with minimal capital outlay has never been stronger. We are always striving to ensure that our punches and dies are at the very leading edge of tooling design, allowing our customers to retain a competitive edge.

To assist our partners in their quest for increased capacity we developed our Multi-Tip and Micro-Tab range of Multiple Tip tooling. Our experience in this field has culminated in today's impressive array of configuration options to suit many products.

Multi-Tip

If you are producing tablets with dimensions larger than 4mm then our Multi-Tip punches and dies are available for a number of both shaped and round tablet designs.



Multi-Tip



Micro-Tab

Micro-Tab

For the production of tablets with dimensions of 4mm or smaller the Micro-Tab is specifically designed for high volume manufacture of micro-tablets.

Both of these ranges are available with I Holland's preferred design solution, the internal cap fixing. However, if your design requires an alternative solution, such as external fixing, we will always find the most balanced and effective layout possible to maximise your production capacity while providing a robust punch and die design.

For further details please see the recently released I Holland Multiple-Tip Tooling brochure available from our stand at Achema or by emailing info@iholland.co.uk

I Holland KwikTAB

KwikTAB

I Holland are pleased to announce the launch of KwikTAB. This beautifully simple single station research and development press is designed to allow quick and easy set up, facilitating greater flexibility for your testing requirements. The KwikTAB can accommodate both shaped and round punches up to a maximum tablet diameter of 20mm and will exert a compressive force of up to 50kN (5 tonnes.)

All parts of the machine that may come into contact with the formulation are made from stainless steel or synthetic material of a Pharmaceutical standard allowing the press to be used in pharmacy production of clinical samples.



I Holland releases PharmaCote RS



I Holland are very pleased to announce the launch of their distinctive new anti-abrasive RS coating. This coating has been introduced by I Holland for its excellent anti-wear characteristics and is easily identifiable by a deep blue/grey sheen. In recent nutraceutical trials PharmaCote RS has expanded tooling life by up to 93% allowing a production increase of more than 23 million tablets. In tests PharmaCote RS proved to be approximately 5 times harder than the already very tough HPG-P.

These spectacular results have translated into valuable cost savings and productivity increases for I Holland customers, with tooling lasting up to twice as long before it requires replacement, run-time is vastly increased with less need for costly downtime due to tooling replacement. Wastage is reduced because presses can be set up and calibrated fewer times as a result of the reduced need for tooling change over. I Holland R&D manager Rob Blanchard explains that, "Whilst we expect the wear performance to be greatly enhanced, the quantum of this improvement may differ from product to product. This is due to variations in granule characteristics and manufacturing environments." - For further info on RS see Pgs 8-9



Successful Cooperation Yields Anti-Stick Rewards

Pfizer is the world's largest research based Pharmaceutical company - discovering, developing, manufacturing, and marketing branded medicines. However, despite its status as an industry giant, Pfizer still has to handle the common day to day challenges of tablet compression...

The Project

During 2007 Pfizer Product and Process Development (PPD, Freiburg Germany) opened discussions with I Holland regarding compression problems on one of their solid dose products under development. The main objective was to find a coating solution that would prevent sticking and also a design solution that would prevent picking. Additionally, a key objective was to evaluate the use of external spray lubricant against coated tooling options.

Sticking
Sticky granule
adhering to the
punch face or die
bore.



Consequently a compression trial was designed that would test the effects of changes in tablet design and the latest coating technologies available. For this I Holland provided two sets of tooling coated with a selection of PharmaCote coatings from their current and developing range. The embossed detail on both sides of the tablet was also redesigned in addition to a change of the tablet profile. The three pronged approach allowed Pfizer to make an informed choice of which coating solution/design to use when scaling up this product for commercial manufacture. The three parameters (coating, design and profile) were tested simultaneously.

The trial was run over three days at the Pfizer plant in Freiburg Germany with I Holland present throughout the trial working alongside the PPD team to monitor and analyse the results. Every tablet produced was isolated from each individual station using the capabilities of the press.



Pfizer - Freiburg, Germany

Design

During the trial several design parameters were tested:

1. Double radius cup against single radius cup
2. Standard Pfizer logo and product identification against optimised design with increased counter dimensions to reduce the chances of picking.
3. External lubrication against coated tooling



Picking
Compressed granule
adhering to the
detail on the punch
face.

Coatings

As the tricky Pfizer logo was put through its paces several coatings were also tested for their anti-stick performance:

PharmaCote DN

A premium coating for combination problem products (sticky, corrosive, abrasive;)

PharmaCote CN

An excellent all round coating to prevent sticking, corrosion & wear;

PharmaCote NI

Bespoke anti-stick coating;

Development Coating 1

Development Coating 2



PharmaCote treatments and coatings



Results

The premium CN coating proved to be the most effective anti-stick solution, completely eliminating the sticking problem and thus the need for an external spray lubricant.

Based on the outcome of the trials, Pfizer elected to adopt I Holland's recommendations for a change in tablet profile to double radius, an optimised embossing design and the CN coating with the additional 'plus' process applied to the tooling.

Since the trial I Holland have supplied further tooling for scale up validation batches and all lots have been manufactured successfully without sticking.

The test set was also used for additional studies on a second product where the NI coating proved to be the most effective solution. This is now being used in development trials.

Significantly, the trials also proved that the use of advanced coating technologies and the matching of correct coating properties to each specific formulation can provide a very cost effective alternative to expensive external lubrication systems.

Since the trial, Pfizer have produced over 40 million tablets using the I Holland solution in the course of a product transfer.

Patrick Daugherty of Pfizer Inc. Groton, USA states:

'The work that I Holland did to troubleshoot this sticking problem and support these trials was fantastic and proved key to moving this project forward.'

In this study, the use of PharmaCote 'RS' extended tooling life by 93%

I Holland works closely with a manufacturer of one of the world's favourite range of multi-vitamins, to resolve a highly abrasive issue.



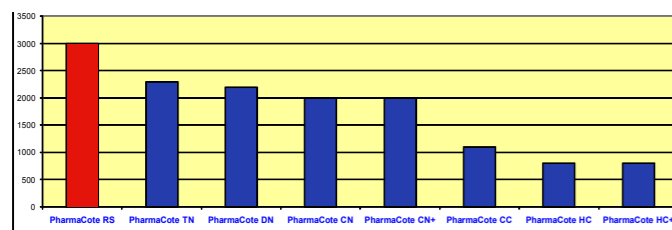
The Challenge

In January 2008 a leading nutraceutical manufacturer was experiencing serious issues with a particularly abrasive formulation of part of their range of Vitamins.

Many nutraceutical products can be abrasive in nature, but this particular compound was causing extreme difficulty. Only 22 million tablets were able to be compressed before the tooling was worn to such an extent that it was deemed to be unserviceable.

This not only necessitated the purchase of new punches but also incurred the associated down time inherent with replacing and setting up 37 stations of tooling. I Holland, along with its local agent Vis Viva were challenged to find a solution to extend the life of this tooling.

PharmaCote RS - (graph shows hardness in Vickers)



Through its continual research and development programme I Holland were in the final stages of developing a highly promising new anti-abrasive coating RS. This formulation

presented an ideal opportunity to trial the highly wear resistant PharmaCote RS.

The Trial

A compression trial was set up at the customers premises and I Holland despatched sets of the new RS coated punches for trial along with one of their iNSPECT camera systems. Photographs were taken for record and stored to enable comparisons to be made during the trial.

The goal of this trial was to see just how far the useful life of the tooling could be extended by the use of a coating. The RS coating was tested with the same abrasive formula against the extremely tough HPG-P and against a competitor's super lattice coating. Representatives from Vis Viva and I Holland kept in close contact with the trial, visiting on a regular basis to check progress. When the results started to take shape RS emerged as a clear winner.

The competitor's coating was shown to fail between 19.5-21.1 million tablets, the premium steel was withdrawn between 21.1-22.8 million tablets but the PharmaCote 'RS' was still serviceable at an astonishing 44,010,000 tablets.

This represents an approximate 93% increase in the life span of the tooling when compressing this formulation.



The Benefits

These spectacular results translate into valuable cost savings and productivity increases for the customer.

This coated tooling now lasts nearly twice as long before it requires replacement, with longer run-time and less need for costly downtime due to tooling replacement. In addition product yield has also increased as the presses need to be set up fewer times.

Since these trials PharmaCote RS coated tooling is now being used successfully at 3 other locations manufacturing for the same range of nutraceuticals and I Holland has released PharmaCote RS to assist customers in combating abrasion worldwide.



Uncoated premium grade steel after 16,300,000 tablets
Removed from service after production of 22,820,000 tablets



PharmaCote 'RS' after 16,300,000 tablets
Still serviceable after production of 44,010,000 tablets



In our tests, PharmaCote 'RS' proved approximately 5 times harder than even the extremely tough HPG-P



I Holland International Seminars

Middle East Tableting Science Seminar - February 2009

Dubai, United Arab Emirates



In 2008 I Holland was approached by Julphar (Gulf Pharmaceuticals) to present a Tableting Seminar to the Pharmaceutical Industry in the Middle East.

The aim of the Seminar was to present technical papers from a wide variety of companies representing the different phases involved in the tablet manufacturing process.

I Holland approached 4 companies to deliver papers that would be relevant to their own presentation at the Seminar:



Korsch – Tablet Press Manufacturer presented a paper on Concepts of Tablet Compression



Glatt – Coating Machine Manufacturer delivered a paper on Fluid Bed Processing of Modified Release Pellet Formulations



Colorcon – Manufacturer of coatings and other excipients presented 2 papers: Development of Robust Processes and Why Film Coat?



Molecular Profiles – Provider of advanced analytical research for the pharmaceutical and healthcare industries presented a paper on Optimising Tablet Manufacture and Reducing Defects

Trevor Higgins from I Holland presented a paper on Tooling Design Implications for Effective Tablet Production.



Senior managers and technical personnel from Pharmaceutical companies throughout the Middle East and into the sub-continent were present. Delegates attended from most of the Middle East Countries as well as Pakistan, Bangladesh, and India

The three day Seminar was held at the Hyatt Regency Hotel in Dubai where the 1st and 3rd days offered delegates the opportunity to meet the speakers and representatives from the participating companies on a one to one basis. This was an ideal opportunity for the delegates to discuss any individual concerns and to view the services and some of the equipment provided by the various presenting companies.

The middle day played host to the main Seminar with the opening address and welcome presented by Dr Ayman Sahli, General Manager of Julphar and Mr Chris Prideaux, Managing Director of I Holland.

On the final day there was also the opportunity for the delegates to tour the Julphar Factory in Ras Al Kheimah. This facility has 7 individual production sites, all of which contain highly advanced manufacturing machinery. After the facilities tour, Julphar hosted a lunch for the delegates at a nearby golf club.

'Excellent Speakers' – Dr Iman Saad, Sharjah University
'Very Beneficial' – Essam Moh. Boul Wafa,
 Saudi Pharm Ind. & Medical App. Corp



The 7 Step Process for Tooling Care and Maintenance

November 2008

Reif Damascus, Syria



This seminar was run in partnership with Al Fares Pharmaceuticals and International Consultancy Services and took place at Al Fares's factory located in Reif Damascus, Syria.

Trevor Higgins and Andy Dumelow from I Holland presented on Tablet production problems and the 7 Step Process which is specifically designed to assist companies with the maintenance and care of their tooling. Trevor and Andy took questions from the floor at the end of the day on all aspects of the tooling and maintenance process.

The seminar was well attended and delegates consisted of Managers and production personal from Pharmaceutical companies throughout Syria, lecturers from several Universities and the Ministry of Health.

Comments from the delegates were a good indication of how well the seminar had been recieved:

'Hope you continue with such support'
 Dr. Majed Al-Msouti, Technical Manager, A L F A R E S Pharmaceuticals Co, Syria

'Excellent seminar'
 Dr. Najwa Safia, Head of tablet Dept. Medico, Syria



Tableting Science Seminar

September 2008

Buenos Aires, Argentina



In partnership with our agents, Advance Argentina, I Holland presented a seminar at the British Embassy which included topics on Steel, Treatments and Coatings, Troubleshooting Tablet and Tool Problems and Optimising Tablet Design.

The Seminar was delivered by Steve Deakin from I Holland and delegates had the opportunity at the end of the day to participate in a question and answer session with Steve.

Delegates attended from Pharmaceutical Companies throughout Argentina and South America



I Holland will be organising other such international seminars in the future. Visit our web site at www.iholland.co.uk for further information.

PharmaCare™ Package Offer*

In order to maximise the life of tablet tooling and hence the return on investment for the consumer, I Holland recommends the following package as the minimum PharmaCare™ solution for each of its customers.

MF35 Pharma - For the micro-fine polishing of punches and dies, this automatic polishing machine ensures consistent results time after time helping to increase tablet productivity, reduce product wastage (due to sticking etc..) and providing strong cost saving benefits against manual polishing operations.



Approve System 2 - Automatic measurement system for punches and dies, this windows based software system measures critical punch and die dimensions aiding tool management and ensuring tablet tooling remains within specification hence producing quality tablets.



Ultrasonic Cleaner - Ensures consistent cleaning results and cost saving benefits over manual cleaning methods. Use of an Ultrasonic cleaner can also prevent product contamination.



Vision - 6 x magnification for the close up inspection of punch tips and tablets.



Maintenance Kit - A range of consumable items and equipment for carrying out manual maintenance and repair work on punches and dies.

Order the above items now and receive a special package discount with cost saving of over £7500

For further details of any of our promotions...

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