

COMPtrade Technologies GmbH
Am Goldberg 2
99817 Eisenach
Germany

Author: Richard Hancock
Date: 11th April 2012



Packaging Trial using INTERCEPT® 2 Gusseted Bag

at

**Ford Motor Company Limited
Bridgend Engine Plant
Waterton Industrial Estate
Bridgend
CF31 3PJ
Wales**

Date: 7th February 2012

Updated 11th April 2012

Trial undertaken by:

Richard Hancock, Toorak Limited
Richard@toorakpackaging.co.uk, +44 7511 562 021

Nick Hancock, Toorak Limited
Nick@toorakpackaging.co.uk, +44 7999 656 663

Homayoun Parvini, Senior Manufacturing Engineer, Material Handling,
Packaging, Layout Equipment, hparvini@ford.com, +44 1656 672537

Kieran Griffin, Senior Supervisor, Materials, Planning & Logistics, kgriffin@ford.com

The information disclosed in this paper, partially or complete, is strictly confidential, private and privileged. It is strictly prohibited to copy or multiply this paper without the specific written consent of COMPtrade Technologies GmbH, Germany. This paper is not to be given or otherwise made available to third parties without the written consent of COMPtrade Technologies GmbH, Germany. The recipient will be held liable for any misuse or distribution of this information. Although the information given is to the best of our knowledge accurate and complete, no warranty is given and no liability is accepted in connection with the use of this information in any way whatsoever.

Introduction

- The trial was arranged to evaluate the functionality of the STATIC INTERCEPT® product for the supply of engine heads to Ford China
- The engine heads showed some residue staining from washing but no rust was evident

Technical Information

Packaging Method:

STATIC INTERCEPT® 2, 80 µm, gusseted bag (2 year protection)

Packaging Material:

INTERCEPT® 2, 80 µm 1,250mm x 1,050mm x 2,250mm gusseted bag

Desiccants type: Topdry DIN 55473-B, 2 unit desiccant bag

Product tested:

- Engine Head

Metal types: Unspecified, dry no oiling

Test period: To be despatched to Ford China in approx 3 weeks, opened and examined. Photos to be taken and comment by Ford China to update trial report

Documentation

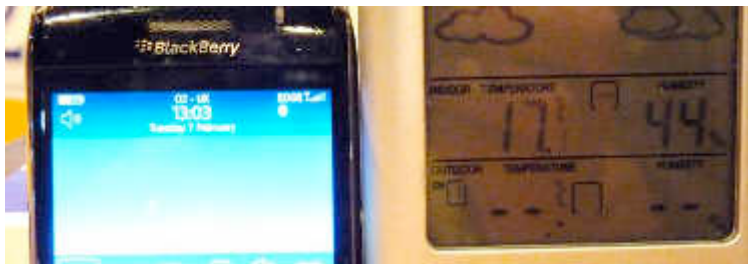
Existing Packaging Process

- Oil is applied to each engine head with a roller. A brush is used to apply oil to the chambers



- VCI bag used on inside of corrugated box
- VCI sheets are cut and placed between each of the 5 layers of product

Trial date: 7th February 2012



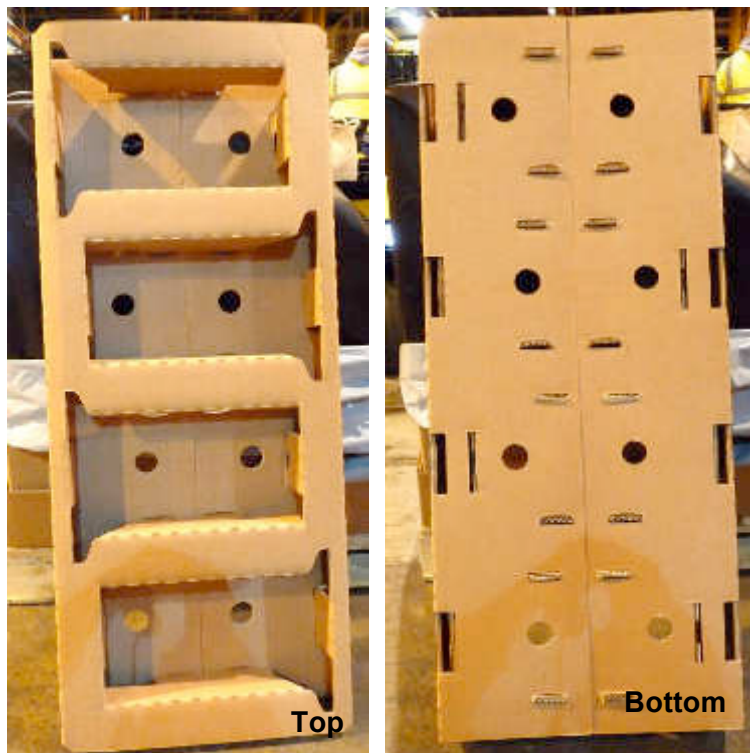
Author: Richard Hancock
Date: 11th April 2012

Packaging Process

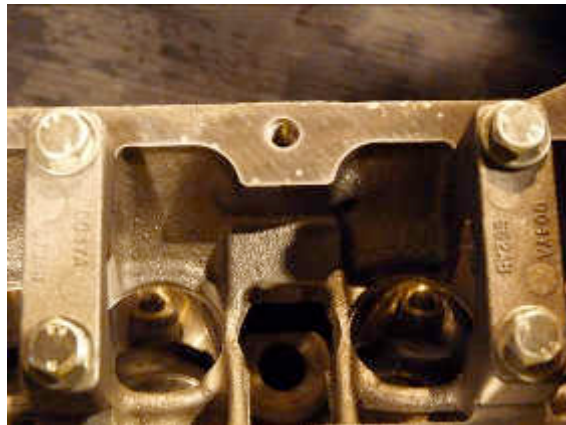
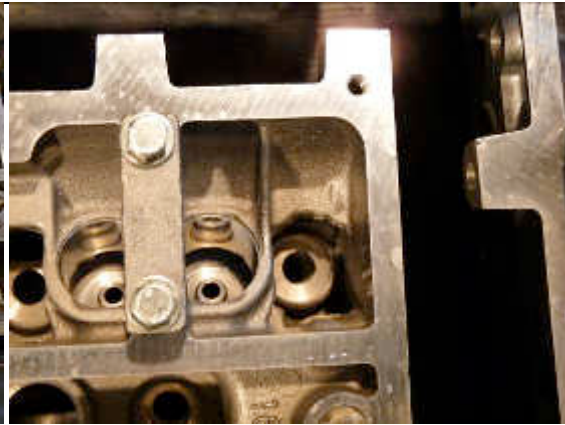
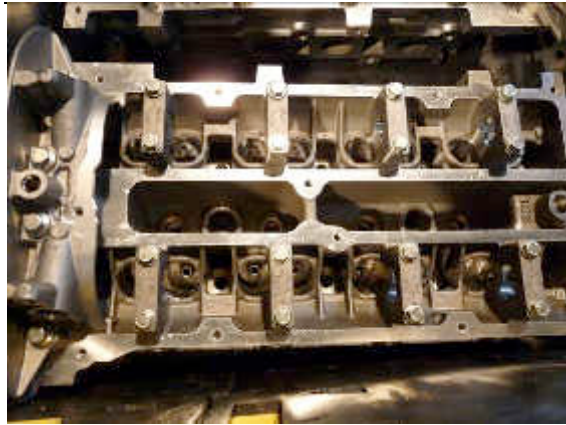
Product was packed in the existing packing area next to the oiling lines

Engine Heads

- INTERCEPT® 2, 80 µm 1,250mm x 1,050mm x 2,250mm gusseted bag
- Topdry DIN 55473-B, 2unit desiccant bags placed on top of each layer
- Open bag end was taped closed before the corrugated lid was located



- Two trays per layer to hold the engine heads in place
- 8 holes were drilled in trays to allow air to circulate

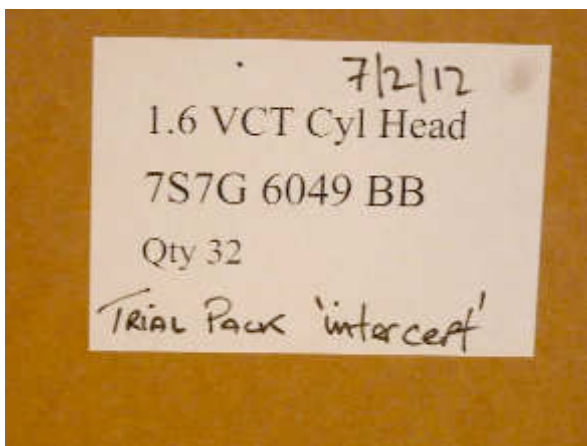


- Product is transported in a corrugated box. The corrugated frame is in 2 parts to allow for easier access to pack product. The corners are sharp and pierced the bag. Hole was sealed with a piece of tape. The VCI bags are prone to the same problem

Author: Richard Hancock
Date: 11th April 2012



- 4 layers of heads – 8 per layer



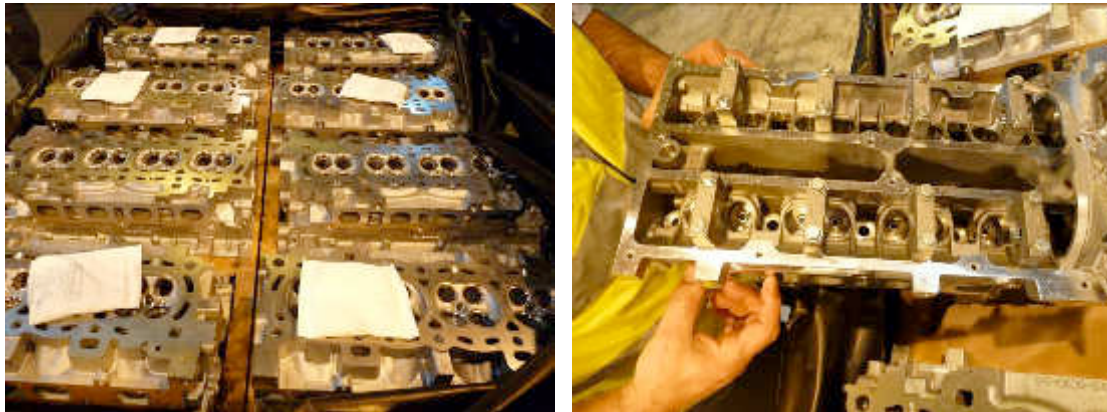
Author: Richard Hancock
Date: 11th April 2012

Next Step

- Box to be sent to Ford China for evaluation

Update 11th April 2012

- Visit requested and made by Richard Hancock and Nick Hancock on 29th March to open box and inspect (Homayoun Parvini & Kieran Griffin present)
- No rust evident on top layer of product
- Box resealed



- Request made by Richard Hancock to change desiccant on top layer of box before trial box despatched. Visit made on 3rd April by Nick Hancock to change desiccant - Homayoun Parvini declined the request to allow desiccant to be changed

COMPtrade Technologies GmbH would like to say thank you to all participants for their cooperation as well as for the permission from Mr Hommie Parvini to take photographs with the intention to complete our documentation

This documentation is confidential and is only to be submitted to parties on a need-to-know-basis

Richard Hancock