

DuPont™ Vespel® In New Generation of High Pressure Test Equipment for Transmission Components

Application Profile DuPont™ Vespel® SP-2515



Vespel® SP-2515 Seal Rings

Seal rings made of DuPont™ Vespel® SP-2515 provide long life under extreme conditions in new transmission component test equipment.

Application Description

Automax Co., Ltd. adopted Vespel® SP-2515 seal rings in a new generation of high pressure test equipment used to evaluate automatic (AT) and continuously variable transmission (CVT) clutch units at the extremes of pressure and speed.

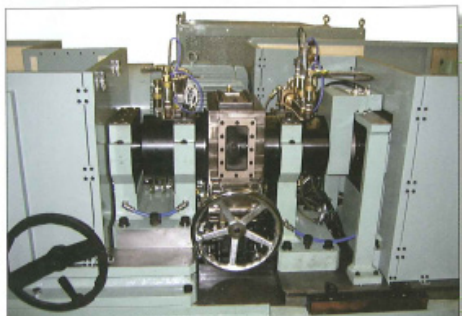
Benefits to Customer

Vespel® seal rings were selected for superior durability and reliability over the entire range of tested oil pressures and rotational speeds. The dimensional stability and microcut gap technology of Vespel® seal rings provided the ability to precisely control leakage at the extremes of oil temperature and pressure.

Material Selected and Why

Vespel® SP-2515 is a unique polyimide composition and provides:

- o low CTE (coefficient of thermal expansion) for dimensional stability and precise leakage control over a wide temperature range;
- o low wear against aluminum, even when contamination particles are present;
- o low friction in lubricated environments for lower torque loss and improved component efficiency;
- o high thermal conductivity and high PV (pressure x velocity) limits which allow for higher operating pressures and shaft speeds.



AT & CVT Clutch Unit Test Equipment
Oil Pressure: 3 MPa Speed: 8000 rpm

Direct Customer

Automax Co., Ltd.
4-28-13 Azusawa, Itabashi-ku, Tokyo 174-0051
Japan
<http://www.automax.co.jp>



The miracles of science™

Let's talk

We have the right materials, technology and technical resources to help you design and manufacture superior parts and systems. Please contact the nearest DuPont Representative for your country.

Americas

DuPont Engineering Polymers
Pencader Site
Newark, DE 19714-6100
Telephone +800-222-VESP
Fax +302 733-8137

Asia Pacific

DuPont (China) Research &
Development Management Co., Ltd
Zhangjiang Hi-Tech Park 600 Cailun
Road, Pudong New District, Shanghai
201203, China
Telephone +86 21 23821122
Fax +86 21 28921234

DuPont Kabushiki Kaisha
Sanno Park Tower
11-1, Nagata-cho 2-chome
Chiyoda-ku, Tokyo
100-6111 Japan
Telephone +81-3-5521-2773
Fax +81-3-5521-2777

Europe / Middle East / Africa

DuPont de Nemours
(Belgium) BVBA-SPRL
Dept. Vespel®
A. Spinostraat 6
B-2800 Mechelen
Belgium
Telephone +32 15 44 1384
Fax: ++32 15 44 1408

More about Vespel®
vespel.dupont.com

The information and advice contained herein is based upon tests and information believed to be reliable, but users should not rely upon it absolutely for specific applications. It is given and accepted at user's risk and confirmation of its validity and suitability in particular cases should be obtained independently. DuPont makes no guarantees of results and assumes no obligations or liability in connection with its advice. This publication is not to be taken as a license to operate under, or recommendation to infringe, any patents.

Copyright © 2009 DuPont. All rights reserved. The DuPont Oval Logo, DuPont™, The miracles of science™ and Vespel® are trademarks or registered trademarks of E.I. du Pont de Nemours and Company or its affiliates.

CAUTION: Do not use in medical applications involving permanent implantation in the human body. For other medical applications, see DuPont Medical Caution Statement, H-50102

Doc. Ref.K21991 (03/09)



The miracles of science™