Accepted Manuscript

Synergisms and antagonisms between MoS₂ nanotubes and representative oil additives under various contact conditions

A. Tomala, M. Rodríguez Ripoll, J. Kogovšek, M. Kalin, A. Bednarska, R. Michalczewski, M. Szczerek

PII: S0301-679X(18)30393-1

DOI: 10.1016/j.triboint.2018.08.005

Reference: JTRI 5349

To appear in: Tribology International

Received Date: 28 March 2018
Revised Date: 9 August 2018
Accepted Date: 9 August 2018



Please cite this article as: Tomala A, Ripoll MRodrí, Kogovšek J, Kalin M, Bednarska A, Michalczewski R, Szczerek M, Synergisms and antagonisms between MoS₂ nanotubes and representative oil additives under various contact conditions, *Tribology International* (2018), doi: 10.1016/j.triboint.2018.08.005.

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

ACCEPTED MANUSCRIPT

Synergisms and antagonisms between MoS_2 nanotubes and representative oil additives under various contact conditions

A. Tomala^{1,2*}, M. Rodríguez Ripoll², J. Kogovšek³, M. Kalin³,

A. Bednarska¹, R. Michalczewski¹, M. Szczerek¹

¹ Institute for Sustainable Technologies – National Research Institute, Radom, Poland

²AC2T research GmbH, Wiener Neustadt, Austria

³Laboratory for Tribology and Interface Nanotechnology (TINT), University of Ljubljana,

Slovenia

*Corresponding Author: agnieszka.tomala@itee.radom.pl

KEYWORDS: Nanoparticles, MoS₂ nanotubes, Additives, Tribofilm, Friction, Wear

ABSTRACT

 MoS_2 nanotubes are known to enhance the tribological properties of lubricants thanks to support friction-reducing and anti-wear properties. However, in fully-formulated lubricants particularly for steel elements, other properties such as oxidation and corrosion protection are also necessary to provide a comprehensive lubricating performance and protection against oil degradation. As a consequence, the coexistence of MoS_2 nanotubes with other oil additives is unavoidable in

Download English Version:

https://daneshyari.com/en/article/9952532

Download Persian Version:

https://daneshyari.com/article/9952532

<u>Daneshyari.com</u>