JASTI ATD Technical report No.2



page: 1/2

[Vinyl molded parts and EC RoHS, RoHS2]

ATD should be environmental friendly and safe materials

- In early 1990 in USA
- Dummy molded had been made from Geon with DOP plasticizer.
- DOP used dummies created vaper gas and shrink and hard skin.
- DOP vaper gas contain cancer caused gas.
- JASTI has never used DOP and developed safety and durable Vinyl polymer for the molded parts with 3 laboratory engineers of Japanese major polymer company since 1995.
- JASTI has manufactured over 300 Pedestrian Head skins to find the best polymer against environmental resistance test inside and outside house for complete two years. The result shows no shrink and no change hardness in early 2000.
- New durable materials has been used for JASTI all vinyl molded parts with DINP, DINA Plasticizer by RoHS staerted.

EC ROHS and ROHS2 requirement

In the middle of year 2013, EC has requested us to meet RoHS1 (Revised 2013 started) and RoHS2 (2015 started) rule in Europe. We should not use phthalic acid contained plasticizer for all of our molded parts since 2015-2016. We only use DINA or other plasticizer.

JASTI ATD has changed with lead free parts such as Lumbar spine adopter, Adopter assembly and Skull ballast weight to alternative material.

MAJOIR Requested counties

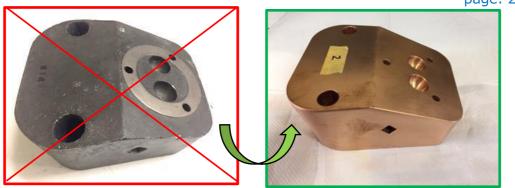
EU -RoHS, RoHS2 CHINA -RoHS, RoHS2

Malaysia -RoHS, RoHS2 KOREA -Partial RoHS, RoHS2

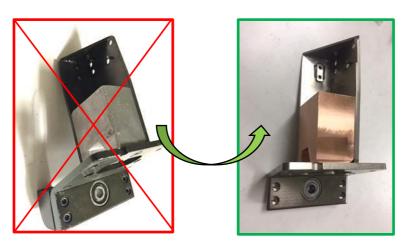
INDIA- Partial RoHS, RoHS2 THAI -Partial RoHS, RoHS2

BRAZIL -Partial RoHS, RoHS2

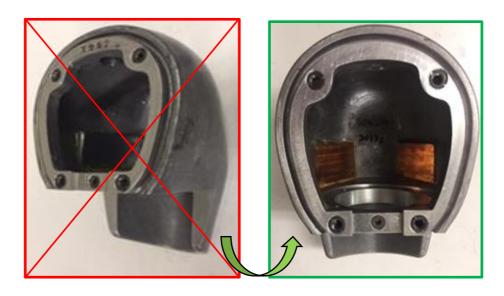
page: 2/2



 $\ \, \textbf{Picture 1:Lumbar adopter} \\$



Picture 2: Adopter Assembly



Picture 3.: Skull ballast weight

Any question and/or request to info@jasti.co.jp

URL http://www.jasti.co.jp/product/dummy.html

Thank you for your cooperation.