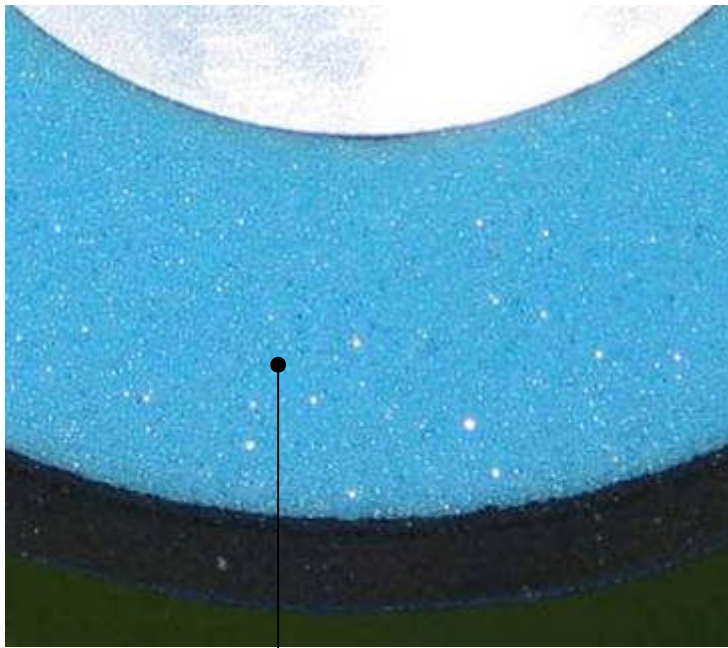


# Flesh part sensitivities to the atmosphere (TRL vs. Flex)

The Japan Automobile Manufacturers Association Inc.  
Vehicle Safety subcommittee and Pedestrian Safety WG

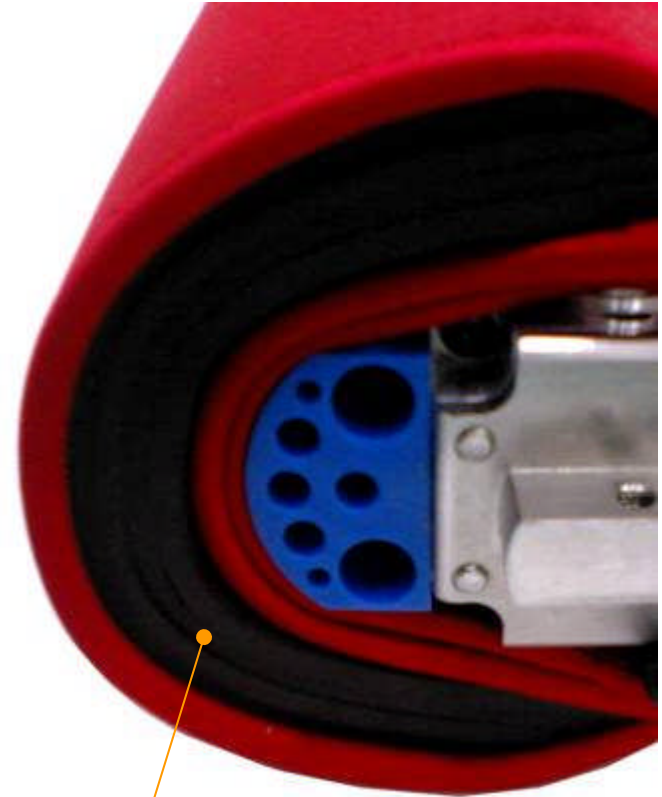
# Differences of Flesh Material

TRL-LFI



Memory Foam  
(Confor Foam)

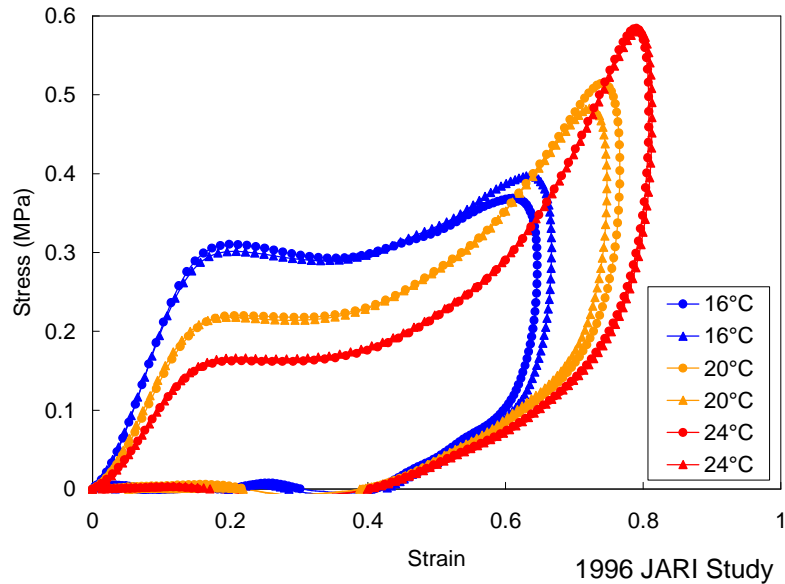
Flex-PLI



Synthetic Rubber

# TRL-LFI

## Temperature



Temperature Sensitivity of Stress-Strain Curve of the "Memory foam" Compression

⇒ High Sensitivity  
But not so difficult to control

## Humidity

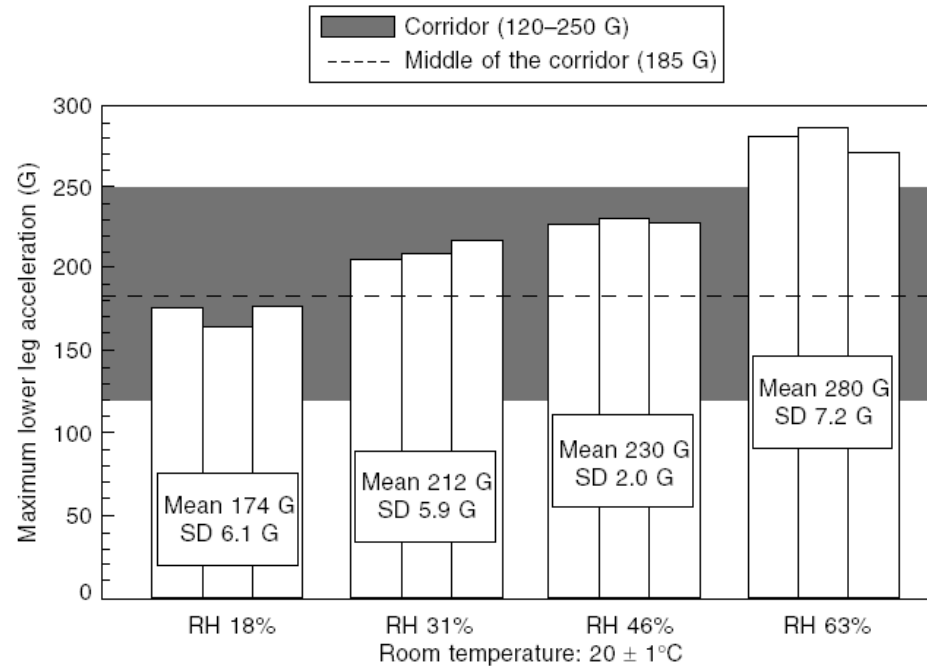


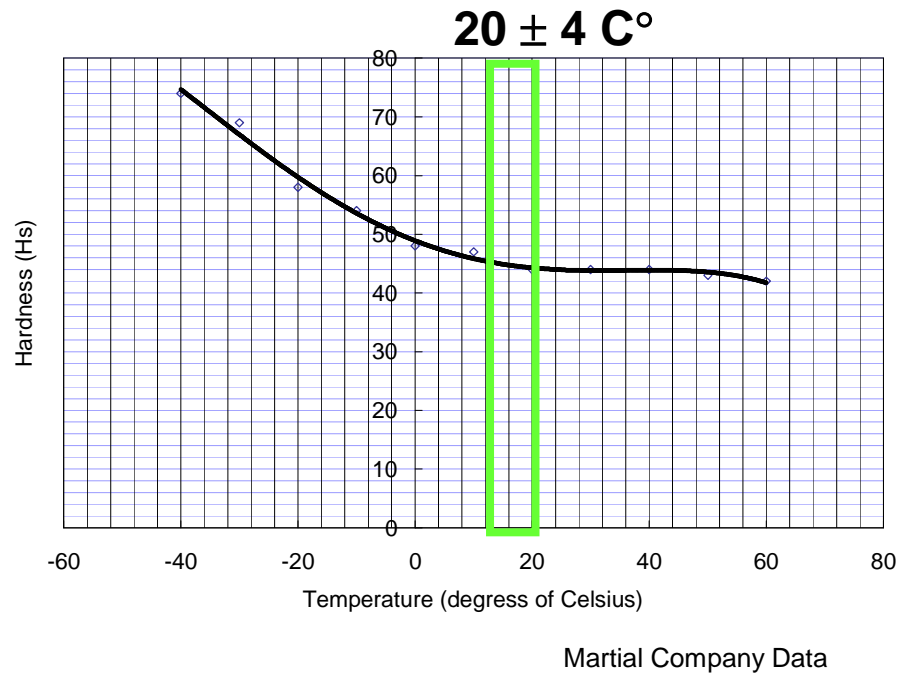
Figure 11 Maximum lower leg acceleration from dynamic certification test results at different relative humidity levels. *IJCrash 2004 Vol. 9 No. 1*

Humidity Sensitivity of Maximum Acceleration from Dynamic Certification Tests

⇒ High Sensitivity  
Difficult to control

# Flex-PLI

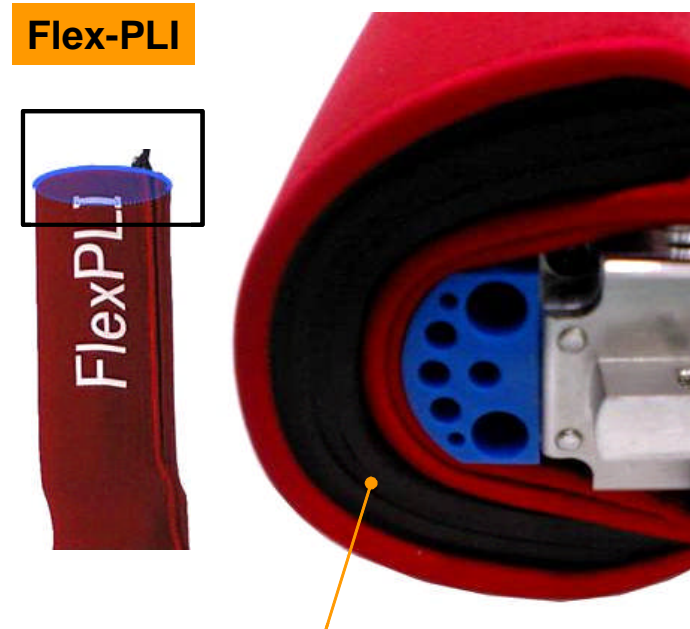
## Temperature



Temperature Sensitivity of  
Hardness (Hs) of  
the Flesh of Flex-PLI, Synthetic  
Rubber, Compression

⇒ Low Sensitivity

## Humidity



Humidity does not affect to the  
Hardness of the Synthetic Rubber,  
Material Company Information

⇒ Low Sensitivity  
No need to control