

Press Release

Date: 14 April 2011
Contact: Richard Marshall
Managing Director
richard@tenasitech.com
+ 61 411 600 314

Title:

TenasiTech pioneers nanotechnology for polyurethane industrial seals

Body:

BRISBANE, AUSTRALIA (April 12, 3 p.m. EST) – TenasiTech Pty Ltd has launched a nano-composite thermoplastic polyurethane system for use in seals to increase the operating time of pumps and lower costs for the end user.

The company which is based in Brisbane, Australia but with manufacturing capability in the US, Germany and Australia, has produced nano-composites exhibiting excellent improvements in mechanical strength, creep resistance, compressive set and barrier properties. Creep resistance improvements are up by 67%, and compression set gains are up by 45%. The nano-polyurethanes are also performing significantly better after exposure to elevated temperatures for extended periods. These dramatic improvements in materials performance are made with no trade-off in flexibility.

“The performance gains from our nano-additives are directly relevant to seals, giving their users the potential of longer Mean Time Between Failure and the possibility of pushing operating temperature ratings further for polyurethanes, which is a historical weakness for this class of polymer,” Richard Marshall, Managing Director, said in a news release.

“TenasiTech is a rare nanotechnology in that it is able to produce material at industrial scale, is competitively priced and fits within the existing polymer supply chain.”

“We have partners in the northern hemisphere for applications other than seals, but we are now actively seeking a partner to develop product in this exciting market,” said Mr Marshall.

The nanotechnology originates from research at the University of Queensland and a number of patent applications are in progress globally.

“The novelty of our nanofillers, designed specifically with the host polymer’s chemistry in mind, is one thing. But the ability to effectively disperse these nanofillers into the polymer with no capital expenditure for our partners is a major breakthrough; perhaps equally as important,” Dr Darren Martin, Chief Scientific Officer, said in a news release.

“It is noteworthy that we are seeing these dramatic improvements without any significant change in flexibility, hardness or clarity relative to a comparable polymer. This puts us out in front of any competing solutions,” said Dr Martin.

About TenasiTech:

TenasiTech is an Australian nanotechnology company developing the leading nano-composite polyurethanes in the world. Based nine years research and development work at the University of Queensland, the company began operations in 2007 and has exclusive worldwide rights to the technology. TenasiTech has manufacturing operations in the US, Germany and Australia.