TSRC R&D



TSRC Corporation is one of the world's leading providers of specialty materials and solutions with a strong commitment to innovation, growth and excellence. TSRC has continued its strong dedication to research and development and in 2017 completed its newly renovated Technology Center in Kaohsiung, Taiwan. The state-of-the-art facility enables the integration of advance product development and characterization facilities into the daily operation of TSRC.

TSRC's people is its biggest asset, contributing to innovative breakthroughs in the elastomer field throughout all development processes. Each of the approximately 140 highly skilled researchers in TSRC's R&D division, consisting of researchers located in Taiwan and the U.S., brings their extensive experiences and knowledge to TSRC. With two-thirds of these qualified men and women holding a postgraduate degree, TSRC is able to further solidify its leadership position in the synthetic rubber industry. The team of scientists and technologists in the field of polymer



synthesis, hydrogenation, morphology, and process development combine their efforts and passion to create truly unique solutions for various application.

TSRC's dedication to helping customers to be profitably successful gave rise to the Technology Center, housing comprehensive equipment and advance technology for polymer design and synthesis, hydrogenation, characterization, and refinement. The accumulated knowledge in the field of elastic polymers in this facility has contributed to the successes of TSRC and our customers and enabled TSRC's continuous pursue to become one of the world's leading synthetic rubber and elastomer providers.





TSRC R&D



TSRC has grown to become an innovative enterprise in the field of elastomers. With more evaluation and synthesis capabilities available than ever before, TSRC's customers will truly profit from investments made in product formulation, application, and production process. The cornerstone of TSRC's R&D division, as in the combination of the Technology Center, the Pilot Plant and Semi-Commercial Plant, the Application Center and of course the highly talented employees will continue to surprise and transform the synthetic rubber and elastomer industries in the years to come.

Expertise:
Anionic
Polymerization
Emulsion
Polymerization
Coordination
Polymerization
Hydrogenation
Catalysis
Process
Development

Testing Capabilities:

Rubber Application Polymer Properties Rheologic Studies Micro-Analysis



TSRC is proud to announce the start of the operation for its newly upgraded Semi-Commercial Plant (SCP) in its Kaohsiung factory in 2017. The advanced manufacturing facility expands TSRC's pilot capacity to more than 300 metric tons per year and adds several units of operation to support new development processes.

Due to the enhanced capabilities of its Pilot Plant and SCP, TSRC can now support customers with small order/quantity for testing purposes:

Production Capabilities of SCP:	Production Capabilities of Pilot Plant:
100-1000kg (full scale sampling)	10-100kg (product evaluation)
2000L reactors	100-200L reactors
300 MT/year	

Features: Bridging lab scale (Kgs), pilot scale (10-100kg) and commercial plant scale (>10 tons).

TSRC R&D



TSRC's Application Center is one of the most advanced and innovative facilities of its kind. The Application Center, located at Gangshan in Kaohsiung, Taiwan, is a key part of TSRC's product innovation and development process. It functions as both a research institute and evaluation site and the team continuously devote themselves to the spirit of progress and foresight, and remain perceptive of market demands and technological advances.





The Application Center plays an integral part in TSRC's commitment to technical services to customers, ensuring that product applications' parameters and properties have been tested and thoroughly evaluated in order to meeting customer's expectations. Utilizing a vast array of advanced evaluation capabilities, TSRC strives to deliver more pertinent, practical and important product application information to its customers. TSRC's acquisition of / investment in specialized equipment such as the Capillary Rheometer, the Rubber Process Analyzer (RPA), the James Slip Resistance Tester and the Dynamic Mechanical Analyzer (DMA) demonstrate its dedication to meet and exceed customer's needs.

