

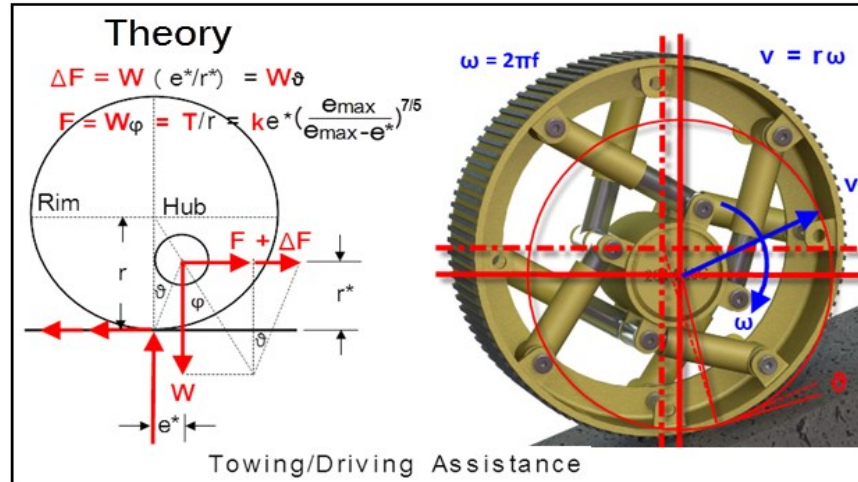
# AIRLESS STEALTH SECURITY WHEEL



- No slippage on ice, snow & mud
- No flat tires, tire changes or pressure checks
- No digging in sand, soft soil & mud
- Conditional Rolling Resistance reduction up to 30% at patrol speed
- Engineering control over all wheel functions, Adjustable pressure shocks
- Reduces rubber usage
- Saves driving power
- Enhances driving stability & comfort
- As flex drive coupler, saves on drive-train care & cost
- Adds stability, strength & lateral stiffness

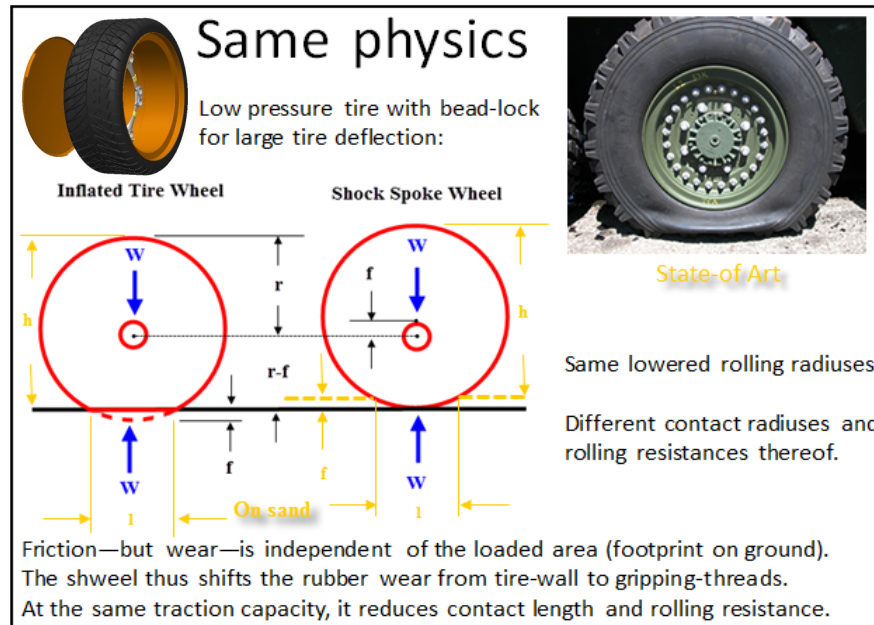


# BULLET, SPIKE & EXPLOSION PROOF AIRLESS TIRE WHEEL WITH BUILT IN AIR CYLINDER SHOCK ABSORBERS (SHWHEELS)



saves energy and thus fuel (up to 15%). The stiffness and strength of the air cylinders are exponentially hardening by the displacement increments, which ensures cushioning. The Shweel substitutes low-tech, material property controlled inflated tire deflection with high-tech compressed nitrogen gas mechanism of high level engineering control. In a compression-decompression cycle, the gas heats up and cools down equally. Only the well oiled piston sealant friction causes some shock-body warming, which is well cooled by the large exposed surface of the highly heat conductive steel. On chassis Dyno testing, only minor warming up was detected after extended high speed drive on SUV Shweels with foam filled tires. A stealth design Shweel can take many bullets, Molotov cocktails, tire shredders, box cutters, glass debris, fire, IEDs and more abuse unharmed.

The Shweel is a shock spoke wheel, with a central symmetric array of air cylinders hinged tangentially between the hub and the rigid rim, for elastic torque and axial load transfer. The shock hinges rigidly transfer lateral wheel loads, enhancing cornering stability. When the hub leads the rim, the towing or driving is assisted by the gravity axel load. The resulting driving assistance is considered negative rolling resistance, which



# STAY AHEAD OF THE COMPETITION



Designed by renowned Structural Engineer, Dr. Zoltan Kemeny, PhD with over 85 successful licensed patents.

Technical data & specification overview by appointment only.

The Shweel Technology is available for Licensing or Patent Purchase for limited time, based on industry and geographical market segments and exclusivity awarded.

Representing Agency:  
Version 2 (V2)  
[www.version2.us](http://www.version2.us)  
Rachel Gutierrez, CEO  
Phone: 602-692-8438 (US/UTC-7)  
E-mail: [gutierrez.rachel@10gmail.com](mailto:gutierrez.rachel@10gmail.com)

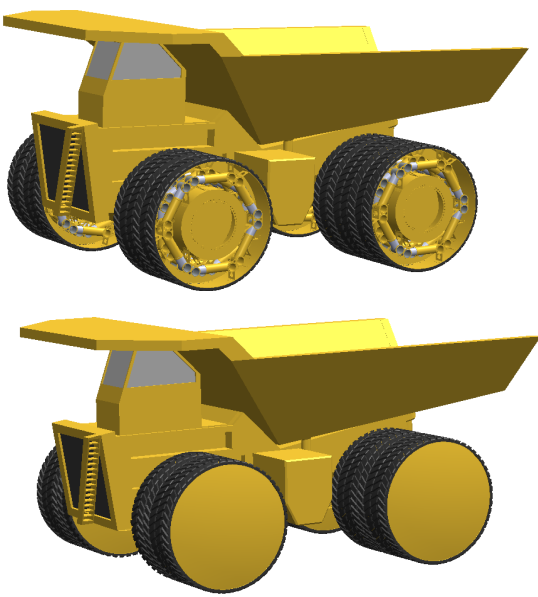
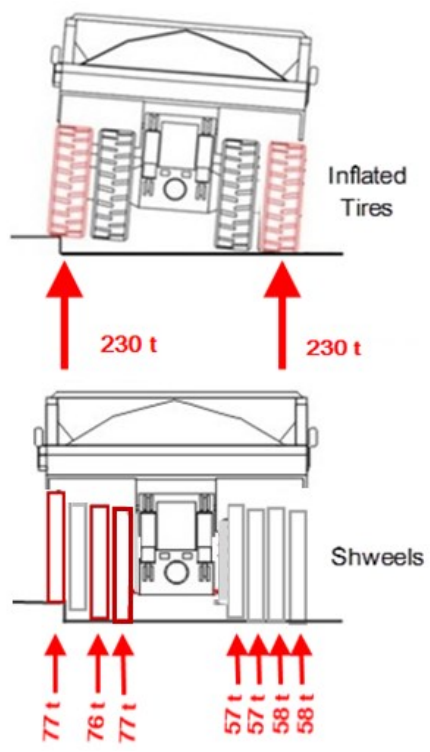






DEFENSE  
SECURITY  
MINING  
INDUSTRIAL

# THE SHWHEEL (SHOCKS-IN-WHEEL) IN RUGGED MINING, INDUSTRIAL & AGRICULTURAL USE

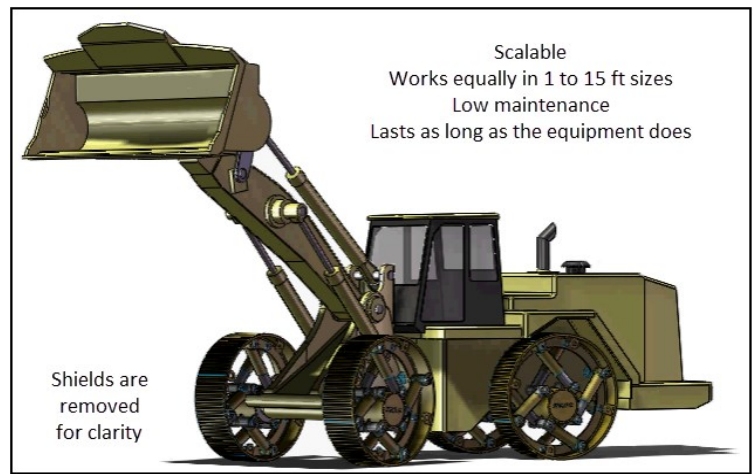


A 52' tall CAT 797 mining truck requires six 13.2-ft size, 5-ton rubber tires, which lasts for 6,000 hours, if sidewall is not cut by a sharp rock. Each tire costs \$42,000 and it is mostly in short supply, for only a few manufacturer can make it in the world. Its delivery and disposal is highly regulated and expensive. It is not recyclable.

A Shweel substitute has 5-tons recyclable steel, costs only \$14,000 and lasts for 60,000 hours. Made by local contractors and ships in segments on flatbeds. It saves up to 20% in maintenance and can save up to 15% fuel.

Shweels may be lined by threaded rubber belt or studded by rubber gripping blocks. The shock-crown or shock-cross of the Shweel deflects 5-10 times more than the inflated tire and thus attenuates high impacts .

It also acts as a flexible torsional coupler, thereby reducing wear on the drivetrain. The outer armored plate bypasses the hub. Shweel Technology reduces driver fatigue, ensuring a comfortable ride on rugged terrain. It does not slip on slippery road, ice, snow or mud. It negotiates sand and soft soil with equal gripping force as hard soils and rocks, without needing any adjustment in air pressure. The Shweel segmental design allows for uniform load distribution and bumping obstacles independently. It does not dig in sand and mud.



# SHWHEEL TECHNOLOGY

