



BESPOKE PLUS

"Pushing to be Better, Faster, and Stronger"

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In 2002, RGK Wheelchairs, Inc., was incorporated to promote RGK products in North America.

In 2003 Varilite® named RGK their Canadian distributor.

In 2004 KENDA tires and tubes were added to the distribution mix; customers now receive various colored Spinergy wheels complete with matching colored non-marking tires.

In 2005 RGK started manufacturing in North America.



Healthcare Innovations Show

The Health Care Innovations Conference and Trade Show hosted by Shoppers Home Health Care is on November 21/22, 2005 at the Toronto Congress Centre on Dixon Road. We look forward to welcoming folks at booth #511. We may even provide a work out shirt, like those shown to the right, for anyone who can answer one of the following questions: What is the meaning of **BESPOKE**, the weight capacity of a 24 X 20 **Evolution™** cushion, or where are the next summer Paralympic Games? If you cannot answer any of these questions you will have to sweet talk Brandy Pinder or Mable Haase for a t-shirt. For more information on this event, see the Shoppers site at: www.healthcareinnovations.ca.



User View on Chair Prescription

I was asked the other day what was important to me when I was assisting someone with their chair measurements. I thought a moment and blurted out, *"let them know of everything that is available in the marketplace, challenge them with your perspective on seating, and understand that they will make the decision as to what is going to best meet their needs!"* It is paramount that the individual getting into the chair takes ownership of the process, measurement, and ultimate product selection. Some sponsoring bodies actually seem to treat the end user as a bi-product in the system rather than the customer; so much so that manufacturers sell to the prescribing authority rather than to the end user. This is a recipe for disaster as far as this end user is concerned.

"Less is more" in this industry and the philosophy of the unit being designed to get you from A to B with the strongest, lightest, and least number of moving parts is the order of the day. An off shoot of this philosophy is that the chair is less likely to look "apparatus like" as the more options you have on a unit the more it tends to have a medical stigma; all things being equal, a mono frame unit should best meet the needs of any user although there are valid reasons for various adjustments, moving center of gravity, brakes, etc.

I look at the individuals physical ability and working muscle groups, their perceptions and stated needs, their body type and weight distribution. There is nothing more disturbing than to see a low lesion para in a reclining chair that is three inches too wide and six inches too long. I try to ensure that the head is aligned over the pelvis; you know that if this is not done the individual will compensate in some manner to attain balance and a level of comfort which will lead to more balance issues, discomfort, and deformities. Get the pelvis in a neutral position (try the RGK ergo seat in a demo situation), determine the amount of squeeze, dump, seat incline needed (note that with RGK ergo seating you can reduce the amount of dump desired by one third while having the balance factor remain the same as per a straight seat setup ie: the balance would be the same for most individuals if they had a straight seat 20" at the front and 17" at the back or 20" at the front and 18" at the back with an ergo seat) and have the head and shoulders in alignment with the pelvis. The center of gravity (COG) is important and I suggest as far forward as the individual is



RGK ergo seating can reduce the amount of dump desired by one third while having the balance factor remain the same as per a straight seat setup. This not only provides better balance and comfort, but it also distributes pressure better and makes it a lot easier for the end user to get in and out of the chair.

You may achieve this with VARILITE® cushion products as well; in particular, the new MERIDIAN™ to be shipped in January 2006 will be made with a front and rear chamber of air and foam with independent valve controls!

capable of using effectively; this may take a trial period and progressive movement forward as the individual gets used to the different balance point.

The Overall chair length (as short as it can be for the individual) while maintaining the longest wheelbase for the length of the chair. I always like to see a chair setup where, if the individual could stand on the footplatform, that all wheels would remain on the floor in a balanced position.

Keep the overall width of the unit as narrow as it can be for the individual and their lifestyle/needs so as to maximize the place that they can travel in the unit (may use side guards for balance and postural support). They will then also have the smallest turning radius; as long as the unit is well balanced the individual user is able to benefit from smaller castors as well because they have less weight on the front end and their chair is less likely to dig into uneven surfaces, etc. Most importantly, this is the end user's domain and we are all here as his/her resource people!

VARILITE® Evolution™ Wave™

The Evolution™ Wave™ and Evolution™ Wave™ Bariatric is an ideal solution for people with high risk of tissue breakdown. This new product incorporates the Evolution™ and Evolution PSV™ adjustable air-foam floatation skin



protection cushions with a family of three solid positioning bases. All three Evolution™ Wave™ bases are manufactured with closed-cell foam which will not absorb fluid and they are resistant to bacteria.

CPW (Contoured Positioning Wedge) - Lateral thigh supports position the lower extremities and prevent unwanted abduction of the thighs. Medial thigh support provides the correct amount of abduction to prevent unwanted adduction of the thighs. The wave CPW increase the weight bearing load on the back of the thighs and decreases the load on the buttocks, without changing the seat-to-back angle.



LPB (Lateral Positioning Base) - Lateral pelvic supports located posterior to the greater trochanters provide lateral stability that maintains the pelvis in the center of the seat. Lateral thigh supports position the lower extremities and prevent unwanted abduction of the thighs. The Wave LPB provides a firm foundation for postural stability and discourages chair upholstery from slinging.



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In Ontario, ADP device Code numbers have been provided for the Evolution™ Wave™ (SESVP0351) and Bariatric (SESVP0402).

What's Next – the Meridian™ in January 2006!

Three Rivers
Natural-Fit™ hand
rim.



The Natural-Fit™
brochure is
available off our
site: 4RGK.com

Kenda purchased
American Airless
this year and now
offers a complete
line of airless
products along
with a new
installation guide.



**Titanium frames
are 50% the
weight of an
equivalent
chrome moly
frame!**

Three Rivers



OUT-FRONT
a Three Rivers brand

Three Rivers is a company based out of Mesa, Arizona and they want people to “**Demand more. Demand Better. Get Out-Front™**” with their product line. Their **Natural-Fit™** hand rim has gained popularity in the community because they are light weight, come in a two piece design offering a standard or a super grip coating, are easy to retrofit on 22, 24, 25, and 26 inch wheels whether they are tab or bolt mounted. They are ergonomically designed to provide a better grip, more comfort, stronger push, eliminate tire pushing, keep hands cleaner, enhance braking ability, and reduce pain associated with Carpal Tunnel Syndrome. Check them out at our booth or track them down on-line at www.3rivers.com and take a look at other products like their **GameCycle™** and **SmartWheel™**!

KENDA Tires & Tubes

Kenda's newest addition to the wheelchair tire market is a camber tire for use in sport and active living. For those using 15 degrees of camber, they will now be able to reduce the amount of friction and rolling resistance by using the **K925x Kaliente**. The design gives the user 90% more tread contact with the ground. It has Iron Cloak construction, 115% more puncture protection, 125 PSI High Pressure, dual rubber compound color for RD, BL, and most of all, low rolling resistance which translates to faster acceleration. For more info, visit Kenda on-line at www.kendausa.com or the American Airless division at www.americanairless.com.



Little Less Behind the 8 Ball

We are feeling a little less behind the eight ball now as we welcome **Frank Agozzino** (Quebec/Atlantic), **Mark Adeney** (South West Ontario), and **Bill Adamthwaite** (North East Ontario/Atlantic) on board to assist in marketing **VARILITE®** products. We will do an in depth introduction for Frank, Mark, and Bill in the next issue of **Bespoke Plus**. They already have their kits and will be able to demo the products, pass along the new selection guides, price sheets, etc., or print them off www.varilite.ca.



Titanium Versus Chrome Moly

The positive and negative aspects of using various materials in the construction of wheelchairs have been an item of interest for years. RGK commissioned a study through Manchester University, which revealed some interesting results. This survey was conducted with athletes that were involved in wheelchair basketball and in top physical condition. It was designed to get some concrete data on the performance factors of titanium wheelchairs versus those in chrome moly. It also included information pertaining to fabric wheels over steel wheels. The end result was a titanium product that had 25% improvement in acceleration, 5.5% increase in speed, -26% weight reduction, and -15% reduced energy requirement! Other factors that favor titanium over other material relate to corrosion resistance, ride quality, and metal fatigue.





Wheel Choices:

corima.com
decon.se
karma.com.tw
Mbl.dk
nthawk.com
spinergy.com
strykersorano.com
sunmetal.com
vulcanwheels.com
velocitywheels.com
x-corewheels.com
zipp.com

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The everyday user has to study the data to determine the extent of benefit he/she would realize from titanium, but we offer the following information for review: Titanium frames are 50% the weight of an equivalent chrome moly steel frame. This will give a weight savings of 5-6 pounds in the complete wheelchair. The effect of the extra weight cannot be underestimated when taking into consideration the likelihood that it is being lifted with only one hand by the end user, and at arms length. The extra leverage multiplies the weight resulting in an effective pound differential that becomes much more significant when being lifted a number of times per day. "Six pounds of weight difference does not seem like that much when a lot of us would be better off losing that much around the waist! However, when that six pounds is at arms length and you have to lift it 10 to 30 times a day, 300 to 900 times a month, 3600 to 10,800 times a year, my shoulders tell me go for it and reduce the weight of the product as much as possible. That six pounds three feet away becomes closer to sixteen when the laws of physics get done with it unlike that six pounds around my stomach. Although, I should also consider losing that sooner than later! Seriously, the danger of repetitive strain injury is very real and should be of utmost concern to the user," quotes Dan Weber, Metrologist and 25 year wheelchair user.

Unlike other metals, titanium is a non-ferrous metal, meaning it does not oxidize and break down as both aluminum and steel. Titanium is completely immune to corrosion, even from salt water! It naturally absorbs vibration thus any shock from uneven sidewalks or other surfaces is dissipated by the frame resulting in a smoother, less jarring ride for the user. This effect eliminates the need for heavy suspension systems and can even reduce the effect of vibration, such as leg spasm. Titanium has a high strength to weight ratio, hence titanium wheelchairs can be built stronger without sacrificing the weight advantage over chrome moly. Titanium does not work harden, unlike aluminum for example, which causes frames to become brittle over time.

Wheels Complete the Puzzle

Light weight chairs require the strongest, lightest wheels on the market to complete the puzzle in creating the best unit to get from A to B! Spinergy Wheels are made with PBO spokes - the ultimate daily use and sport wheel. Available with White, Yellow, Red, Blue, or Black spokes and in sizes 22, 24, 25, 26, and 700c. See them on-line at www.spinergy.com. Sorano wheels by Stryker are a new ultra-light weight wheel on the market available in 650 c size with a selection of Kenda tires. from A to B! You can find them advertised at www.strykersorano.com.

Bits and Bytes

- RGK Measuring Guide, price lists, etc., at www.4RGK.com;
- RGK - r. a. designs track chair on site at Shoppers Show;
- Shoppers Home Health Care Show November 21/22 in Toronto.

See Bespoke Plus @ 4RGK.com

BESPOKE PLUS helps market and promotes **RGK Wheelchairs**, **VARILITE™** Seating and Positioning Systems, **KENDA** Tires, **SPINERGY** Wheels, and other products through the North American company called **RGK Wheelchairs, Inc.**

If you have something that you think we should be expounding on, please contact the editor, Reg McClellan.