

# FORMING IDEAS

A publication of Brenco Industries Ltd

Volume 2 Issue 20 Autumn 2017

## Canada Day Design Big Hit In Ottawa

This summer, Brenco designed and created a commemorative tribute to Canada's 150th birthday. A very limited run of 150 were produced. One was sent to the Mayor of Delta. She had it placed in front of her seat in Council Chambers and was seen on community television which broadcasts the council meetings. Another was sent to Victoria for which we received a very kind letter from then Premier, Christy Clark. A third was sent to Ottawa. Prime Minister, Justin Trudeau responded with praise for our unique design. Lastly, one Brenco customer was so taken with our design, they asked if we could produce a couple hundred to be distributed to their stores across the country before Canada Day. Regretably, with only a couple weeks until the big day, there wasn't enough time to meet their request.



## Brenco ISO 9001:2015 Certified

Brenco is now certified to the new ISO 9001:2015 Quality Management System. The most important improvement over ISO 9001:2008 is the addition of risk management which helps organizations plan and prepare for the worst. Brenco not only achieved this new level of certification but also attained the highest rating of *Benchmark* status in every single category.



ISO is more than a marketing tool. Brenco uses it to maintain effective documentation management, procedures and policies. It ensures corporate and cultural alignment so that we remain consistent in our practices. Brenco maintains a very high level of quality and customer satisfaction because we continually measure our performance. This too is driven by ISO.

## In This Issue:

**History Mystery:  
When Trucks Were King**



**40 Hours  
Saved  
A Waste-o-Saurus Story**

**Wäs-tö-sau-rús**, n. [Waste, and Gr. sauros. a lizard.]  
A cute but troublesome creature that wastes time and material. The Waste-O-saurus is elusive but commonly identified through reduced profit and productivity.

**New Website  
Dedicated to  
Art**



**Second Web Site Added:**  
[www.brencoart.com](http://www.brencoart.com)  
[www.brenco.com](http://www.brenco.com)



# Waste-O-Saurus Sightings

## Creative Waterjet Cutting Saves 40 Hours of Machining



Waterjet doesn't take the place of machining but it does incorporate well with machining processes. This is a case where creativity saved 40 hours of machining time.

A piece of 4" thick 44W mild steel plate was loaded onto the waterjet table. The first profile was cut from the 4" plate blank utilizing waterjet operating at 97,000 psi. The blank was cut with conventional oxy-fuel and is shown with the waterjet cut part removed in the top photo.

Once the part was removed from the blank, it was turned on its side for the second profile cut. In order to reference the part accurately, a mounting plate was created with reference lines etched onto the surface. The part was accurately positioned using the reference lines and welded to the mounting plate as seen in the second photo. Note that the 97,000 psi waterjet stream is so powerful that it cut through the reference plate as well as the part.

The result is a 3 dimensional part which now requires only minimal machining. The waterjet cutting process

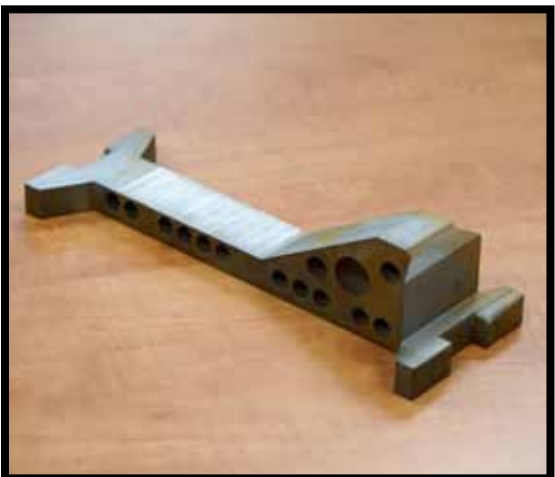


took only 6 hours and the customer claimed that saved them a whopping 40 hours of machining time. Another big Waste-O-Saurus take down!

Waterjet cutting is an excellent cost saving solution. It is also effective for producing gears and sprockets. Brenco is frequently requested to cut gear sections that are used to replace portions of large gears that have broken. Sprockets too can be waterjet to significantly reduce machining time. The advantage over using a thermal cutting process is the elimination of the heat affected zone.



*Waterjet cutting can be used to significantly reduce machining time on gears and sprockets as well.*



**The Waste-o-saurus** is intended to provide value to our readers by presenting issues relating to efficiency and quality in an effort to encourage and promote improvement. Do you have a Waste-o-saurus story that you'd like to share? Send it to us at: [thebest@brenco.com](mailto:thebest@brenco.com)





# History Mystery

**Canadian Kenworth** was located on Kitchener Street in Burnaby between Boundary Road and Ingleton Avenue. The parent company, Pacific Car and Foundry (Paccar), had purchased Kenworth in the 1940's from the founders' widows. Their husbands, Harry Kent and Edgar Worthington started Kenworth in Seattle, Washington, in 1923.

Pacific Car and Foundry built the "Canadian Kenworth" Burnaby plant in 1955 in response to high tariffs on truck imports imposed by the Canadian federal government. The post war provincial economy was booming and demand for heavy duty logging trucks and transport trucks was strong.

During the 1960's, Canadian Kenworth also built trucks for export, most notably, a fleet of tankers that were delivered to Africa, where rough roads and inexperienced drivers dramatically shortened the fleet's life span. Stories came back of drivers strapping road kill to the tops of the engines to cook for their evening meals.

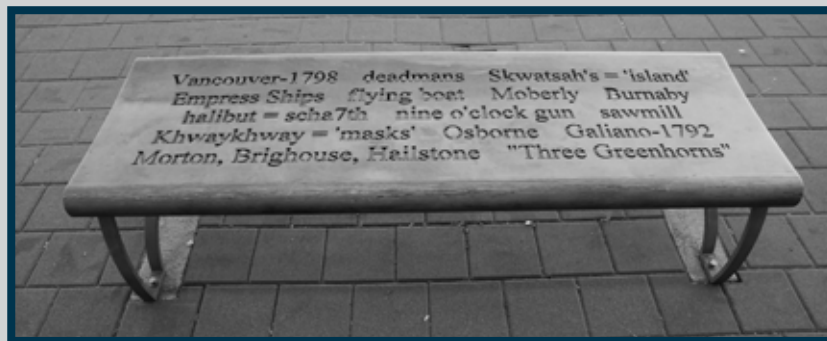


My father, Lud Heim, worked in the sheet metal department from 1957 to 1968. He almost always worked Saturday mornings and would take me with him. Since his was the only department working, I had free reign over the entire plant and offices. I would climb in and out of and over and under trucks either

being assembled or ready to roll. Aside from starting one up, there were no rules.

Production at the Burnaby plant began to taper off in the 1970's and was eventually shut down in by the mid 80's. The building is now home to the Coast Mountain Bus Company. The building seen at the top left corner of the photo is Kitchener Elementary School, built in 1925. It continues to operate as a public school to this day.

**Brenco has launched a second website** dedicated entirely to the many art projects we have participated in. This site is a tribute to the skilled artists we have had the privilege to work with and their amazing talent. It is an honour to work along side them, creating unique masterpieces that enhance our communities, from Williams Lake to Los Angeles and Victoria to the Okanagan Valley. Take a look at the amazing creativity of our local artists by visiting [www.brencoart.com](http://www.brencoart.com).



*This bench top was produced by Brenco a few years ago. It is located along the waterfront at 1927 West Georgia Street in Vancouver. Note the "flying boat" laser cut in the bench surface. It is a reference to the Boeing aircraft plant that was once located at this site and was featured in the last edition of Forming Ideas (available on our website).*

# Brenco's First Customer Calls It A Day: The Allied Controls Story

*Retirement parties are becoming a common event as baby boomers hang up their skates in favour of retirement. For those of us still in the game, it can be difficult to watch great staff, customers and suppliers turn off the lights and lock the door for the last time. It's especially tough when the customer is not only a long time friend but also your very first customer. Gord Verrall and Keith Good, co-owners of Allied Controls in Burnaby are retiring and closing their business. We asked Gord to put it in his own words because nobody waxes as eloquently as he. Take it away, Gord....*

Allied Controls, like so many other firms started from an obscure past. An original very small controls firm called "GBS Electrical Controls" was the cradle from which Allied Controls was born. I, as a summer student from BCIT, got a job in 1972 repairing circuit boards for ship loader gantry cranes with GBS. Upon graduation, I returned as a designer/estimator, where I became particularly interested in the process and controls of the water and wastewater industry.

Through business evolution, GBS closed and I became a partner in a new firm called Allied Controls Ltd. Through further evolution, my original partner ventured off to pursue his own endeavours and I was joined by my long time friend, Keith Good, as my equal partner. We'd been friends since grade 9 and should have really thought this out better, as I forgot that he tried to electrocute me during a lab assignment in high school Electricity 11. That one incident being the exception, he has never tried to electrocute me since, and has been my partner for over forty years.

Our corporate structure was well defined. I would wear the jacket and tie and go out and find the work and Keith would organize and construct the projects. I always thought of this as though I worked in an imaginary world, and Keith worked in the real one. The jacket and tie have long since gone, but the

task break-down has fairly-much stayed the same. Our business has been, for the most part, heavily involved with poo and pee.

Years ago, the control panels we constructed were usually contained within concrete buildings. We pursued a new market, where all of the controls could be contained within a purpose built structure. We looked about the metal industry and found a small metal fabrication shop in Burnaby called Pop's Sheet Metal. Shortly after our discovery, Pop's was purchased by two steel fabricators, one of them named Lud Heim. Lud and I had an agreement. I taught him everything he needed to know about housing electrical components, and he taught me everything I needed to know about tin-bashing.

As I mentioned earlier, many firms come from obscure pasts. Through many morphs and evolutions, Lud's son Steve formed Brenco Industries, and we were the very first client of that new firm.

Our fun has lasted for over 45 years, and the projects have always been interesting. Boredom was never a possibility. It is like we have worked from a hobby shop for over forty years, tinkering in the basement, building stuff that other people needed. Allied will soon be no more, but we have left hundreds of green boxes on the side of the road and enough blue lights in SkyTrain stations to prove of our past existence. Time to move on...



Gord Verrall and Keith Good. Photos from earlier times.

Brenco has been publishing  
**Forming Ideas**  
for you since November 2007

Back issues are available  
on line at [www.brenco.com](http://www.brenco.com)



 **brenco**  
more than  
**Metal Processing & Fabricating**



In the June 2014 issue of Forming Ideas, we reported that construction on a new bridge would begin in 2017 to replace the aging and inadequate George Massey Tunnel. Oops! Here we are in 2017 and our new provincial government is having second thoughts. Let's file this beside Site C and Uber.

phone: 604-584-2700

website: [www.brenco.com](http://www.brenco.com)

email: [TheBest@brenco.com](mailto:TheBest@brenco.com)