

## **Part 2**

### **A-bomb led me as an independent technician**

**(5)**

#### ***Success in importing new techniques through English***

There was in those days a library named “American CIE Library” CIE stands for Civil Information and Education. Later years it was renamed “American Cultural Center” This was the place the English speech contest for high school students was held in which I got the first prize. I, as a young man who is keenly interested in absorbing American culture and technology, I used to come to this library. One day I was trying at random to take a look at books and magazines turning pages quickly. It was when

I took in my hands “Oxyacetylene welding” and “heat-tensioning” for band saws. The former one is easier for ordinary people to understand. The big difference between the Japanese way of making a band saw endless is overlapping the ends with knife-edges, between them a blazing material is placed and red heated irons placed firm between the spot to melt and paste the knife edged.

This welding technique is also used for inserting the broken teeth by nails and also for fixing the crack, in stead of cutting of the cracked portion and make it blazed endless, which made the band saw shortened.

When I told my great teacher and fellow filers, they said with no exception, “No! Never happen!”. The band saw is under so big tension in operation that ordinary welding technique never allowed it to stand, which made the people concerned to believe it is impossible to weld it.

I began to correspond at random with people and companies that I found in the book for technical information exchanges. They were so friendly and cooperative to make me succeed.

Among them was a manufacturing company named “Armstrong Manufacturing Company” in Oregon, Seattle. They sent me a big amount of papers as the top secret. I still remember vividly that one of them write right in the very beginning, “For a long time, the band saw filers have been regarded as magicians and in order that they show their status they used to wear silk hat and tuxedo on their way to and from their works. The paper even put a picture of it.

A set of papers among them was a top secret materials, sent me on condition that I never show the paper to anybody to avoid miss understanding on the part of the readers that they come to be pretending they became the professionals simply by reading it. One of the conditions it said was, “Never let the immature read this”. In those days, we had no

copier, so I wrote them by handwriting and returned it in accordance to their rule. That was a sort of a pride and honor for the special technicians regardless of West or East in those good old days. a big book titled "LUMBER". I turned pages to find to my big surprise, so many pictures of sawmills and more than anything else that of saw filing rooms and their technicians, band saw filers!

Big and wide band saws or even the one which has cut edges on both sides, double cutting band saw, are the one we never have and never saw before. I never forget that shock and excitement!

I turned pages on and on as if I was poring over it with astonishment and excitement for new discoveries. Simultaneously I discovered the facts that American band saw filers have some new techniques which we Japanese never had in those days, and that they practiced the techniques before I was born.

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Almost half a century passed since then, it was in 1995, the president of the Armstrong Manufacturing company, Fred Andrianof, came to see me. He was a son of the president when I had an association with its company. One of his company executives used to tell him about me. Coincidentally, his company had a contract with a firm in Hiroshima which I myself had a contract in those days for the manufacturing and sales of my three inventions. I used to teach English to the two sons of the firm’s president then. One of them was the president who accompanied him to me. We visited a big saw mill near Hiroshima, one of the biggest saw mills in Japan, for investigation of the machines they sold. An interesting thing about the saw mill is that one of the executives, too, knew about my episode! Believe it or not, it was a matter of some forty years ago. I was such a famous man in this field, you know.

Fred said to me, “I envy you, Yuuki. I am sick and tired of being occupied with troubles for the workers and the customers. I want to be a consultant like you.” Years later, I was told that he sold his company with a contract that he works for the company as its consultant. He is now enjoying retired life. He is far much younger than I, though.

Well, I go back to the past and come back to the present or even again to the back and forth in writing this.

Again back to the book “LUMBER”, as mentioned before, I discovered the new techniques, which I found were, in modern terms, “the reengineering and high productivity”. Especially the oxyacetylene welding was interesting and great. One of its merits is “butt welding”. It was something that was regarded as an impossible technique for us Japanese filers because of hard frequency of bending and stretching under heavy tension. The secret of the technique of “forging”, which was nothing but the secret of the Japanese sword making needed from the ancient days. Forging red heated iron with hammer is it.

One of other techniques that brought in reality with the oxyacetylene welding device is the one named “heat-tensioning” of band saw. This is something too much of technical matter for the ordinary person, let me explain in short. One of the important operations for band saw

maintenance is “tensioning”. The ordinary way is made by “stretching” by means of rolling the steel blade. The heat tensioning is made by means of “shrinking” mechanism by heating a particular portion of the blade.

Because of its miracle like mechanism, when the news about this new technique was reported in the newspaper, a professor of Tokyo University, specialized in metallurgy, came to me for investigation and said, “Unbelievable!”

Together with those new techniques and the new devices of my patented inventions, later years, I became to be in a position to make lectures for education and for sales. Promotion of the devices throughout Japan followed.