

## Hanjin In CEO and Chairman, Tae-Chang Industrial

#### PERSONAL PROFILE

As Chairman and CEO of one of the world's leading manufacturers of cannula and needles, Hanjin In helps lead an ambitious effort to battle COVID-19. His company, Tae-Chang Industrial Co., Ltd. of South Korea (TCI), is the supplier of the critically important Needle Hubs that make the ApiJect BFS Prefilled Injector possible.

With TCI's Needle Hubs, ApiJect can manufacture components for hundreds of millions— and eventually billions— of BFS single-dose injectors per month.

This extraordinary productivity will enable ApiJect to supply the U.S., and then the world, with enough delivery devices to quickly and efficiently vaccinate the populations of entire countries.

"I enjoy my work because I get to help people by doing what I love, which is starting innovative new projects and developing them into actual products," Hanjin declares.

Hanjin studied biomedical engineering and mechanical engineering at Carnegie Mellon University in Pittsburgh.

He now leads a global company that employs 650 people in five facilities (four in Korea, one in France) and "As we face this global pandemic, our goal is to provide better healthcare to people everywhere in the world."

- Hanjin In -

three offices (Korea, the U.S. and Indonesia). All of TCI's needle products are GMP, ISO & CE certified.

TCI's parent firm was founded more than 25 years ago by Hanjin's father as an OEM, specifically a component manufacturer serving local companies. It acquired the namesake TCI needlemaking concern 15 years ago.

Today the amalgamated corporation

exports needle products to more than 50 nations, including the U.S. and Japan. Its customers include 15 of the world's top 20 medical device companies.

Hanjin has served as CEO and Chairman for both TCI and its Kovac-Med company, which manufactures specialty precision injection products, since 2006.

Over the past decade, as a Director of a growing number of TCI affiliates from Indonesia to France and Florida, he has also overseen all company operations worldwide.

TCI will have a separate, dedicated 150,000 sq. ft. facility on the campus of ApiJect's new Gigafactory, located in North Carolina's Research Triangle. The Gigafactory is expected to become operational in 2021.

TCI's site will be dedicated to manufacturing needles exclusively for ApiJect, as well as prefabricating and sterilizing Needle Hubs for ApiJect BFS Containers. The components will be manually assembled at the point of care to produce BFS Prefilled Injectors.

"TCI is a family business, so I always knew that I would be part of it," says Hanjin. "But conditions are constantly evolving and so are we."

## "We are constantly raising the bar."

Making the planet's finest needles and cannula demands even more than world-class manufacturing. It also requires world-class design, concept development, product R&D, operations and management, according to ApiJect partner Hanjin In.

Hanjin In has served as Chairman and CEO of Tae-Chang Industrial (TCI) of South Korea, the world's second-largest manufacturer of needle products, since 2006.

As a global supplier to top-tier pharmaceutical companies, TCI is also a founding partner in ApiJect, making and supplying billions of Needle Hubs that enable a BFS plastic container to become the ApiJect Prefilled Injector.

INTERVIEWER: Hanjin, you work in a highly demanding, extremely competitive field. You have led your company through a 15-year revolution that has redefined needle and cannula manufacturing. What started this revolution?

HANJIN: Medical device companies like Medtronic, Johnson and Johnson and other tier-one organizations have greatly increased their requirements and standards for suppliers. In the process they have significantly reduced the number of suppliers, leaving only the best and eliminating the rest.

#### How do they define "the best"?

Today pharma companies and medical device manufacturers expect not only quality of manufacturing and final product, but they are also looking closely at suppliers' skills across a range



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of functions—including design, R&D, management, operations, and others. The result is far fewer competitors, but those who have survived this filtering process are much stronger. We are constantly raising the bar for ourselves and for our industry sector.

Does that give TCI a more important role and a more active relationship with pharmaceutical companies?

Yes, very much so. Initially we were only manufacturing needle products based on our customers' designs. But as large U.S. and European companies started to pull back on in-house development

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work, they increasingly came to rely on suppliers like TCI to perform those functions. At this point we are actually doing the design development work for many of our customers.

#### What does that process involve?

The client comes to us with a general concept and we do the rest of work—from initial design specifications through product development, process invention, registration, validations and other support. As a result, I have been changing my business structure, investing more in research and development.

### What are the advantages of this new arrangement for your customers?

We can usually accomplish these tasks with a better cost structure, while reducing our customers' liability and enabling them to make more extensive use of our specialized expertise.

#### How does this define TCI's role as the supplier of Needle Hubs for the ApiJect Prefilled Injector?

We are proud to be an integral partner in ApiJect and the RAPID Consortium. In the face of COVID-19, the stakes

are higher than ever and we are working as hard as we can, bringing to bear two generations of skill and knowledge to meet this latest challenge. As we see it, our role is to help safeguard a healthier world.

# TCI began as a small, local concern 25 years ago. How did it evolve into the global manufacturer of choice for so many of the most important brands in the medical industry?

Our original company was launched 25 years ago by my father as an OEM component supplier. Very early, he decided to design and manufacture his own machines, setting up an engineering department for this purpose. That set us apart from the competition in a very strong way. When we purchased TCI 15 years ago, we then integrated five companies into one. Today we have 650 people operating worldwide in five facilities and three offices. We are in Korea, France, the U.S. and Indonesia.

## Do you have a favorite story about your work in this industry?

Just a small, human story that makes me smile. Recently I was talking to a

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nurse. She explained what she does and then I explained what I do. She said, "Wow, your business must be

"Why do you say that?" I asked.

She said: "When the economy is bad, people want to make sure they get their money's worth from all those insurance premiums they pay. So they visit the doctor and get an injection."

I said, "Yes, that's true. But when the economy is good, they still see the doctor anyway for the same reasons."

And she said: "That is why your business must be so good!" (Laughs)

The truth is, I really enjoy my work because I get to help people by doing what I love. And what I love is starting innovative new projects and then developing them into actual products that can make a difference in health for everyone.

Right now, as we face this global pandemic, our goal is to provide better healthcare to people everywhere in the world.

Thank you, Hanjin.



TCI's next plant will be a U.S.-based 150,000 sq. ft. facility dedicated to manufacturing needles for ApiJect, as well as prefabricating and sterilizing Needle Hubs for the BFS Prefilled Injector.