

Shooting for the Stars

Wheelchairs produced by a collection of small factories in the partially industrial town of Ota are attracting the attention of domestic wheelchair basketball athletes. by Matthew Hernon

O ne of the most eagerly anticipated events at every Paralympic Games is wheelchair basketball. Initially devised as a rehabilitation exercise for injured war veterans in the United States, the sport has spread to more than 100 countries, intensifying the competition worldwide. It is a fast and frenetic sport that was first featured at the Paralympic Games in Rome in 1960 and debuted for women in Tel Aviv eight years later. Featured at every Paralympic Games since, it has become increasingly popular over the years.

For countries participating in the Paralympic Games, the performance ability of the equipment used makes a big difference in competitiveness. The wheelchairs used for playing basketball are conceived to be the player's legs and so they are designed to give maximum performance.

With this in mind, a leading wheelchair manufacturer has enlisted the aid of various small factories in Ota Ward, and by combining their technical expertise and skills they are producing excellent wheelchairs that are light and easy to maneuver. One of their aims is for their machines to be adopted by teams in the Tokyo 2020 Paralympic Games.

Ota Ward, which is home to Haneda International Airport, is a key industrial base with many small to medium-sized urban enterprises known as *machi-koba* specializing in machinery and metal processing. They are famed for finished products with high-precision and short delivery times, mainly made possible through neighboring networking.

There are currently around 3,500 machi-koba in the



area, of which around 80 percent are small businesses with no more than nine employees. Some of these companies have embarked on the Ota Ward Sports Equipment Product Development Project for the Disabled. We spoke to the president of one of the participating machi-koba that manufactures the shaft, the metal fitting that connects the caster to the main body of the chair. He was happy to have his company play an active role in the project.

"Though we are not a wheelchair manufacturer, we were keen to do this because it is an exciting initiative that is motivating for our staff," he says. "We have never had to design anything like this before. The aim was to make the part as light as possible using aluminum so the biggest difficulty we faced was making sure it was strong enough."

According to the company president, what makes working in Ota Ward so special is the camaraderie and sense of community spirit among the various machi-koba. That feeling of togetherness intensified further following the 2008 global financial crisis.

"Until that point, many factories felt they could make money individually, but since then you see those companies working closely together," he says. "Everyone knows each other and there is a lot of respect between the different organizations. We pass on things we are unable to complete ourselves, which means everyone can focus on what they do well. Employees then go above-and-beyond to create high-quality products."

A great example of this is the wheelchairs manufactured in Ota. Durable, dynamic, and very flexible, they were

1

The *machi-koba* of Ota Ward are constantly upgrading their manufacturing techniques and are keeping pace with growing new demands.

highly praised by some members of a Tokyo-based basketball team who have been playing in them this season.

"I have been impressed by the changes," says one of the players on the

team. "I am heavy but have a weak torso. Using the previous models, I would often sink in the seat when trying to generate power. With these new designs, I can move easily. These chairs are ideal for me."

"My previous wheelchair from a different manufacturer broke down three times a year," adds one of his teammates. "As my torso is weak, I need a strong backrest. These chairs feel sturdier and more dependable. Also, these new white wheels are smaller and harder than the old ones I used to use; I can move my chair more quickly in the way I want."

Ota Ward's machi-koba are not limited to machinery and metal processing. They are also entering new industrial fields such as healthcare and agriculture. And so just like the basketball players using the equipment manufactured there, the industries in Ota too, are aiming high, and shooting for the stars.

Some of the light and strong aluminum components specifically manufactured for wheelchair basketball.



Wheelchair basketball is a fast and furious sport, and demands the best, both of the players and on the equipment.