

The world's only air jet spinning nozzle used in commercial production




Registration No.	Number 00388		
Registration Date	18 September 2025	Registration Category	Category 1

Name (Model, etc.)	Tandemly configured false twist air jet spinning nozzles for MJS (Murata Jet Spinner)
Location	Fushimi-ku, Kyoto, Japan
	Head office, MURATA MACHINERY, LTD.
Owner (Custodian)	MURATA MACHINERY, LTD.
Manufacturer (Company)	MURATA MACHINERY, LTD.
Year Manufactured	1990
Year first appeared	1981
Reason For Selection	This item is a spinning nozzle for the MJS (Murata Jet Spinner). It is an air jet spinning machine that generates false twists in fiber bundles with a swirling current of high-pressure air and binds some of the fibers in the twist back. It was launched in 1981 to overcome the instability of a single nozzle by assigning two nozzles, one for generating a false twist and one for wrapping the bound fibers. It boasted a production speed of about 10 times that of a ring spinning machine and was widely used in the U.S. weaving market. This nozzle was also the starting point for revolutionary vortex technology and is historically important for its contribution to the development of high-speed spinning as the only commercially produced nozzle for air jet spinning machines in the world.
Registration Criteria	1-A (Shows an important aspect or stage in the development of science and technology.) 2-A (Played a notable role in improving people's way of life and creating new ways of living.)

Open/Closed to the Public	Open to the Public
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Photos

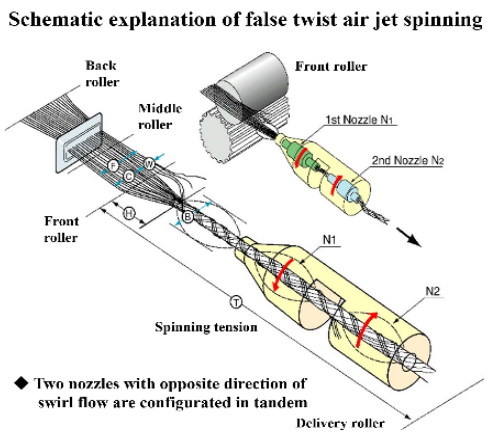
Types of nozzles Z-twist: N1(sub-nozzle) - N2 (main-nozzle)

<p>For high speed spinning H3—H3</p> 	<p>For standard yarn C—S</p> 	<p>For coarse count yarn C—C</p> 
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MJS Spinning Nozzle

Tandem nozzle configuration of the MJS (Murata Jet Spinner), a false twist air jet spinning machine

Schematic explanation of false twist air jet spinning



◆ Two nozzles with opposite direction of swirl flow are configured in tandem