



Multi-Vane Vacuum Pumps – TPN Series

Heavy-Duty, Air-Cooled Vacuum Solutions for
Demanding Industrial Applications

Multi-Vane Vacuum Pumps

Forged through relentless R&D, Toshniwal Vacuum's Rotary Multivane vacuum pumps set a new benchmark in vacuum generation. These turnkey, plug-and-play units eliminate the need for foundation simply position, connect, and power up for fully automatic operation. Their proprietary Multivane rotor design delivers class-leading air-cooled single-stage performance, achieving residual pressures as low as 0.5 mbar while maintaining steadfast operation from 50 to 1000 mbar. Compact and low-noise, they comply with international safety and environmental standards and are engineered for minimal life-cycle cost and maximum up time.

Beyond superior pumping efficiency, the exclusive vertical layout optimizes oil separation and ensures all wear parts are readily accessible, streamlining routine maintenance and slashing intervention time and cost. Integrated controls allow for real-time monitoring of operating parameters, enabling predictive maintenance and seamless integration with plant automation systems. Rugged construction and high-quality materials deliver reliable performance across chemical, pharmaceutical, food, and electronics applications. With a minimized footprint and plug-and-play simplicity, Toshniwal Vacuum's Rotary Multivane Vacuum pumps offer the most economic, efficient, and future-ready solution for modern vacuum plants.



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TPN Multivane Vacuum Pumps Features:

- Oversized aluminum radiator with temperature-controlled fan for reliable air-cooling, eliminating the need for cooling water.
- Closed-loop lubrication circuit guarantees virtually zero oil consumption.
- High-capacity single-stage rotary-vane design delivers broad pumping speed across its range.
- Achieves 1/0.5 mbar residual absolute pressure with performance curves holding steady up to 95 % of rated speed, the best in its class.
- Lower electrical energy is drawn compared to other pumps with similar nominal flow rates.
- True “plug-and-play” units: install directly without foundations for instant, fully automatic operation.

Technical Data and Installation

		TPN4
Capacity	m ³ /h	250
Ultimate Pressure	mbar	0.5
Residual Pressure	mbar(a)	1/0.5
Pump Motor	kW	5.5/50Hz
Rotation speed	rpm	1450
Fan Motor	kW	0.11
Water Vapour handling capacity	Kg/hr	18.5
Water Vapour Tolerance	mbar	140

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