

KOBELION

SCREW COMPRESSOR

"KOBELION" Forged in the World's Harshest Conditions
~ Delivers Stable Airflow Even in the Peak of Indian Summers ~



** The photo shows an overseas model of the KOBELION series.*



True Trust is Earned Only After Surviving the Indian Summer

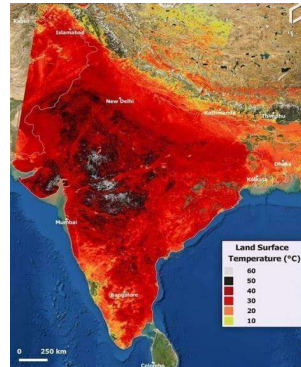
Challenging the Indian Market Means Challenging the Heat

Scorching Heat of India

India's summers bring extreme conditions. May to June are the hottest months, with cities like Delhi and Phalodi in Rajasthan often experiencing temperatures **close to 50 degrees Celsius**. Direct sunlight feels like needles on the skin, and asphalt can melt.



<https://www.indiatoday.in/>



Demanding Factory Environments Indoor temperatures in factories can routinely **exceed 45 degrees Celsius**, placing heavy stress on both workers and equipment. In such conditions, durability is essential to ensure compressors keep running without failure.

Despite being a latecomer, KOBELCO's growth trajectory was driven by a new focus on “machines that never stop.”

Growth Journey Fueled by Unstoppable Machines As India's manufacturing industry grows, so does the air compressor market.

This market, demanding operation under high heat and dust, has seen foreign players since the 1960s, with local manufacturers joining from the 2000s. Our company entered the market in 2015 by establishing KCIN (KOBELCO COMPRESSORS INDIA). Initially focusing on brand awareness, we introduced products across various industries and regions.

Later, through customer feedback, we confirmed our high reputation for “reliability under extreme heat.” We then concentrated sales efforts in the textile sector. By emphasizing “high-temperature resistance” and “system-based energy savings,” we earned trust, expanded our sales network, and built local partnerships—steadily increasing our market share.



India's Rising Global Presence

In 2023, India surpassed China to become the world's most populous country. With a working-age population expected to grow until 2050, India is considered the most promising country for long-term growth.



The Evolution of Indian Manufacturing

Gone are the days of “manufacturing in India because it's cheap.” Today, India boasts advanced industries such as automotive parts, semiconductors, and pharmaceuticals, attracting global attention.



Modern India

While urban centers are lined with luxurious shopping malls, the old towns are filled with the chaos of daily life—complete with cows walking freely on the streets.



KOBELION runs at full load even in 50°C ambient temperature

Even in Indian factories where ambient temperatures reach 50 degrees Celsius, KOBELION keeps running. This exceptional heat resistance tested in the toughest environments around the world, its proven reliability brings real value to Japanese industry as well.



“Reliable and Robust—That’s Why We Chose KOBELCO”

Kansal Industries Ltd. (Gurgaon Manesar Plant)

Factory Manager: Mr. Sanjay Singh

We chose KOBELCO for its solid Japanese engineering, durability, and reliability.

Before installation, we had many issues due to high heat. Now, we’re fully satisfied with performance—even after 8 years of operation under intense heat and dusty conditions, there have been zero issues.

We were so satisfied with the first unit that we replaced two others from a competitor with KOBELCO units. Now, all compressors at our facility are KOBELCO.

We are also very satisfied with the after-sales service and will continue using KOBELCO for future expansions.



KCIN MD Mr. Takeshima, Factory Manager Sanjay, KCIN GM Mr. Rakesh Pandita



Intake Temp: 52.2°C → Running at 100% Load
Discharge Temp: 91.3° C

※Dusty environments are not recommended.

※Discharge temperature is not guaranteed.



Customer Details:

- Company: Kansal Industries Ltd.
- Product: Automotive parts (Top-class in industry)
- Year of Installation: 2017
- Models: KOBELION VS160 × 1, AG160 × 2





Stable operation at production sites thanks to high temperature resistance

End Heat-Related Downtime

Due to the ventilation conditions in the compressor room and the effects of exhaust air during operation, the indoor temperature can exceed 45°C in some cases. In recent years, the risk has increased further due to rising summer temperatures caused by global warming.

Common Concerns

- Annual summer shutdowns due to overheating
- Unexpected full-line halts and anxiety about delivery delays
- Restarting after shutdown involves long cooling times and quality risks

KOBELION is designed for the world's harshest conditions. Its proven operation in India's intense heat is a testament to its reliability and durability. From design to production, service, and quality assurance, we pursue efficiency to deliver unmatched performance to Japanese factories.

Why Compressors Stop in the Heat

The main reason for compressor shutdown in high heat is excessive discharge temperature. Ambient temperature contributes, but the root cause is the rise in internal unit temperature. If discharge temperature increases, risks include screw contact due to thermal expansion and motor overheating, which may trigger emergency shutdown (trip). To prevent such issues, high cooling performance is essential.

KOBELION keeps going without dropping output—even at 50°C

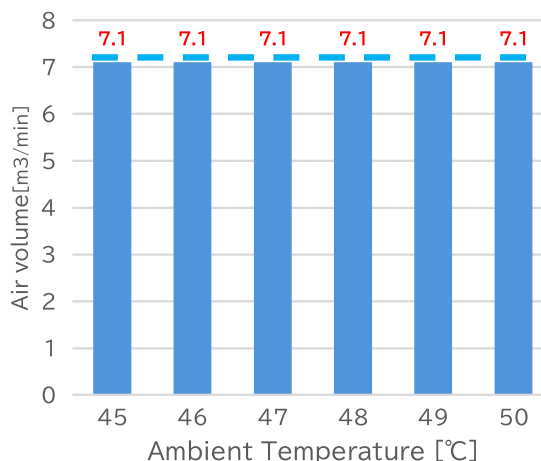
Maintains Air Output Even at 50°C

Even in extreme heat, KOBELION delivers the required pressure and airflow.

Significant Improvement in Durability Compared to Older Models

Environmental testing confirmed stable operation at +5°C higher ambient temperatures versus older models.

◆VS37ADIV Discharge Air Volume
@ 0.7 MPa (Ambient Temp 45°C or above)

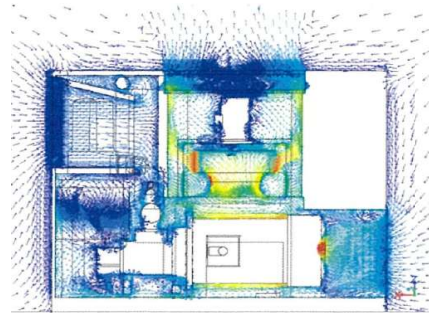


KOBELION

The technology behind it that supports overwhelming heat resistance

Optimal Unit Layout for Maximum Performance

Focused on improving internal cooling efficiency through layout optimization and airflow analysis. Result: stable airflow even at 50°C.



Heat Analysis image



Large Cooler & Turbo Fan

Cooler capacity significantly increased to handle high ambient temperatures. Proper oil and air temperatures enhance environmental resistance. Turbo fan technology, with low heat generation, contributes to energy efficiency and ambient temperature resilience.



Oil-Cooled Motor Cooling (VS Models only)

Replaces traditional fan cooling with oil cooling, improving cooling and resistance to unit condition changes.



※Continuous operation above 45°C may shorten the life of electronic components, O-rings, etc.

As long as there are customers who use it at 50°C, there is no room for compromise.



The KOBELION Development Story

With global markets in mind, KOBELION has dramatically evolved in terms of durability. Starting with the third-generation model, we completely restructured the design—developing oil-cooled motors and reconfiguring internal layouts to ensure operation in 50°C environments. Throughout development, we faced numerous challenges: unexpected issues right before hitting our targets, or tradeoffs like “improving airflow increases noise.” But we never compromised with “49°C is good enough.” As long as there are customers who operate in 50°C environments, we’ll keep pushing forward. This commitment defines both our development and manufacturing spirit.