

# 100% Oil Free Compressor

## WISAIR 20-75 HP



People.  
Passion.  
Performance.



Chicago  
Pneumatic

# Oil-free compressors

Industries such as pharmaceuticals, food and beverage, electronics and textiles cannot risk any chance of oil contamination in their processes. Therefore, it is essential that the compressed air is 100% oil-free. The standard is ISO 8573-1 (2010) certification, in which Class Zero represents the highest air purity. It is the only way to ensure oil-free air for your critical processes and with it peace of mind.

Outstanding reliability, low maintenance and operating costs make oil-free compressors a sound investment.



## The power of our oil-free screw range

WIS 20-75V oil-free compressors provide high-quality compressed air for a range of industrial applications. The continuous investment in product development has resulted in both economical and ecological compressors. The range is built focusing on three pillars to make them stand out.

WIS 20-75V oil-free compressors provide high-quality compressed air for a range of industrial applications. The continuous investment in product development has resulted in both economical and ecological compressors. The range is built focusing on three pillars to make them stand out.

### Oil-free quality air

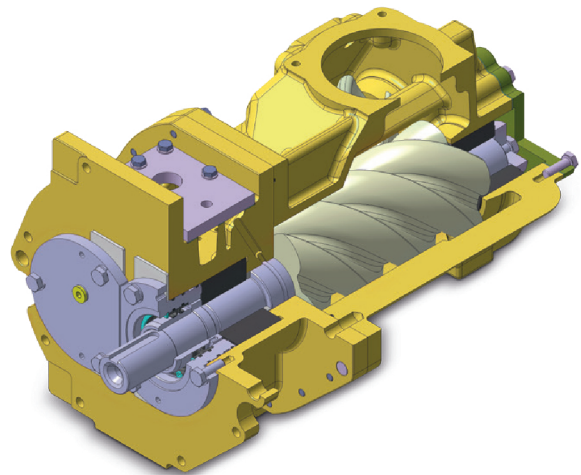
- Ultimate 100% oil free, clean air.
- The integrated air dryer enhances the air quality and protects your air network against corrosion.

### Ultimate reliability

- Friction free hydrodynamic bearings lubricated by clean, filtered lubricant.
- Durable materials to exclude any risk of corrosion.
- Reduced rotor stresses due to soft start up process.

### Energy efficiency

- The most energy efficient compression due to low air discharge temperatures, optimized rotor profiles and no bearing losses.
- Integrated inverter technology assures a perfect match of air supply and air demand eliminating no load power losses.
- Direct driven no loss drive train.
- Graphic, full color screen controller with intelligent energy saving features.





# When technology and ecology join forces

The WIS 20-75V range combines the user benefits and compressor features that matter most. All integrated into one concept!

## Premium performance

- Pressure rating up to 13 bar.
- Output from 47 to 296 cfm.
- Radial cooling fan (air-cooled versions only) and sound-absorbing cabinet for premium cooling and noise performance.

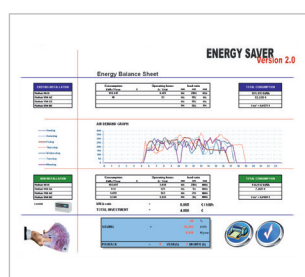
## Premium efficiency

- Unique isotherm compression brings premium saving.
- Inverter driven technology provides up to 35% energy savings.
- Limited pressure band results in an overall reduced net pressure (1 bar extra pressure = 7% energy).
- 3.5" graphic full color controller with web visualization and intelligent saver cycles.
- Friction free air end bearings.
- Direct driven power train to reduce energy losses.
- Built-in dryer to reduce downstream pressure drop.

## Premium quality

- ISO 8573-1 **Class 0\*** certified quality air.
- Integrated dryer guaranteeing PDP < 3°C.
- Corrosion proof materials: aluminium bronze rotor housing, stainless steel rotor shaft, piping and separator vessel.
- Smooth start up with inverter driven technology.
- Clean piping.

| CLASS* | Concentration total oil (aerosol, liquid, vapour) mg/m <sup>3</sup>            |
|--------|--|
| 0      | As specified by the equipment user or supplier and more stringent than class 1 |
| 1      | ≤ 0,01   |
| 2      | ≤ 0,1  |
| 3      | ≤ 1  |
| 4      | ≤ 5  |



## Energy audit

To optimize your energy efficiency, you need to select the right compressor. Contact your local representative and we will perform a simulation based on your parameters to help you get the perfect compressed air solution.

# One package – multiple benefits

Check out these innovative features of the WIS 20-75V range and see how they provide you with maximized efficiency, excellent air quality and low noise levels.



## Direct drive set

- IP55 induction motor directly coupled to the air end.
- No long-term losses.
- Direct drive train for optimum efficiency.
- Flexible to meet pressure/flow requirement.

## In-house designed element

- Highly efficient profile.
- Corrosion-proof parts.
- Hydrodynamic bearings.





## Integrated inverter

- Optimum zone control to optimize energy cost.
- Forced cooling air flow over electronics and smooth start-up to guarantee longer lifetime.
- More than 30% potential savings.

## Graphic controller

- All readings and controls from full color screen controller.
- Data logging possibility.
- Web visualization.
- Integrated sequencer.
- Standard on the WIS 20-75V range.



## Integrated dryer

- Integrated into the package to reduce footprint, maintenance and installation cost.
- Designed to guarantee a constant pressure dew point of 3°C.
- All readings/control function from one point.

## Sound insulated canopy

Allows installation in most working environments without requiring a separate compressor room.

## Radial fan & cooling system

- The cooling turbine is installed in an easily accessible sound insulated cabinet.
- Oversized cooler pack to enhance cooling performance.
- Maintaining a high cooling efficiency, the radial cooling turbine reduces the energy consumption.

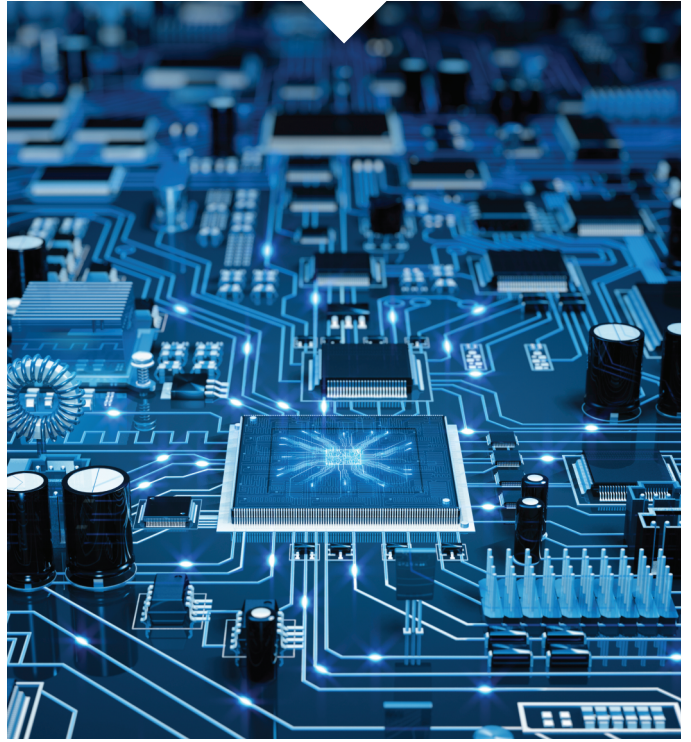


# WISAIR sets modern industry standards

Pharmaceutical Industry



Electronics



Food & Brewery



Chemicals & Plastics





# Oil-free range rewarded by class zero iso certification

Class zero guarantees the ultimate air quality for all those applications that require perfectly clean air:

- Pharmaceuticals
- Food and beverages
- Textile industry
- Electronics

With our oil-free screw compressor range we meet your mandatory requirements to avoid oil traces in the output air according to ISO 8573-1.



**Introduction  
integrated dryer pack**

**2001**

**Introduction inverter  
driven technology in wis**

**1998**

**First air-cooled  
package**

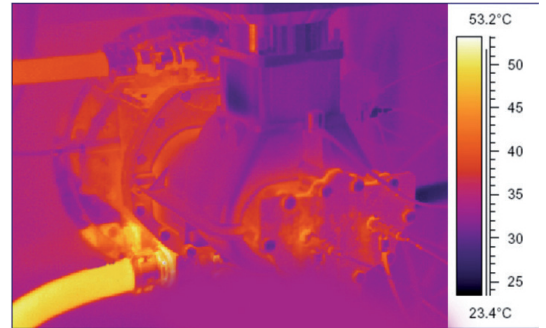
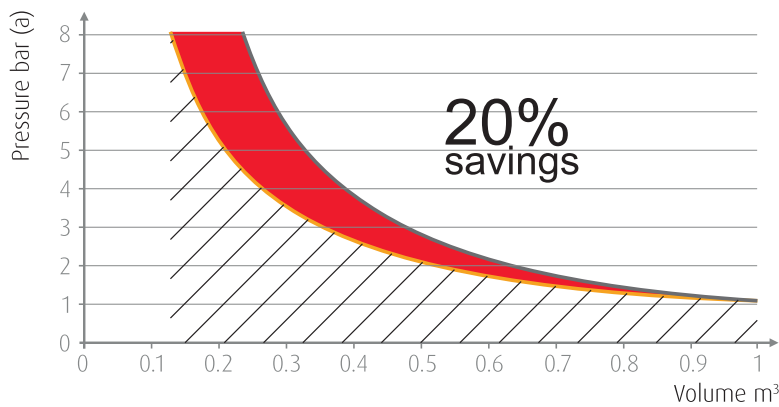
**1993**

**First water injected  
screw compressor installed**

**1992**

# Energy savings pushed to the limit

## Savings from the oil-free air end



Limited temperature increase of only 25° C inside compressor element

— Adiabatic — Isothermal ■ Energy saved — Energy consumption WIS

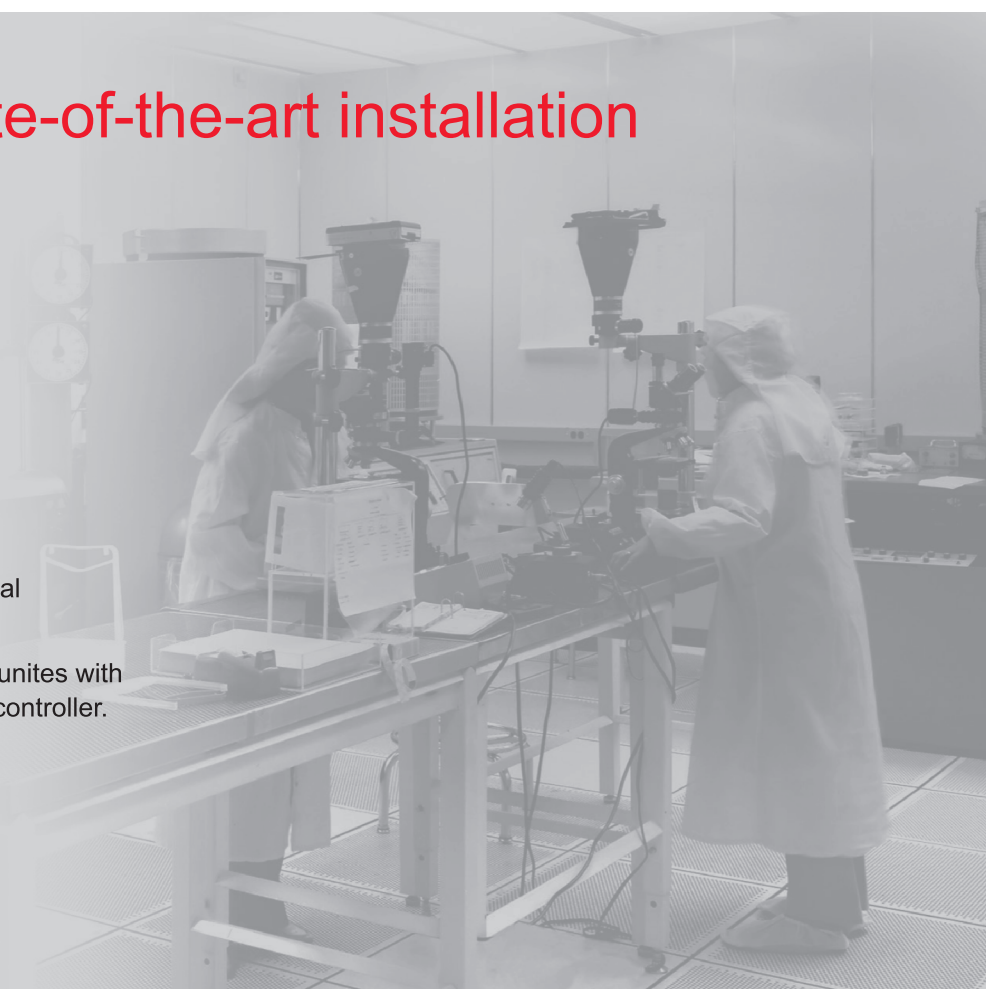
Adiabatic compression: All compression heat is transferred to the compressed air (~ dry screw technology)

Isothermal compression: Constant temperature in compression chamber (~ WIS technology)

The WIS 20-75V range offers nearly isothermal compression. Superior air end cooling results in more compressed air for lower energy consumption.

## Savings from state-of-the-art installation

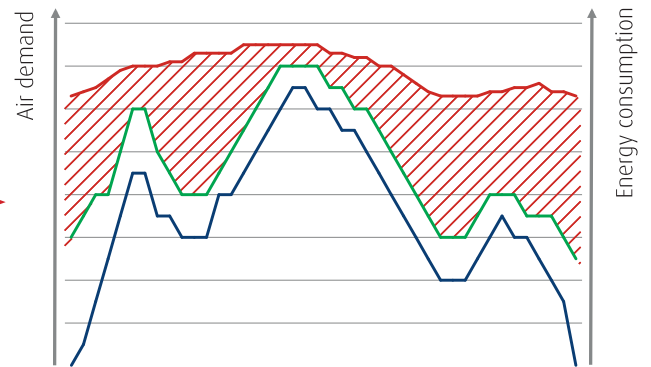
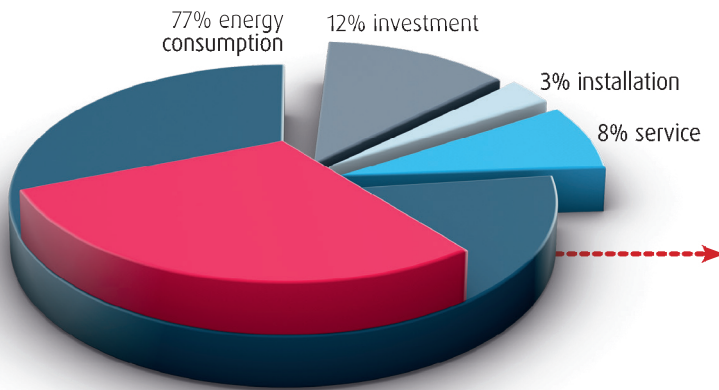
- Reduced installation costs:
  - No filter maintenance costs.
  - No pressure drop.
  - No condensate treatment.
  - No contamination.
- Reduced noise level even with multiple installations.
- Small footprint compared to conventional installation.
- Single central control point for multiple unites with integrated sequencer or wall-mounted controller.





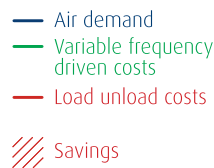
# Savings from inverter technology

Energy costs represent about 70% of the total operating cost of your compressor over a 5-year period. That is why reducing the operating cost of a compressed air solution is a major focus. The WIS oil-free screw compressor can cut the energy bill of your compressor by up to 30%.



## Energy cost is reduced because:

- The no load power is eliminated.
- A stable net pressure is maintained.
- There are no current peaks due to soft start.



# Savings from the controller

- Instant pressure logging and communication limits the pressure band and reduces the average net pressure.
- Integrated saver cycles to limit energy consumption and optimize air quality.
- Integrated sequencer for 4 up to 6 compressors limiting the energy consumption and equalizing running hours.
- Dual pressure band operation.



# Options to optimize your operations

A wide range of options enables you to get the most out of your WIS 20-75V compressor.

## General options

- Booster pump
- Flanged inlet
- Anchor pads
- IT ancillaries

## Air treatment

- Dryer bypass for unbreakable production

## Protection

- Water shut-off valve
- Main power isolator switch

For further information on how our options can optimize your operations, please contact your local representative.





# Technical specifications

## Inverter version

| Model   | Max. working pressure | Reference working pressure | Free Air Delivery | Motor power |    | Noise level | Cooling air volume | Weight   |        | Compressed air outlet diameter |
|---------|-----------------------|----------------------------|-------------------|-------------|----|-------------|--------------------|----------|--------|--------------------------------|
|         | bar                   | bar                        |                   | kW          | hp |             |                    | std (kg) | T (kg) |                                |
| WIS 20V | 13                    | 7                          | 47-100            | 15          | 20 | 67          | 1080               | 650      | 700    | 1                              |
| WIS 25V | 13                    | 7                          | 47-114            | 18          | 25 | 69          | 1440               | 650      | 700    |                                |
| WIS 30V | 13                    | 7                          | 47-140            | 22          | 30 | 70          | 10080              | 740      | 800    |                                |
| WIS 40V | 13                    | 7                          | 47-176            | 30          | 40 | 72          | 10040              | 740      | 810    |                                |
| WIS 50V | 13                    | 7                          | 89-220            | 37          | 50 | 69          | 11880              | 1195     | 1306   | 1 1/2                          |
| WIS 75V | 13                    | 7                          | 90-328            | 55          | 75 | 72          | 16200              | 1195     | 1314   |                                |

## Fixed Speed version

| Model  | Max. working pressure | Reference working pressure | Free Air Delivery | Motor power |    | Noise level | Cooling air volume | Weight   |        | Compressed air outlet diameter |
|--------|-----------------------|----------------------------|-------------------|-------------|----|-------------|--------------------|----------|--------|--------------------------------|
|        | bar                   | bar                        |                   | kW          | hp |             |                    | std (kg) | T (kg) |                                |
| WIS 40 | 7.5                   | 7                          | 180.1             | 30          | 40 | 68          | 11520              | 1226     | 1320   | 1 1/2                          |
|        | 10                    | 9.5                        | 144.8             | 30          | 40 | 68          |                    |          |        |                                |
|        | 13                    | 12.5                       | 113.0             | 30          | 40 | 68          |                    |          |        |                                |
| WIS 50 | 7.5                   | 7                          | 215.4             | 37          | 50 | 69          | 11880              | 1298     | 1395   |                                |
|        | 10                    | 9.5                        | 183.6             | 37          | 50 | 69          |                    |          |        |                                |
|        | 13                    | 12.5                       | 148.3             | 37          | 50 | 69          |                    |          |        |                                |
| WIS 60 | 7.5                   | 7                          | 257.8             | 45          | 60 | 71          | 15840              | 1321     | 1416   | 1 1/2                          |
|        | 10                    | 9.5                        | 208.4             | 45          | 60 | 71          |                    |          |        |                                |
|        | 13                    | 12.5                       | 173.0             | 45          | 60 | 71          |                    |          |        |                                |
| WIS 75 | 7.5                   | 7                          | 296.6             | 55          | 75 | 72          | 16200              | 1378     | 1497   |                                |
|        | 10                    | 9.5                        | 250.7             | 55          | 75 | 72          |                    |          |        |                                |
|        | 13                    | 12.5                       | 208.4             | 55          | 75 | 72          |                    |          |        |                                |

## Dimensions

| Model  | Length std mm | Width mm | Height mm |
|--------|---------------|----------|-----------|
| WIS 40 | 2435          | 965      | 1840      |
| WIS 50 |               |          |           |
| WIS 60 |               |          |           |
| WIS 75 |               |          |           |

| Model   | Length std mm | Width mm | Height mm |
|---------|---------------|----------|-----------|
| WIS 20V | 1976          | 974      | 1500      |
| WIS 25V |               |          |           |
| WIS 30V |               |          |           |
| WIS 40V |               |          |           |
| WIS 50V | 2435          | 965      | 1840      |
| WIS 75V |               |          |           |





Since 1901 the Chicago Pneumatic name has represented reliability and attention to customer needs, with tools and compressors designed for specific industrial applications. Today, Chicago Pneumatic has a global reach, with local distributors around the world. Our people start every single day with a passion to research, develop, manufacture and deliver new products that are meant to meet your needs not only today, but tomorrow as well. To learn more, visit [www.cp.com](http://www.cp.com).

## Chicago Pneumatic: full offer, global presence



TMD



CPVS



WIS AIR



Spiral Air



PPNGs



TAS

**Chicago Pneumatic Compressors**  
Sveanagar, Mumbai Pune Highway, Dapodi,  
Pune - 411012 Maharashtra, India.  
Phone: + (91) 93 7191 9200 / 93 2417 4988



Design  
Manufacture, Sales and  
Service of air compressors,  
Air dryers and air filters



ISO 9001 . ISO 14001  
OHSAS 18001  
Forms an integral part of each  
business process of Chicago  
Pneumatic Compressors

### Dealer Network

**100+**  
**Distributors**  
present across India



### Regional Customer Centers

|                |   |
|----------------|---|
| <b>West</b>    | Rushabh, II Floor, Near American Heart Institute, Ghodbunder Road, Thane (W) - 400601   |
|                | 93241 74565 / 93256 36552   |
|                | <a href="mailto:sales.west@cp.com">sales.west@cp.com</a> / <a href="mailto:service.west@cp.com">service.west@cp.com</a>             |
| <b>North</b>   | Unitech Business Park, Tower - A, First Floor, Block - F, Sector - 41, South City-I, Gurgaon - 122001                               |
|                | 93124 06866 / 93124 17744   |
|                | <a href="mailto:sales.north@cp.com">sales.north@cp.com</a> , <a href="mailto:service.north@cp.com">service.north@cp.com</a>         |
| <b>East</b>    | Trinity Plaza, 2nd Floor, East Wing, 84/1A, Topsia Road, (South) Kolkata - 700 046  |
|                | 93322 90559 / 93322 91224   |
|                | <a href="mailto:sales.east@cp.com">sales.east@cp.com</a> , <a href="mailto:service.east@cp.com">service.east@cp.com</a>             |
| <b>Central</b> | 4th Floor, Block A, Amsri Shamira Building, Old Lancer Lines, Secunderabad - 500 025  |
|                | 88861 78825 / 93924 06641   |
|                | <a href="mailto:sales.central@cp.com">sales.central@cp.com</a> , <a href="mailto:service.central@cp.com">service.central@cp.com</a> |
| <b>South</b>   | No. 1-A, Kushal Garden, Peenya Industrial Area, Peenya 2nd Phase, Bangalore - 560 058   |
|                | 93677 87070 / 93421 44450   |
|                | <a href="mailto:sales.south@cp.com">sales.south@cp.com</a> , <a href="mailto:service.south@cp.com">service.south@cp.com</a>         |

- **Area offices:** Ahmedabad, Baroda, Chandigarh, Chennai, Pune
- **Resident offices:** Coimbatore, Erode, Kochi, Jaipur, Raipur, Vizag

**Toll Free No.: 1800 200 0040**

© 2010, Chicago Pneumatic. All rights reserved. All mentioned, product names, company names, trademarks and service marks are the properties of their respective owners. Our products are constantly being developed and improved. We thus reserve the right to modify product specifications without prior notice.