Continuous mobile asphalt plants
iNOVA Series
iNOVA 1000 | 1500 | 1502 | 2000
WHERE THE PASSION FOR ASPHALT PLANTS STRIKES

In the capital of Porto Alegre, in the southernmost state of Brazil, CIBER Equipamentos Rodoviários has been located for the last 60 years. Founded in 1958, the company was the pioneer in the development of mobile counterflow asphalt plants, keeping up to the present day always on the cutting edge, launching new technologies and products in the mobile power plant line. CIBER is a company of the Wirtgen Group, an internationally active group of companies in the road and mining equipment industry.

With a modern factory set in an area of 46,848 sq. meters, strictly following the assembly line standards of German factories, CIBER has already produced and distributed more than 1,800 plants spread throughout Latin America, Africa, Southeast Asia and Oceania. The quality processes at CIBER start from the thorough selection and development of more than 300 suppliers, in the purchase of +170,000 pieces and monthly components, of the 1,600 hours/year carried out in tests for approvals and that comprise the Lean assembly and finishing process. And all this with ISO 9001 certification. In the CIBER product line, complete solutions in mobile counterflow asphalt plants that meet any size and design profile, with machines that produce from 50 t/h up to 200 t/h of hot mix asphalt, optimized in less mobility when compared to products with high productivity and attributes that ensure greater profitability and operational results.

Through the WIRTGEN GROUP distribution network, CIBER has a customer support structure through its own subsidiaries and authorized dealers spread across four continents, which have a constant and extensive inventory of original parts, highly qualified technicians and a constant training program for clients and operators with a single goal: to be always close to our customers.

CIBER. WIRTGEN GROUP quality standard.

Total area: 46,848 m²
Built area: 17,862 m²
Innovation is the best definition for the CIBER iNOVA Series asphalt plants. Asphalt plants used to adapt to the characteristics of the materials and projects, but with variable and proportional performance. With new technologies applied in the CIBER iNOVA Series plants, maximum productivity has become a constant, regardless of inputs and projects, quality is reached according to the parameters established in each operation. This paradigm break opens a range of opportunities for higher productivity, with higher quality, lower environmental impact and lower cost.
The most modern technology for the production of asphalt mixes applied to continuous flow mobile asphalt plants. The CIBER iNOVA Series plants stand out for the following characteristics:

**PLANTS WITH HIGH PRODUCTION CAPACITY IN LESS MOBILITIES**
- Plants with production of 50 t/h to 200 t/h in 1 or 2 mobilities
- Lower cost of transportation
- Lower area and cost of installation

**HIGH PERFORMANCE IN SPECIAL MIXES**
- Mixer with dry mixing zone
- Automatic mixing time control
- High accuracy in dosing of aggregates and asphalt cement

**EFFICIENCY IN FUEL CONSUMPTION**
- Perfect thermal exchange between aggregates and fuel gases
- CIBER Total Air® Burner
- Dryer drum with Thermal insulation

**EASE OF OPERATION**
- New EasyControl® system
- CIBER Push & Play 100% automatic operation
- Excellent production visibility
- Comfort and ergonomics in operation
- CIBER Truck-Assistant® System

**OPTIMIZED MAINTENANCE**
- Heavy duty components with long service life
- Intelligent fault diagnosis system
- Easy access to wear elements
Higher production capacity in less mobilities

1 and 2 | iNOVA 1000 and iNOVA 1500: plants in 1 mobility

3 and 4 | iNOVA 1502 and iNOVA 2000: plants in 2 mobilities

THE MOST COMPACT LINE OF ASPHALT PLANTS ON THE MARKET

- Plants with high production capacity. Ideal for all types of projects.

LOWER TRANSPORT COST

- Lower number of mobilities reflects lower transport costs
- Lower investment of the plant + freight package
- Transport conditions appropriate to standards throughout Latin America, Africa, Southeast Asia and Oceania

SAFETY OF OPERATION

- Protection of mobile parts
- Emergency and interlocking systems

EASE OF INSTALLATION

- Easy adaptation to different construction sites
- Low complexity for installation
- Less mobilization and assembly time

OPTIMIZED PRODUCTION WITH SYNCHRONIZATION BETWEEN DIFFERENT COMPONENTS

- Production capacity from 50% to 100% of rated capacity
- The majority of engines have rotational speed proportional to the production, reducing the consumption and cost of electricity
The iNOVA line features unique technologies that minimize the energy consumption needed to dry and heat aggregates.

- **Intelligent heat exchange system**
- **Perfect exhaust control**
- **CIBER Total Air® Burner**
- **Thermal Insulation**

**Intelligent Heat Exchange System**
- Automatic control of the dryer spin speed results in the maximum heat exchange between the aggregates and fuel gases

**Perfect Exhaust Control**
- Intelligent exhaust system that ensures perfect combustion regardless of the production rate

**CIBER Total Air® Burner**
- Optimization of air flow used for combustion
- Control of the exact amount of air required for burning, ensuring lower consumption
- Innovative automatic control of the burner according to the need to heat the materials (closed loop system)

**Thermal Insulation**
- Avoids thermal energy dissipation of the dryer drum
- Rapid stabilization and uniformity of temperature inside the dryer
- Coated with stainless steel material

**Efficiency in Fuel Consumption**
**High performance special mixes**

**EXTERNAL MIXER PUG-MILL**
- Mixing separated from the drying system
- High shear rate applied to the mix
- Minimizes early aging of asphalt cement due to oxidation

**DRY MIX**
- Homogenization of the aggregates before the asphalt cement injection and perfect dispersion of this binder in the aggregates
- Important in applications using lime as adhesion improver
- Essential requirement for special mixes using fibers and other additives

**MIXING TIME CONTROL**
- Automatic adjustment of the volume of material inside the mixer as required by different types of asphalt mixes
- Maximum power applied to the mixture that guarantees homogeneity of asphalt concrete

**HIGH ACCURACY OF DOSAGE OF AGGREGATES AND ASPHALT CEMENT**
- Pick-Up and Can Open systems that assure total quality in the dosage of aggregates
- Perfect aggregate and asphalt cement ratio ensure a high-quality mixture

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1) Mixing time control on demand.
2) High accuracy for dosing of materials with the Pick-up system.
Ease of operation

EASYCONTROL® SYSTEM

> Intuitive software with full control of productive processes
> Easy-to-operate touch screen
> CIBER Push&Play® - Automatic control (without operator interference) of the burner flame and other components during production

BROAD VISIBILITY OF THE PRODUCTIVE PROCESS

> Cabin located in strategic position with a wide view of the production
> CIBER Truck-Assistant® device for communication between the plant operator and the truck

COMFORT AND ERGONOMICS FOR OPERATION

> Air-conditioned cabin
> Ergonomic operation table and intuitive operation by MMI
> Guarantee of total efficiency and safety of operation

POWER PANEL

> High degree of protection/sealing of components
> Inverter air conditioning

1] Broad visibility of the production process. High-tech EasyControl® control system.
2 and 3] Operating table with comfort and ergonomics for operation.
**Optimized maintenance**

**LONGER LIFE = LESS DOWNTIME FOR MAINTENANCE**

The INOVA line is designed to facilitate preventive and corrective maintenance. Several components were developed, guaranteeing greater robustness in production.

**INTELLIGENT FAULT DIAGNOSIS SYSTEM**

- Possibility of preventive maintenance of engines and electrical components
- Digital mapping of the plant
- Real-time component information
- Minimizing the possibility of errors or operating faults
- Lower number of maintenance stops
- Remote access to reports and diagnostics (optional)
- Visibility of the whole asphalt plant through 4* video cameras (*optional)

**EASY ACCESS TO WEAR ELEMENTS**

- Less time needed for preventive or corrective maintenance
- Easy Spin tool for quick and easy removal of bag filters

**HEAVY DUTY COMPONENTS WITH LONGER LIFE**

- Blades of the mixer with new Honey Comb shape, with the surface that favors the creation of a cover with the asphalt material itself, reducing the wear
- High abrasion resistance blades
- High resistance elements on surfaces exposed to wear
- Highly weather resistant fuel injectors, blower air and cold air dampers

**PLEATED BAG FILTER**

- Greater filtration and production area ratio
- High durability structured bags
- Washable bags

1. Easy access to wear elements.
2. Longer-duty heavy-duty components such as Honey Comb vanes.
3. Each filter bag with total filtration area of 6.2m² and 55 pleats that give greater durability and less changes.
<table>
<thead>
<tr>
<th><strong>Transport</strong></th>
<th><strong>INNOVA 1000</strong></th>
<th><strong>INNOVA 1500</strong></th>
<th><strong>INNOVA 1502</strong></th>
<th><strong>INNOVA 2000</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Production capacity</strong></td>
<td>50 to 100 t/h</td>
<td>75 to 150 t/h</td>
<td>100 to 200 t/h</td>
<td></td>
</tr>
<tr>
<td><strong>Mobility</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Axles/Tires mobility 1</td>
<td>3 / 12 (+ 1 spare)</td>
<td>2 / 8 (+ 1 spare)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Axles/Tires mobility 2</td>
<td>-</td>
<td>3 / 12 (+ 1 spare)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Suspension / Brakes - mobility 1</td>
<td>Triple tandem / ABS</td>
<td>Double tandem / ABS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Suspension / Brakes - mobility 2</td>
<td>-</td>
<td>Triple tandem / ABS</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Size</strong></td>
<td>21.30 x 3.20 x 4.30m (L x W x H)</td>
<td>21.30 x 3.20 x 4.30m (L x W x H)</td>
<td>13.90 x 2.30 x 4.30 / 17.10 x 3.20 x 4.30m(L x W x H)</td>
<td>13.90 x 2.30 x 4.30 / 19.00 x 3.20 x 4.30m (L x W x H)</td>
</tr>
</tbody>
</table>

| **Drying System** | | | | |
| **Technology** | Counterflow dedicated exclusively to the drying and heating of aggregates | | | |
| **Burner** | CIBER Total Air® | | | |
| **Bag Filter** | 88 bags | 122 bags | 174 bags | |
| **Filtering area** | 518 m² | 777 m² | 1,091 m² | |
| **Maximum filtration/production area ratio** | 5.2 m²/(t/h) | 5.5 m²/(t/h) | | |
| **Filter efficiency** | Greater than 99.99% | | | |
| **Filter technology** | Pleated Bags | | | |

| **Mixing System** | | | | |
| **Technology** | External double-axled pug mill with arms and straws | | | |
| **Mixing steps** | Dry mixing and mixing with asphalt cement | | | |
| **Mixing time** | Configurable | | | |
| **Cleaving** | With lower deck | | | |
| **Wear elements** | High abrasion resistance material | | | |
| **Asphalt Injection** | With sprinkling nozzles | | | |

| **Transport and Storage System** | | | | |
| **Mix Transport Technology** | Redir type drag lift | | | |
| **Wear elements** | High abrasion resistance material | | | |
| **Bin volume** | 1 m³ | 2 m³ | | |
| **Type** | Maximum level sensor, anti-saturation window, anti-segregation plate, inspection flap | | | |

| **Control System** | | | | |
| **Operation cabin** | Metallic with side door, containing control panel, supervisory, buttons for actuation in manual and PLC | | | |
| **Sistema de climatização** | 7,000 BTU air conditioning with inverter technology | | | |
| **Critical Control** | Automatic (supervisory) or emergency mode (by supervisor + manual operation buttons) | | | |

| **SAFETY** | | | | |
| **Feed bins** | Fixed protections for mobile parts | | | |
| **Emergency button** | | | | |
| **Drier** | | | | |
| **Emergency button** | | | | |
| **Dryer / Burner** | | | | |
| **Emergency button** | | | | |
| **Mixer** | | | | |
| **Emergency button** | | | | |
| **Bag Filter** | | | | |
| **Emergency button** | | | | |
| **Control cabin** | Emergency button + internal audible alarm | | | |
| **Operating interface in extra low voltage (24V)** | | | | |
| **Power Panel** | Security PLC Monitoring | | | |
## Options

<table>
<thead>
<tr>
<th>Options - iNOVA Series</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>TETRAFUEL BURNER</td>
<td>Light oils, heavy oils, LPG and NG</td>
</tr>
<tr>
<td>COMPRESSOR EXTENSION</td>
<td>Compressor position displacement as required</td>
</tr>
<tr>
<td>VIDEO CAMERA</td>
<td>4 cameras</td>
</tr>
<tr>
<td>REMOTE MONITORING SYSTEM</td>
<td>Remote monitoring of production during production</td>
</tr>
<tr>
<td>ADDITIONAL VIBRATOR</td>
<td>Kit of 3 vibrators in bin number 2</td>
</tr>
<tr>
<td>FILLER DOSING BIN</td>
<td>Bin of 2 m³</td>
</tr>
<tr>
<td>FINE DOSING BIN</td>
<td>Bin of 4 m³</td>
</tr>
<tr>
<td>FIBER DOSING BIN</td>
<td>Bin of 2 m³</td>
</tr>
<tr>
<td>RECYCLING SYSTEM</td>
<td>15% RAP in the mixer</td>
</tr>
<tr>
<td>ASPHALT FLOW METER</td>
<td>Open and closed-circuit operation</td>
</tr>
<tr>
<td>FUEL FLOW METER</td>
<td>Open circuit operation</td>
</tr>
</tbody>
</table>

1) Filler dosing bin.  
2) Fine dosing bin.  
3) Fiber dosing bin.  
4) RAP.  
5) Asphalt tank is not part of the options.
Customer support

AFTER-SALES SERVICE - A PERFECT CONCEPT FROM A TO Z

Always next to the client

The CIBER service is present in all locations in which the company markets its equipment, in order to provide fast and efficient service in any part of Latin America, Africa, Southeast Asia and Oceania. The company’s goal is to facilitate the work of its clients, offering technical support and constant partnership.

PRODUCT SUPPORT

Optimized operation of all equipment:
- Comprehensive technical support for the entire product line
- High quality original parts
- Practical and intelligent customer communication system
- Training courses for all products marketed

WORKSHOP SERVICE

Complete workshop services:
- Quality: highly specialized shop services
- Services performed by highly qualified and permanently trained maintenance technicians
- Wear parts replaced by original parts, serviced by qualified personnel
- Professional installation of auxiliary equipment

TECHNICAL SUPPORT

Your equipment always working:
- Specialized technical delivery: the equipment sold is assembled and verified by experienced and qualified professionals
- Local support: CIBER technicians and their resellers are close to customers, ensuring fast and efficient service
- Trained resellers: CIBER authorized resellers receive training to solve issues regarding all branded equipment
- Factory support: customers can contact the CIBER team directly, by telephone or via the internet

LOCAL SERVICE

Maintenance directly on site: we guarantee quick solutions:
- State-of-the-art technology: maintenance service engineers are regularly trained at the company headquarters
- Full maintenance with an extra: technical support combined with application consulting as and when required
- Complete equipment: rapid diagnosis and repair of dysfunctions with special tools

ORIGINAL PARTS

Credibility in original parts:
- Fast and reliable order processing
- In-depth consultation with trained service specialists when purchasing original parts
- Quick identification of spare parts through complete documentation such as Parts and More, WIDOS and WITRAIN

TRAINING

For an equipment to offer greater productivity, it is essential that all those who operate it have a wide knowledge about its operation.

In order to ensure safety and long life of the equipment it markets, CIBER, through its network of dealers and the factory itself, provides training to its customers in order to qualify all operators with the necessary knowledge for operation and maintenance of machines. The training has the credibility of the factory, providing the know-how of specialists and personalized service according to the specificity of each project or work.

TRAINING SCHEDULE

Find the right training for you and check out the seminar dates available:

Distribution of CIBER customer support around the world.

For more information, see: www.ciber.com.br