

Continuous mobile asphalt plants

iNOVA Series

iNOVA 1000 | 1500 | 1502 | 2000



60 years of pioneering, technological innovations and a great deal of passion

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.





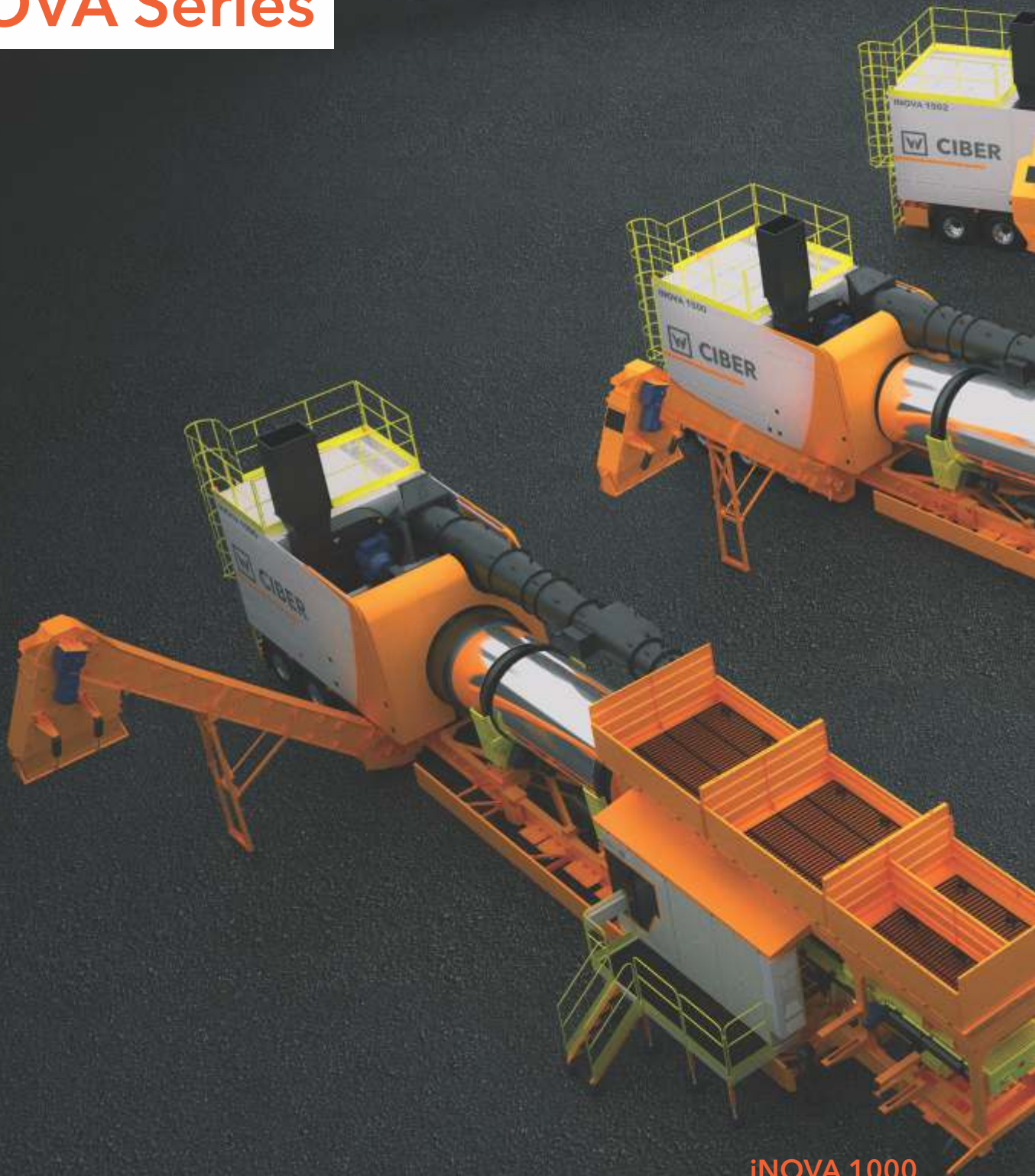
- ① ADMINISTRATION BUILDING
- ② RECEIPT AREA
- ③ STORAGE
- ④ FACTORY / ASSEMBLY LINES

- ⑤ QUALITY CONTROL / TESTING
- ⑥ FINISHING
- ⑦ FINISHED
- ⑧ SHIPPING

Total area: 46,848 m²
Built area : 17,862 m²

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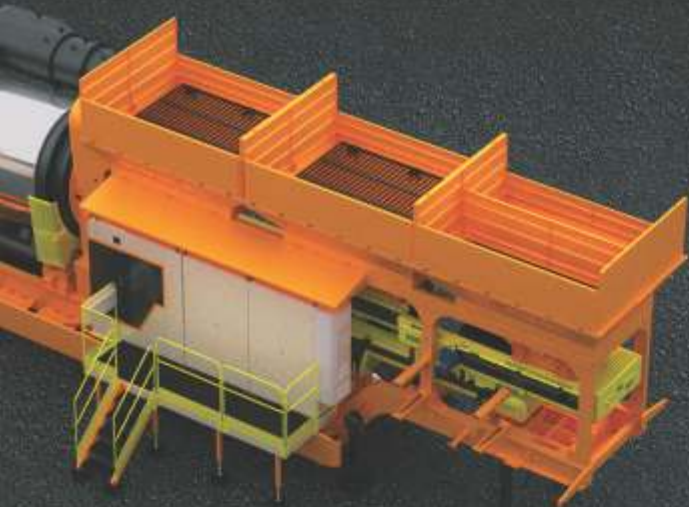
iNOVA 1000



iNOVA 2000



iNOVA 1502



iNOVA 1500

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



**EFFICIENCY
IN FUEL
CONSUMPTION**

- > Perfect thermal exchange between aggregates and fuel gases
- > CIBER Total Air® Burner
- > Dryer drum with Thermal insulation



**HIGH
PERFORMANCE IN
SPECIAL MIXES**

- > External Pug Mill mixer
- > Dry mixing zone
- > Automatic mixing time control
- > High accuracy in dosing of aggregates and asphalt cement



**EASE OF
OPERATION**

- > EasyControl® operating system
- > CIBER Push & Play 100% automatic operation
- > Excellent production visibility
- > Comfort and ergonomics in operation

Continuous mobile asphalt plants

iNOVA Series



OPTIMIZED MAINTENANCE

- > Heavy duty components with long service life
- > Intelligent fault diagnosis system
- > Easy access to wear elements



1



2



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

COMPACT LINE OF ASPHALT PLANTS

> 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 international traffic rules

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



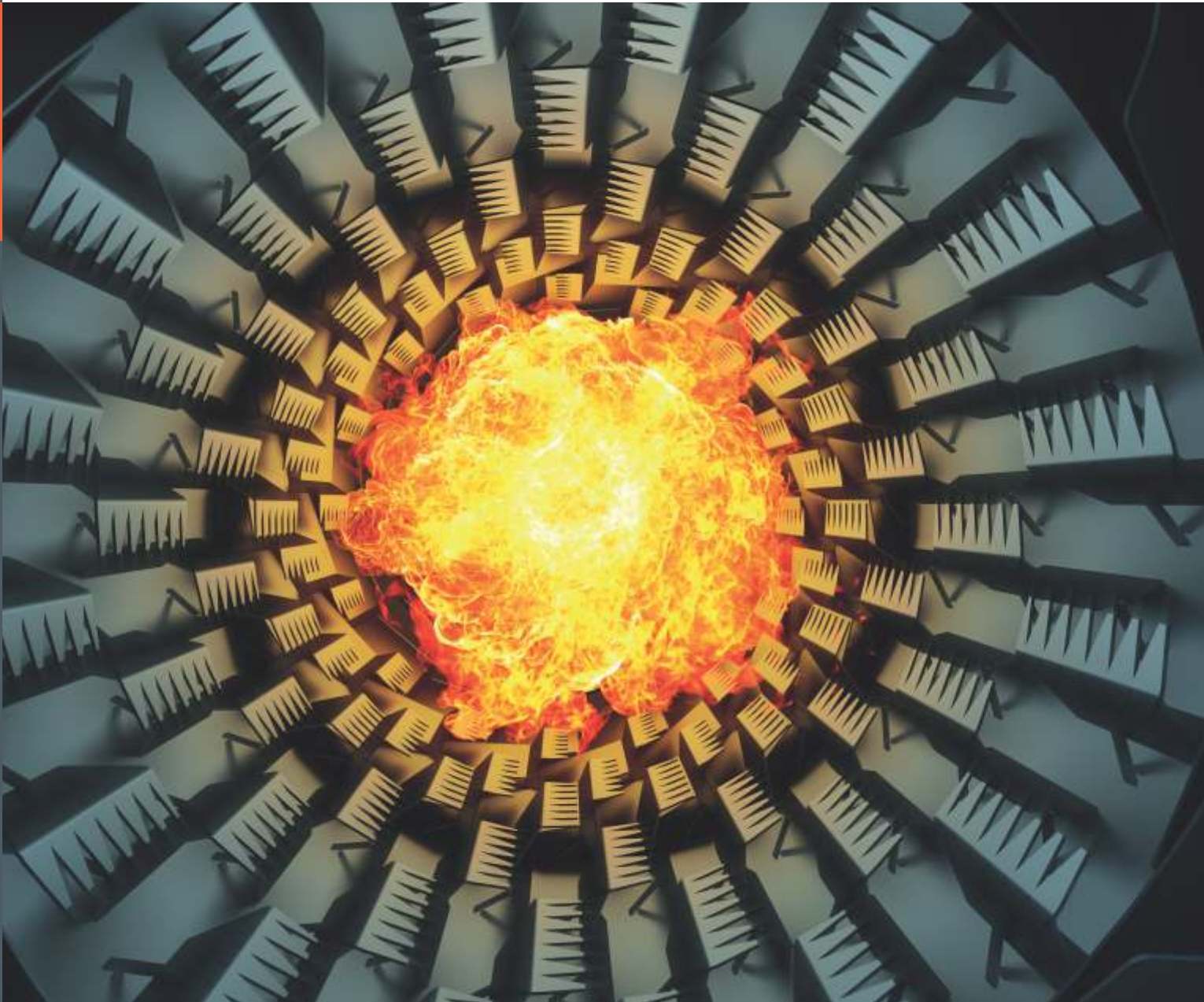
OPTIMIZED PRODUCTION WITH SYNCHRONIZATION BETWEEN DIFFERENT COMPONENTS

- > 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



Efficiency in fuel consumption

10
11



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

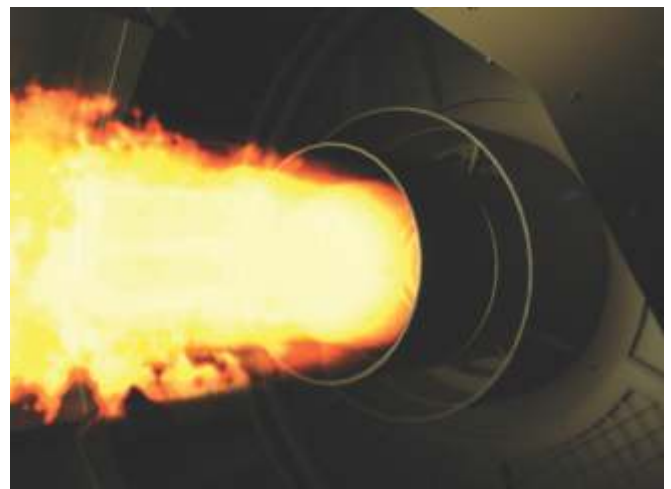
> Automatic control of the dryer spin speed results in the maximum heat exchange between the aggregates and fuel gases

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

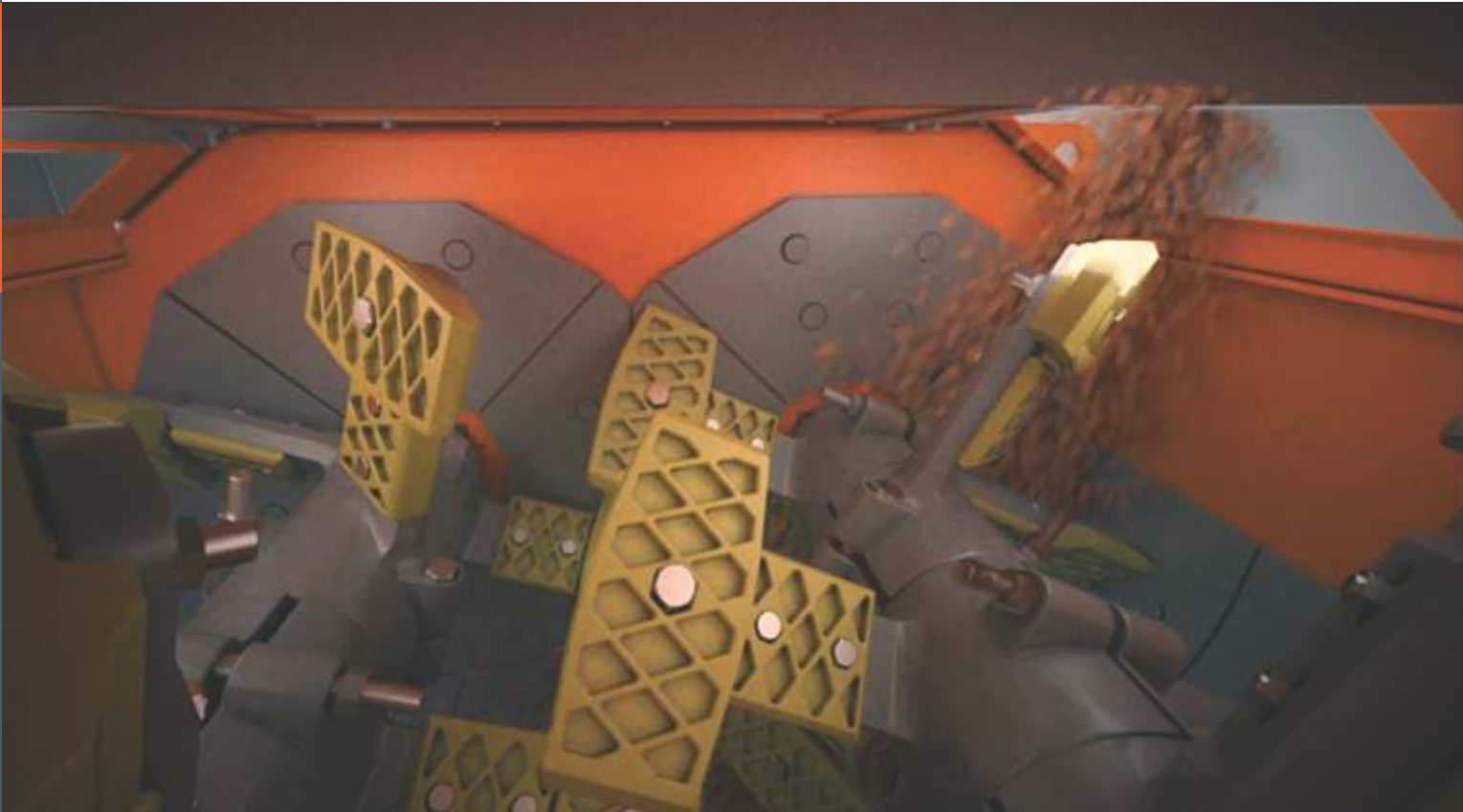
- > Avoids thermal energy dissipation of the dryer drum
- > Rapid stabilization and uniformity of temperature inside the dryer
- > Coated with stainless steel material





High performance special mixes

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Pug-Mill with dry mixing area

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

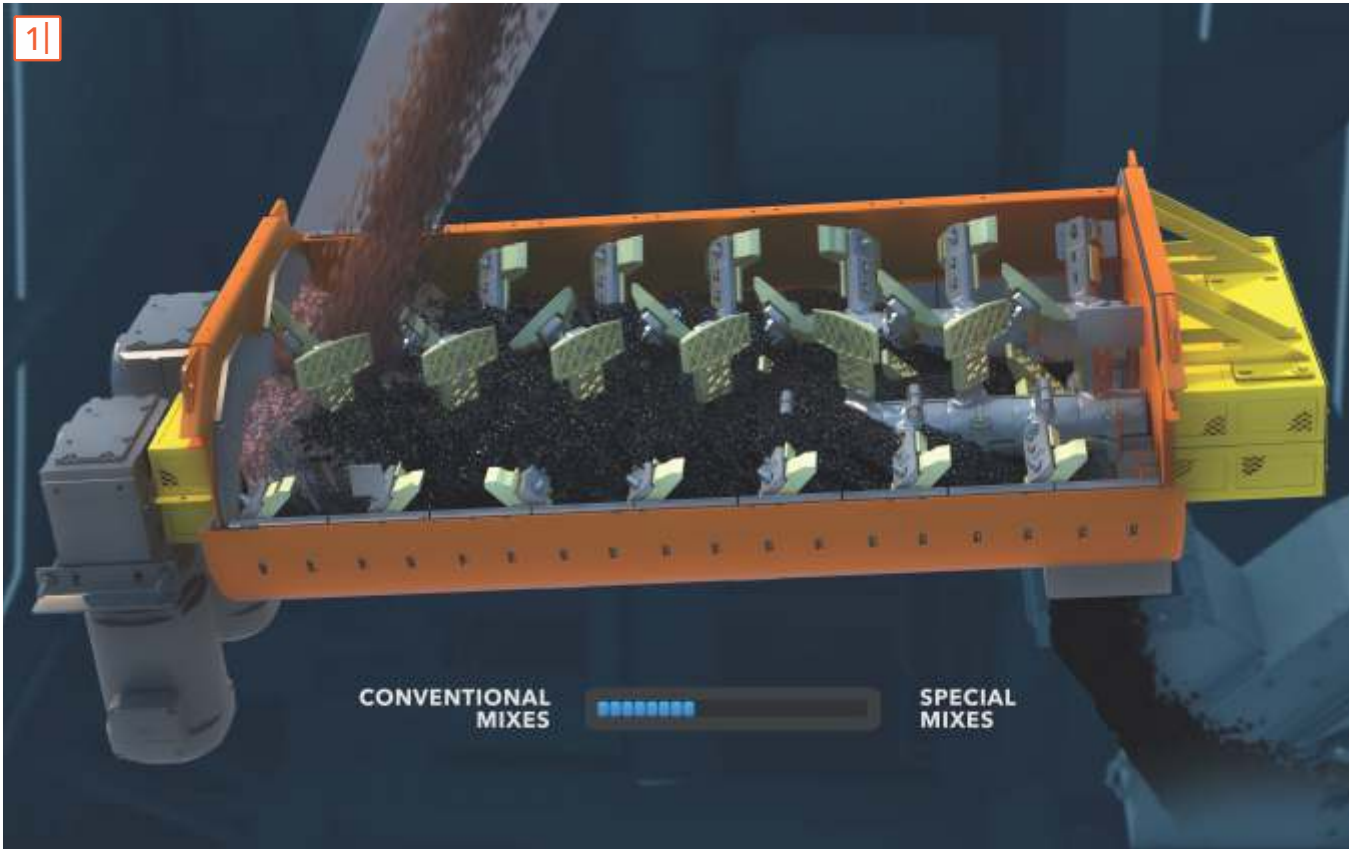
- > Homogenization of the aggregates before the asphalt cement injection and perfect dispersion of this binder in the aggregates
- > Important in applications using lime as adhesion improver
- > Essential requirement for special mixes using fibers and other additives

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



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

COMFORT AND ERGONOMICS FOR OPERATION

- > Air-conditioned cabin
- > Ergonomic and intuitive operation panel
- > Guarantee of total efficiency and safety of operation

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 (optional)

POWER PANEL

- > High degree of protection/sealing of components
- > Air conditioning to ensure the perfect temperature of electronics components



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.

Sistema inteligente de diagnóstico de falhas.

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

- > Mixer paddles 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 paddles
- > 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

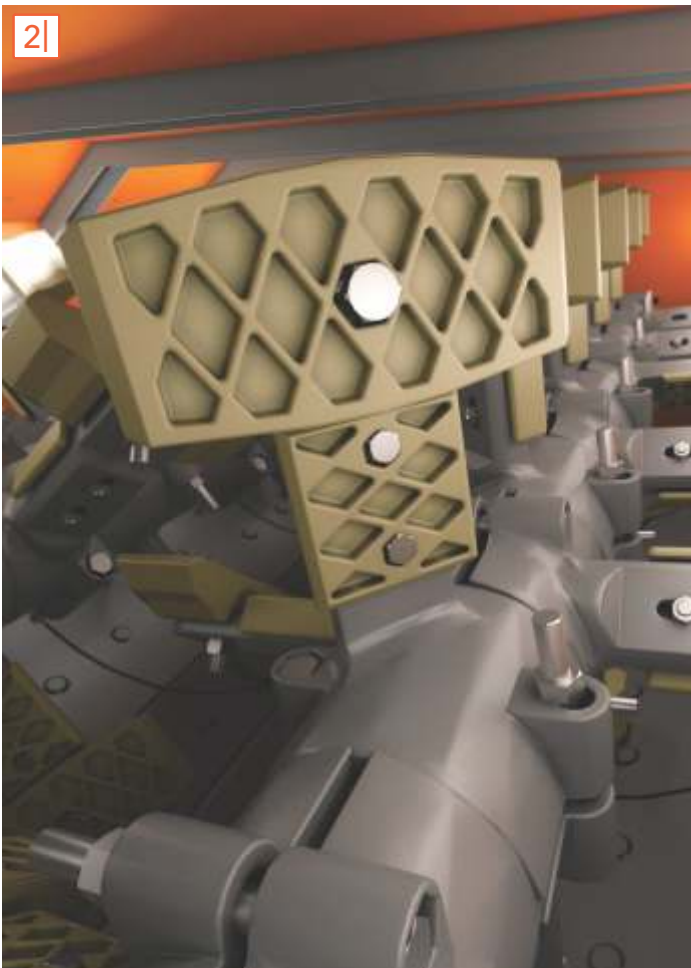


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1| Easy access to wear elements.

2| Longer-heavy-duty components such as Honey Comb paddles.

3| Each filter bag with total filtration area of 6.2m² that gives greater durability and less changes.



2|



3|

Data Sheet

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		iNOVA 1000
Production capacity	50 to 100 t/h	
Mobilities	1	
Axles/Tires mobility 1	3 / 12 (+	
Axles/Tires mobility 2	-	
Suspension / Brakes - mobility 1	Triple tan	
Suspension / Brakes - mobility 2		
Size	21.30 x 3.20 x 4.30m (L x W x H)	
Number of Bins		
Bin volume	2 of 10m ³	
Aggregate weighing		
Speed sensor		
Wall Vibrator		
Technology		
Burner		
Bag Filter	88 bags	
Filtering area	518 m ²	
Maximum filtration/production area ratio		
Filter efficiency		
Filter technology		
Technology		
Mixing steps		
Mixing time		
Cleaning		
Wear elements		
Asphalt Injection		
Mix Transport Technology		
Wear elements		
Bin volume	1	
Type		
Operation cabin		
Sistema de climatização		
Critical Control		
	OPER	
Feed bins	Fixed protections	
Dryer	Emerge	
Dryer / burner	Emerge	
Mixer	Emerge	
Bag Filter	Emerge	
Control cabin	Emergency button + Operating interface in	
Power Panel	Security PLC Command circuits with 2	

iNOVA 1500		iNOVA 1502		iNOVA 2000	
		75 to 150 t/h		100 to 200 t/h	
TRANSPORT					
				2	
1 spare)				2 / 8 (+ 1 spare)	
				3 / 12 (+ 1 spare)	
dem / ABS				Double tandem / ABS	
				Triple tandem / ABS	
21.30 x 3.20 x 4.30m (L x W x H)		13.90 x 3.20 x 4.30 / 17.10 x 3.20 x 4.30m (L x W x H)		13.90 x 3.20 x 4.30 / 19.00 x 3.20 x 4.30m (L x W x H)	
DOSING SYSTEM					
		4			
+ 2 of 5 m ³				10 m ³	
Individual dynamic weighing by centralized high precision compression load cells, with an individual capacity of 200kg					
Inductive sensor for speed check (pick up)					
3 standard vibrators in bin 1. Optional vibrators in bin 2					
DRYING SYSTEM					
Counterflow dedicated exclusively to the drying and heating of aggregates Smart drying system					
CIBER Total Air®					
FILTERING SYSTEM					
		132 bags		176 bags	
		777 m ²		1.091 m ²	
5,2 m ² /(t/h)				5,5 m ² /(t/h)	
Greater than 99.99%					
Pleated Bags					
Quick-change system with EasySpin tool					
MIXING SYSTEM					
External double-axled pug mill with arms and paddles					
Dry mixing and mixing with asphalt cement					
Configurable					
With lower deck					
High abrasion resistance material					
With sprinkling nozzles					
TRANSPORT AND STORAGE SYSTEM					
Redler type drag lift					
High abrasion resistance material					
m ³				2 m ³	
Maximum level sensor, anti-saturation window, anti-segregation plate, inspection flap					
CONTROL SYSTEM					
Metallic with side door, containing control panel, supervisory, buttons for actuation in manual and PLC					
Split air conditioning					
Automatic (supervisory) or emergency mode (by supervisor + manual operation buttons)					
SAFETY					
PROTECTION			PRODUCTION		
for mobile parts			-		
Emergency button			-		
-			Reading of the rotational speed with interlocking		
Emergency button			Flame sensor - UV photocell		
Emergency button			Pick up dryer monitoring		
Emergency button			-		
Emergency button			Temperature sensor		
Emergency button			Cold Air Damper		
Emergency button			Emergency valve		
internal audible alarm			-		
extra low voltage (24V)			-		
Monitoring			-		
counters connected in series			-		



Options

Options - iNOVA Series

HEAVY OIL KIT	To burn light and heavy oils
TETRAFUEL KIT	For burning light, heavy oils, liquid and natural gases
COMPRESSOR EXTENSION	Compressor position displacement as required
VIDEO CAMERA	Kit with 4 cameras
ADDITIONAL VIBRATOR	Kit of 3 vibrators in bin number 2
FILLER DOSING BIN	Bin of 2 m ³
FINE DOSING BIN	Bin of 4 m ³
FIBER DOSING BIN	Bin of 2 m ³
RECYCLING SYSTEM 25%	RAP in the mixer
ASPHALT FLOW METER	Volumetric or mass meter on request
FUEL FLOW METER	Open circuit operation
GRID	Oversize grid in feeder bins
TOOL BOX	Basic tool kit
ADDITIONAL DOSAGE BINS	Additional bins on request
PRINTER	Industrial printer
SPARE PARTS KIT	Kit with wear items
LEVEL INDICATOR	Aggregate level indicator
TRUCK-ASSISTANT	Light communication system between plant and truck
RADIO	Car radio installed in the cabin
MOISTURE SENSOR	Integrated into the plant's production process
STORAGE SILO	STA 50 P - Mobile asphalt mix storage silo, 50t capacity





- 1 | Filler dosing bin
- 2 | Fine dosing bin
- 3 | Fiber dosing bin
- 4 | RAP
- 5 | STA 50 P



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

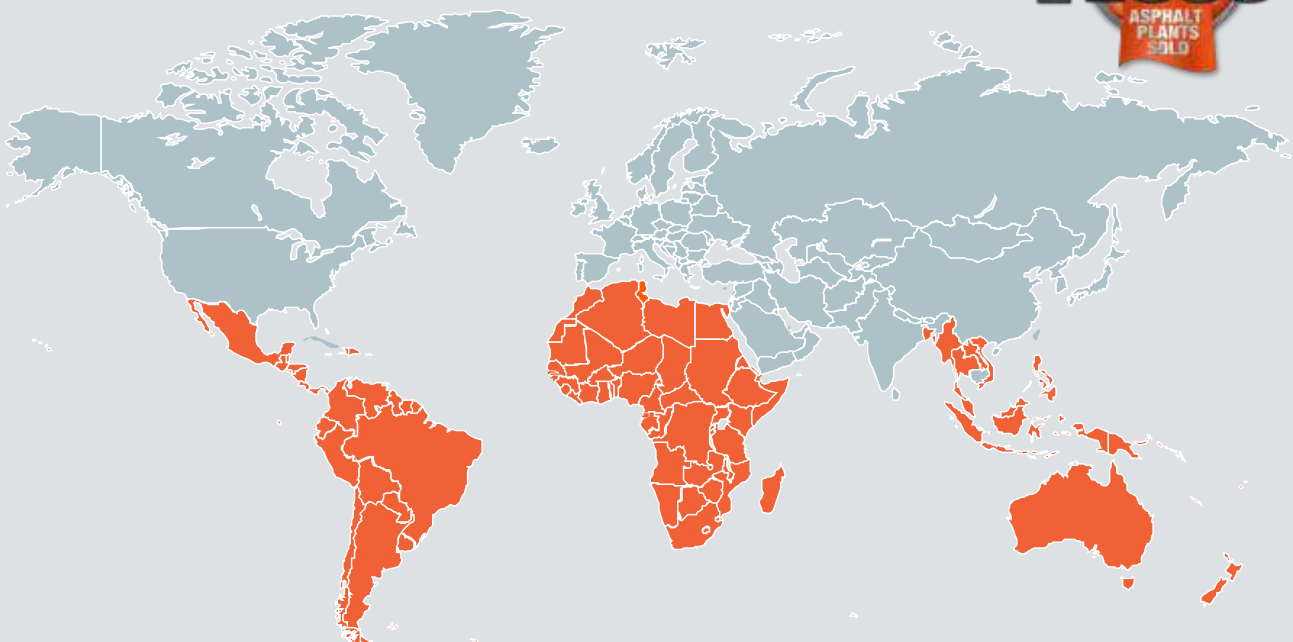
Find the right training for you and check out the seminar dates available.

www.ciber.com.br/en/customer-support/training/

Distribution of CIBER customer support around the world.

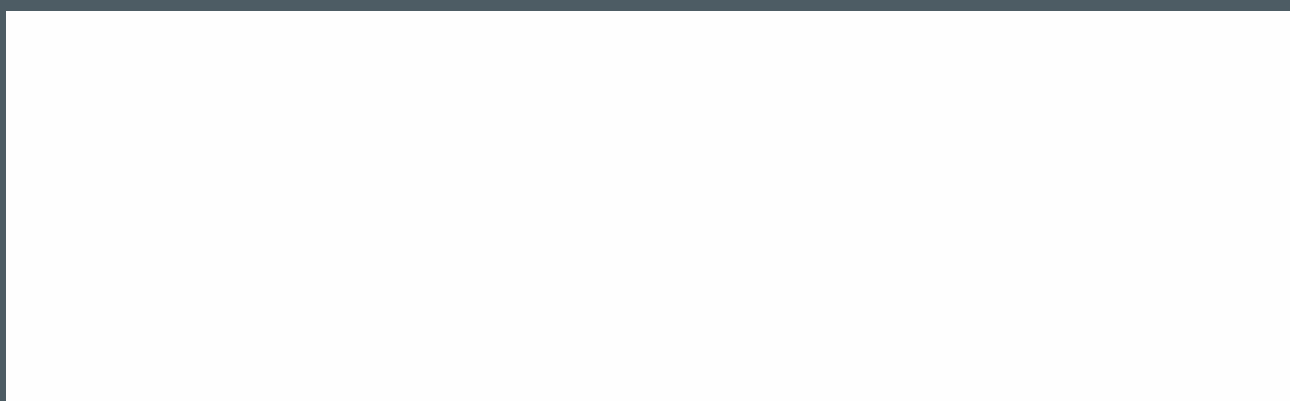
> For more information, see: www.ciber.com.br

+1900
ASPHALT PLANTS SOLD





WIRTGEN GROUP QUALITY STANDARD.



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