



Rua Senhor do Bom Fim, 177  
Porto Alegre - RS - Brasil

Fone: + 55 51 3364 9200  
Fax: + 55 51 3364 9222  
ciber@ciber.com.br  
www.ciber.com.br

UACF Advanced



HIGH TECHNOLOGY, FULLY MOBILE  
FAST COMMISSIONING AND RELIABILITY

## COUNTER-FLOW ASPHALT PLANTS ADVANCED SERIES



All of the pictures, illustrations, and specifications are based on current information on the date this publication was approved. Ciber Equipamentos Rodoviários Ltda. reserves the right to change specifications and designs and eliminate components without previous notice. The performance data depends on the conditions of the plant site.

Publication date: December 1, 2007 – No. 703000



Fully mobile without the need of cranes

Perfect control in the dosing of the aggregates

**ASPHALT MIXTURES THAT COMPLY WITH THE STRICTEST WORLD QUALITY STANDARDS**

## PORTABLE ASPHALT PLANT WITH COUNTER-FLOW DRYING AND EXTERNAL MIXING

### Counter-flow Asphalt Plant Advanced Series

The asphalt plants from the Advanced series combine a fully mobile structure to the continuous production concept of counter-flow drying and external mixing by a pug-mill, resulting in a mixture quality compared to the batch plants. It is a line of versatile and reliable equipment that can be adapted to different materials and weather conditions. There are three options of production ranges, which make them applicable for several different sizes of projects.

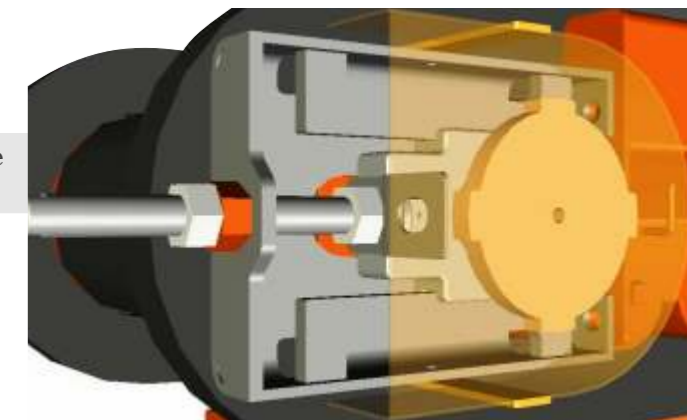


## INDIVIDUAL WEIGHING SYSTEM

Dynamic weighing of the aggregates is done by means of a robust and high precision load cell together with a superb stability signal converter that ensures the control in the dosing of the aggregates.



Gear ride on the front roller

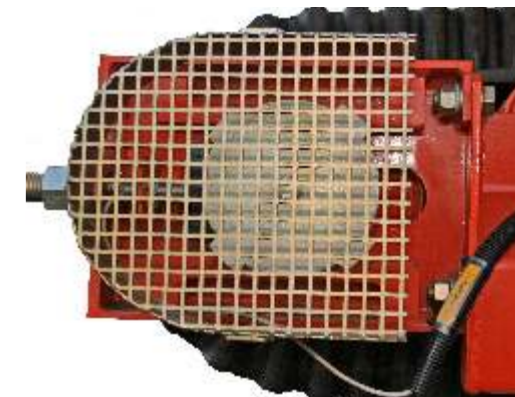


Speed sensor on the rear roller

### HIGH PRECISION PRODUCING ASPHALT MIXTURES

Speed sensor on the rear roller  
Continually checks the belt speed: self-monitoring and total protection against slippage.

Gear motor on the front roller  
Frequency inverter inset, which eliminates risk with electrical interferences on the scales.





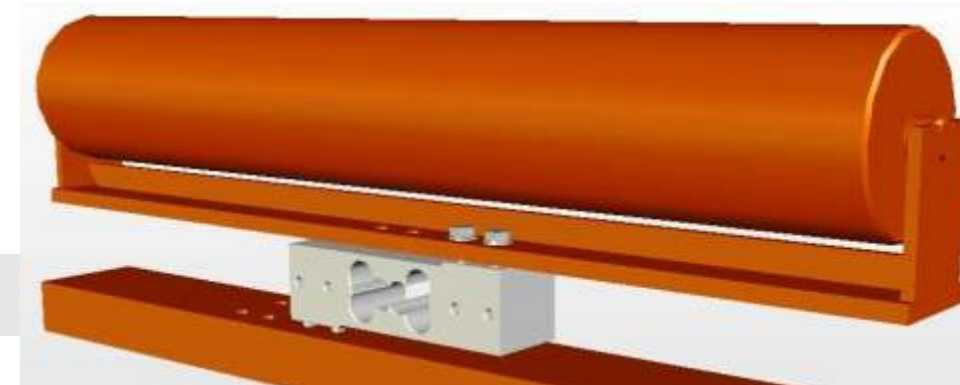
Dosing belts with vulcanized side guards



Manual floodgate



Collecting belts and conveyors with scrapers



Lathed and balance weighing rollers

## FEATURES THAT ADD VALUE TO THE PRODUCING PROCESS

**Dosing Belts**  
Require low maintenance and provide precision weighing without losing aggregates. They are flat, easily aligned and set for tension, and they distribute uniformly the weight from the load of the aggregates on the weighing rollers.

**Manual floodgate**  
Its smooth operation makes it possible for the belt to work at ideal speeds, which generates loading stability and a long lifetime.

**Versatile configuration**  
Possibility of setting the plan up to 5 bins. Top opening 3 meters wide, which make them easier to load and avoids inter-bin aggregate contamination. Gives the option of using grates for impurity retention.

PERFECT CONTROL OVER THE DOSING OF AGGREGATES

**Wall vibrator**  
Activated by the operator or automatically in the case of lack of material in the belt.

**Lathed and balance weighing rollers**  
Complement the high level of precision provided by the self-adjusting system.

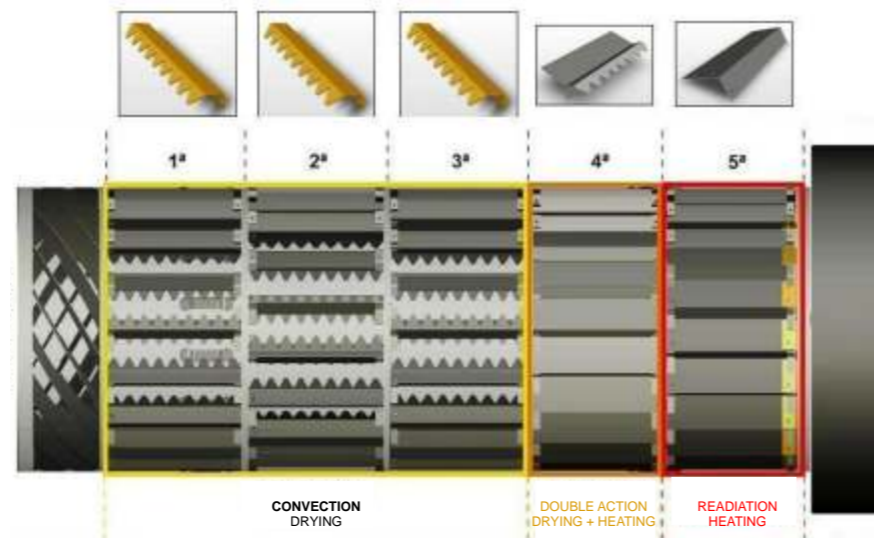
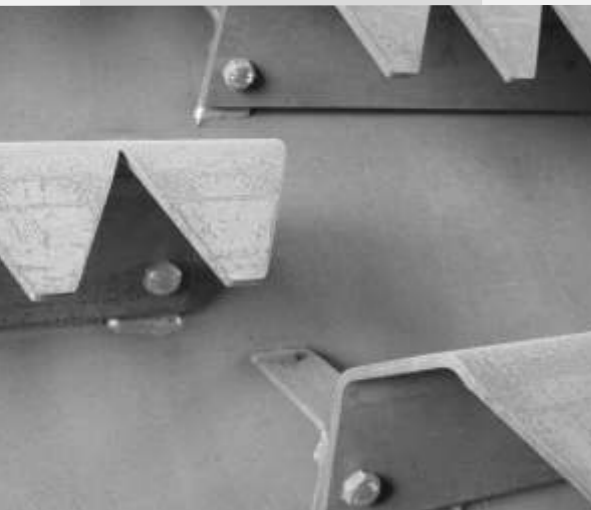
Wall vibrator  
\* Standard Bin I





Each region of the dryer has different types of blades that have specific functions

Perfect distribution of the blades. Greater efficiency of thermal exchange.



## EFFICIENCY IN HEATING THE AGGREGATES

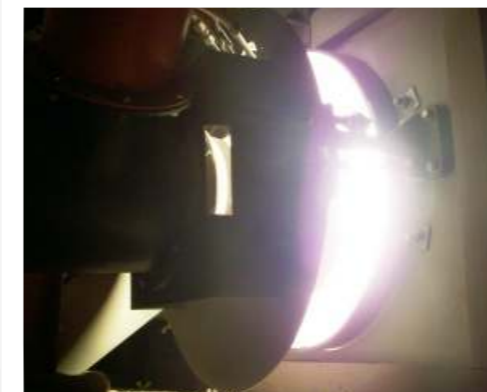
Counter-flow dryer

Completely dedicated to drying, heating, and pre-homogenization of the aggregates. It operates a counter-flow system where the heat is gradually applied on the aggregates, respecting the physical laws for extracting humidity, ensuring high productivity and low fuel consumption.

Designed using advanced computer-simulation systems, with blades so that the application of the heat on the aggregates is done gradually in order to eliminate humidity and result in ideal heating conditions until reaching the temperate stipulated.



HIGH PRODUCTION AND LOW FUEL CONSUMPTION



Ciber Burner for fuel oils (light and heavy)  
Ciber Dual Burner for LPG and optional for fuel oils

Hauck Dual Burner for natural gas and fuel oils (light and heavy)  
\*Optional

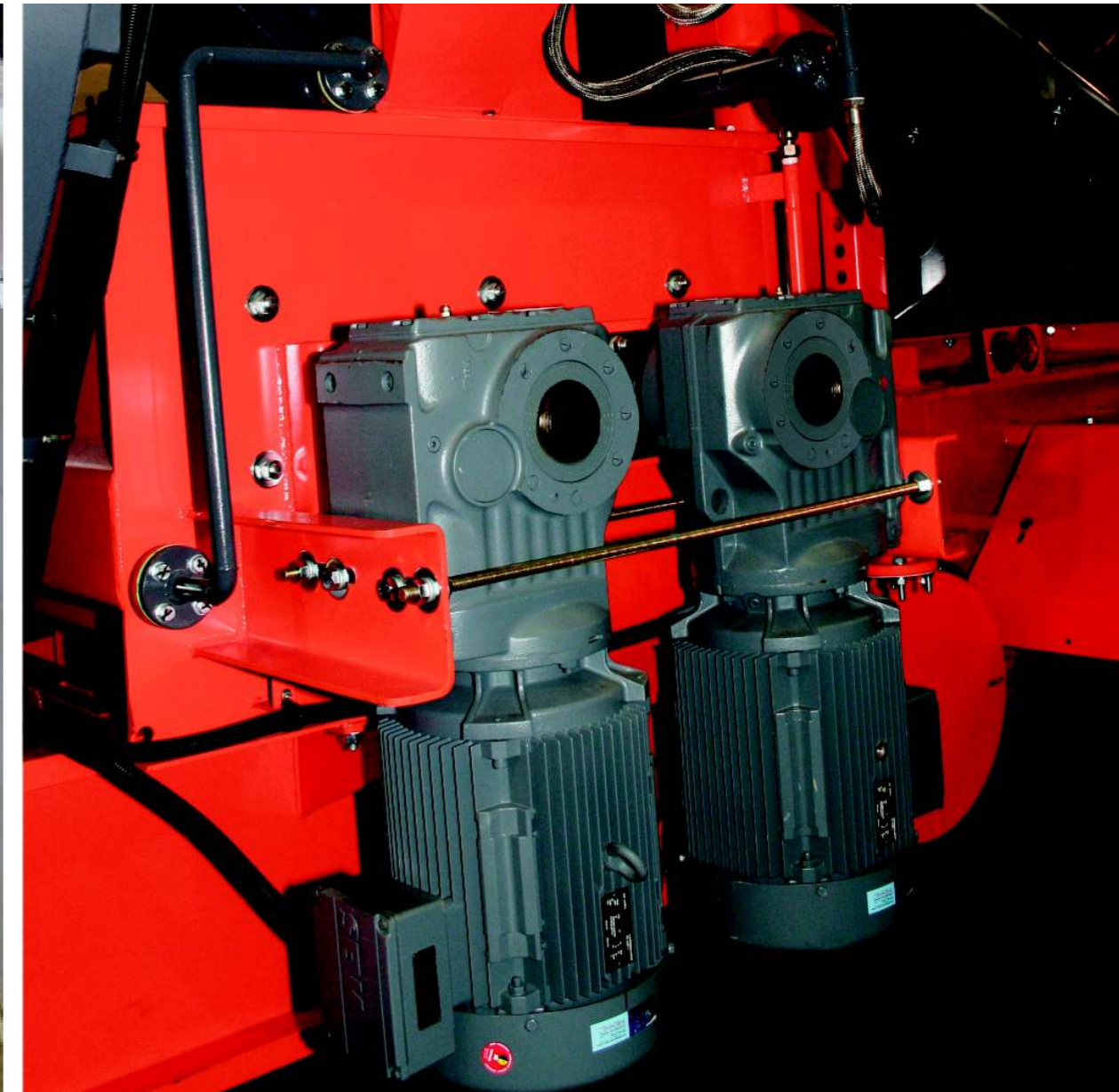


Burner

Operates under the principle of low-pressure spraying, ensuring the ideal condition of oxygen for complete combustion.

The dose of air as well as of fuel is proportional and independent, ensuring a perfect and total burn at all the levels of power. The result is the complete use of the fuel with high production and low consumption.

Since the fuel chamber is made out of stainless steel and does not use refractory stones, there is not wear on it. The level of maintenance is minimal.



## PRODUCTION OF HIGH QUALITY MIXTURES

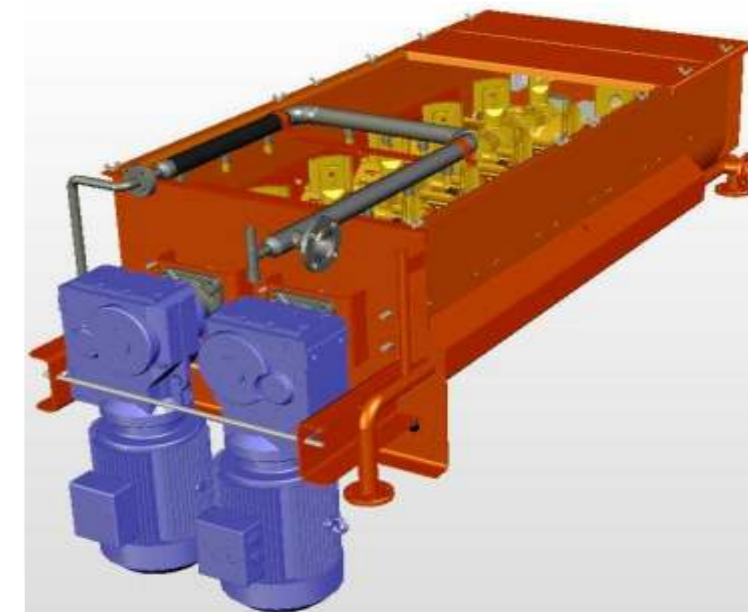
### External Mixer

Completely external mixing process using the pug-mill type mixer, 2 synchronized, symmetrical and parallel shafts with arms and paddles.

Completely internally protected mixer with highly durable wearing plates divided into small section, which make them easy to replace and more cost-effective.

### PRODUCTION OF MIXTURES WITH DIFFERENT TYPES OF BINDING AGENTS

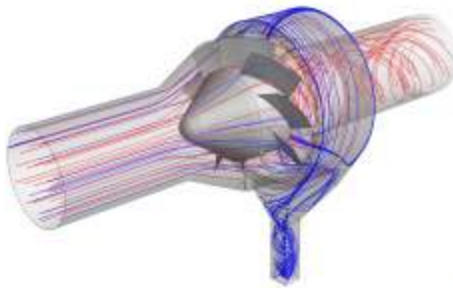
- Force applied directly on the mixture.
- Heating system by thermal fluid, keeping it at an ideal temperature.
- Mixer and conveyor set for cold mix production as an option.





STRICT CONTROL OVER THE EMISSION OF PARTICLES. THIS IS DEVELOPMENT GIVING A PLACE OF PRIORITY TO PRESERVING THE ENVIRONMENT.

Pre-collector of particulates



## ADVANCED SOLUTIONS THAT RESPECT THE ENVIRONMENT

Pre-collector of particulates

The static separator type of pre-collector is highly effective in reducing the particulates retained in the mesh 200 ( $> 75\mu\text{m}$ ), which results in a longer life of the filtering elements.

Bag filter

Using polyester-lined pleated bags, the filtering of particles takes place at the surface. This keeps the component free from getting impregnated with the dust and therefore increases durability and results in less loss of load and very lower emission rates. It also has an exclusive system for controlling the reuse and proportion of fine solids in the mixture.



HIGHLY DURABLE PLEATED BAGS

Bag filter



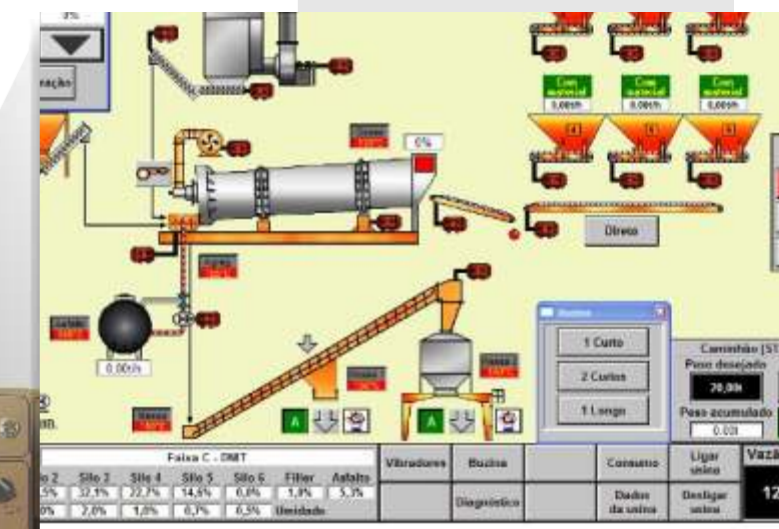


Operational Station



THE CONTROL CABIN IS SPACIOUS AND COMFORTABLE FOR THE OPERATOR

The "Overview" screen is to visualize the operation of all the equipment's parameters.



## COMFORT AND RELIABILITY

It is air-conditioned and the operations are laid out in an ergonomic way. The design makes optionally to install the cabin disconnected from the chassis frame. Easy access air-conditioned electric panel.

Advanced processing software calculates the flow needed for each bin individually and auto-adjusts real-time in order to reach perfect dosing results.

The plug-and-play software is ready to receive any one of the options offered at any time, without the need of replacement of hardware or software.



CONTROL PANEL USES AN INTERACTIVE 15-INCH SCREEN, WITH TOUCH-SCREEN TECHNOLOGY



Plant with an Asphalt Storage System

## OPTIONAL FEATURES

### Asphalt Storage Silo

A logistical alternative is the asphalt storage system with capacities of 30 and 40 metric tons.

### Fine Aggregates Feed Bin

An independent fine aggregates system makes it possible to add lime, cement, polymers, or fibers directly into the mixer.

It also can be used to remove excess fine aggregates.



Unloading of excess fine aggregates



Inspection Platform for the Bins

# TECHNICAL SPECIFICATIONS

	UACF 15 P ADVANCED		UACF 17 P ADVANCED		UACF 19 P-2 ADVANCED	
PRODUCTION CAPACITY	40 – 80 t/h		80 – 120 t/h		100 – 150 t/h	
CHASSIS						
QUANTITY	P-1	P-2	P-1	P-2	P-2	
	1	2	1	2	2	
NUMBER OF AXLES	2	1 METERING CHASSIS - 2 DRYER CHASSIS	3	1 METERING CHASSIS - 2 DRYER CHASSIS	1 METERING CHASSIS - 3 DRYER CHASSIS	
NUMBER OF TIRES	8	4 METERING CHASSIS - 8 DRYER CHASSIS	12	4 METERING CHASSIS - 8 DRYER CHASSIS	4 METERING CHASSIS - 12 DRYER CHASSIS	
FEED BINS						
NUMBER OF FEED BINS	3 STANDARD	4 STANDARD	3 STANDARD	4 STANDARD	4 STANDARD	
	UP TO 4 OPTIONAL	UP TO 5 OPTIONAL	UP TO 4 OPTIONAL	UP TO 5 OPTIONAL	UP TO 5 OPTIONAL	
CAPACITY	7.2 m <sup>3</sup> WITH STANDARD ADD-ON EXTENSIONS / 10m <sup>3</sup> WITH OPTIONAL ADD-ON EXTENSIONS					
AGGREGATE WEIGHT READING	DYNAMIC READING BY MEANS OF A LOAD CELL WITH HIGH PRECISION COMPREHENSION.					
BELT	FLAT, CLOSED, MADE OF VULCANIZED RUBBER, WITH ACCORDION-TYPE SIDE BANDS.					
DRYER						
TYPE	METAL ROTATING CYLINDER, OPERATING IN COUNTER-FLOW, WITH BOLTED, MOVEABLE BLADES.					
BURNER						
MODEL	CIBER MC-8		CIBER MC-10		CIBER MC-10	
SAFETY SYSTEM	THE PHOTO-CELL TYPE FLAME SENSOR CUTS THE FUEL IF THE FLAME IS NOTICED TO BE OUT.					
EXHAUST SYSTEM						
PRE-SEPARATION	STATIC-TYPE PRE-SEPARATOR					
FILTERING AND RECOVERY	HIGHLY EFFECTIVE BAG FILTER					
NUMBER OF BAGS	72		144		216	
FILTERING AREA	360 m <sup>2</sup>		720 m <sup>2</sup>		1.080 m <sup>2</sup>	
EFFICIENCY OF THE BAG FILTERS	MORE THAN 99.5% - EMISSION OF PARTICULATE MATERIAL IS LESS THAN 50 mg/Nm <sup>3</sup>					
MIXER						
TYPE	COMPLETELY EXTERNAL MIXER OF DIRECT INJECTION, PUG-MILL TYPE, 2 TWIN SHAFTS, SYNCHRONIZED FOR OPPOSITE ROTATION.					
ELEVATOR						
TYPE	REDLER-TYPE, CLOSED, DRAG ELEVATOR.					
UNLOADING SILO						
TYPE	METAL UNLOADING SILO WITH CAPACITY OF 1M <sup>3</sup> OR 2M <sup>3</sup> MOUNTED ON THE ELEVATOR – UNLOADING OPTION OF 30 T AND 40 T, FIXED OR PORTABLE, WITH THEIR OWN CHASSIS.					