

# WHY CIFA



**Truck Pumps**  
**CARBOTECH Series**





WHY  
CIFA



# FIRST IN INTRODUCING CARBON FIBER IN CONSTRUCTION MACHINERY

Ahead of their times, innovating constantly the products. A commitment that, since the beginning, has seen us as key players, making the story of this industry. The introduction of carbon fiber in the construction of Carbotech series booms places itself in this journey, with the goal of improving performances of our equipments and quality of the job of those who use them every day in the job site.



MANUFACTURING FACILITIES



READY FOR DELIVERY



LEAN PRODUCTION

## LEASING



Available in Italy, Russia, China, South Africa, Australia, USA

## MOUNTED ON ALL TRUCK BRANDS



CIFA truck pumps can be mounted on all truck brands. According to CIFA truck specifications documentation

## ITALIAN DESIGN



## TRAINING FOR OPERATORS



### PLACING BOOMS

Available lengths to reach all distances: from 131 to 262 feet.



### PUMPING UNITS

Two closed loop types according to the desired way of pumping.



### CONTROL SYSTEMS

Designed and positioned to facilitate job and to speed-up all operations.



### STABILIZATIONS

Different types of stabilization in order to guarantee a safe work in a small area.



### SAFETY

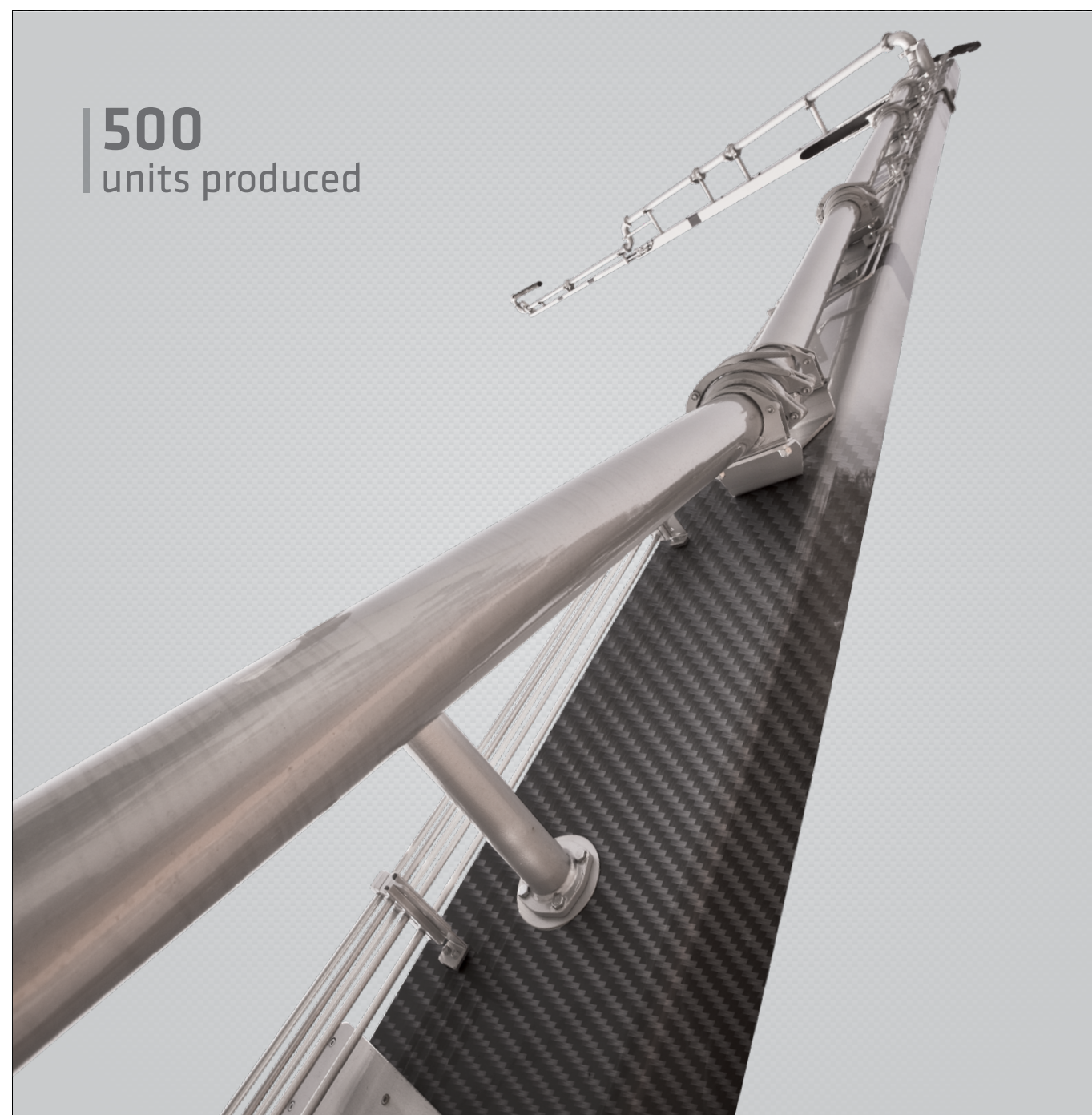
Different systems to work and move the boom in all its configurations in total safety.



### FINISHING

Customized painting available upon customers' request.

500  
units produced





# CARBOTECH SERIES: THE REVOLUTION IN CONCRETE DISTRIBUTION

In 2010 CIFA introduced the use of composite materials in the machinery construction industry, making a series of concrete distribution booms with this innovative technology. Thanks to the growing market demand, CIFA offers to the market a wider range of Carbotech Series, from 131 to 262 meters boom.



CARBOTECH

CIFA Carbotech Video



Lighter and, so, longer; but at the same time stronger and more resistant. CIFA Carbotech booms allow to obtain unparalleled results, overcoming inviolable limits, in terms of heights and lengths.

## +20% Stronger

**TO WITHSTAND THE HARDEST STRESSES**  
Composite materials offer higher resistance to strains and fatigue compared to steel.

## -25% Weight

**LIGHTER, ALSO IN TRANSFERS**  
To respect legal limits and at the same time to save fuel in transfers compared to traditional pumps of the same length.

## +20% Length

**LONGER, TO GET ANYWHERE**  
Greater boom length means less placings of the pump on the job site.

**500**  
units produced  
until today  
(October 2022)

# LIGHTNESS, LENGTH AND STRENGTH BEYOND ANY LIMIT





# PLACING BOOM

## STRENGTH AND RELIABILITY:

The booms mounted on CIFA truck pumps combine both strength and reliability. Each section of the boom has been designed for maximum structural resistance and fatigue strength. All Carbotech booms are tested against fatigue at the TEC testing center, allowing us to certify the life of these components with a 5 years warranty.



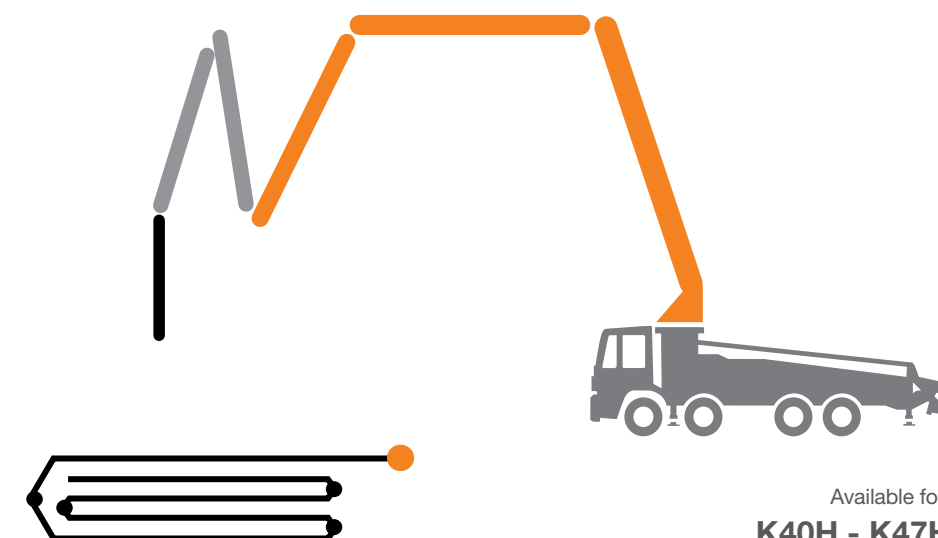
## VERSATILITY AND FLEXIBILITY:

The different configurations of the booms on CIFA truck pumps ensure the greatest operative versatility and enable to reach almost any part of the construction yard, even those accessible with the most difficulty. Complete working flexibility together with great working speed, allows the complete extension of the boom and its perfect and fast positioning.



## RZ type

It provides maximum flexibility by combining R+Z solutions.



Available for:  
**K40H - K47H**

# FOLDING SYSTEMS

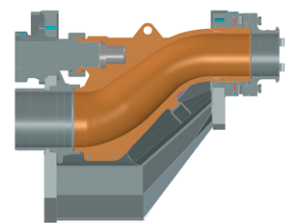




Completely removable, the pumping unit ensures gentle, continuous and regular flow. This technology guarantees an extremely efficient system for pumping different types of concrete, with aggregates of all sizes, reducing the number of cycles per minute while maintaining the same flow rate, thus ensuring less wear and longer life.



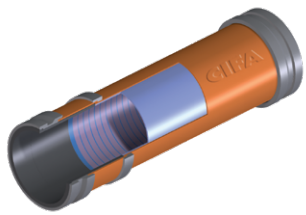
# PUMPING UNIT



**“S” VALVE:**  
The structure is made with varying thickness to achieve maximum resistance to wear even when using difficult types of concrete.



**WEAR RING AND WEAR PLATE:**  
The ring and the plate are made of special anti wear material against abrasion and stress due to the concrete flow.



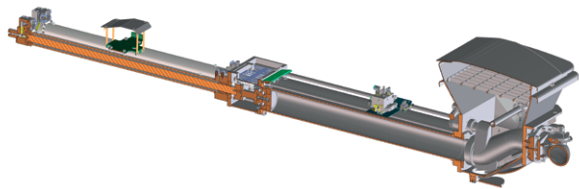
**CIFA LONG LIFE PIPES MADE BY CIFA**  
CIFA truck pumps have long life pipes as standard equipment. LLT (Long Life Top) version available as option or as standard supply according to model.



CIFA truck pumps have the first bend outside the pumping unit in long life pipes as standard equipment.

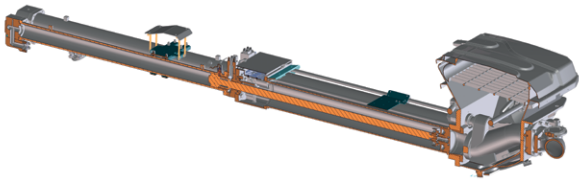
CARBOTECH

## Closed Loop: Electronic management



### HP1608EC

Available for:  
K40H - K47H



### HP1808ECX

Available for:  
K47H

PUMPING UNITS		HP1608EC	HP1808ECX
MAX. THEORICAL OUTPUT	yd³/h	210	235
MAX. PRESSURE ON CONCRETE	psi	1160	1203
MAX. NUMBERS OF CYCLES PER MIN.	n	31	27
CONCRETE CYLINDERS (DIAM. X STROKE)	inch	9" x 83"	10" x 83"
CONCRETE HOPPER CAPACITY	gal	145	159
HYDRAULIC CIRCUIT	type	closed	closed

## The quiet pumping system

A revolutionary system to drastically reduce vibrations, wear and noise. The “core” of the vibration is caused by the pumping unit movement therefore the system is placed in the 3 main fixing points and, thanks to the rubber absorbers, it reduces the vibrations transferred to the frame keeping the boom still while pumping.

- Low vibration
- Low noise
- Higher comfort of use
- Improved balancing while working
- Less wearing of key components



Rear Damping System



Front Damping System





# CONTROL SYSTEMS



## WIRED VIBRATOR AND HORN REMOTE

Convenient cable control dedicated to the mixer driver. It can be used from both sides of the hopper.



## HYDRAULIC OUTRIGGERS CONTROL

Hydraulic controls on both sides of truck pump. The machine emergency stop is also positioned nearby.



## BOOM PROPORTIONAL DISTRIBUTOR

Ergonomic hydraulic controls for boom.



## REAR CONTROL PANEL

Control panel positioned on the rear side.



## REMOTE CONTROL

Comfortable and lightweight for boom control and the management of the main machine functions. Different models and brands available.



## DETACHABLE ELECTRICAL SYSTEM

The electrical system can be detached for easy maintenance.

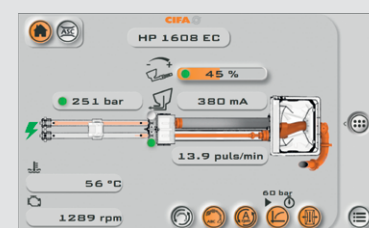
# Smartronic®

Smarttronic is the most advanced machine management system for truck-mounted pumps. It oversees every functionality providing a clear and user-friendly interface. It is available in the silver and gold versions as standard on Carbotech series according to the pump model. The gold version can be completed with the Smarttronic advanced package delivering an additional set of features

## GOLD

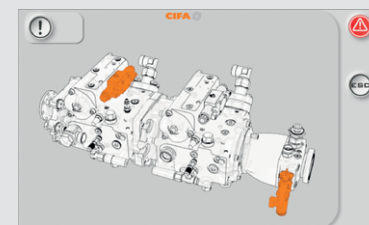


DISPLAY LCD 7"



## PUMPING UNIT MANAGEMENT

Automatic hopper-grid vibration

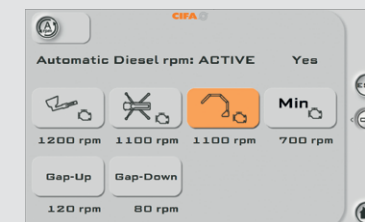


## DIAGNOSTICS

In case of fault, the operator is guided to understand what's the subpart involved and graphically guided to understand the issue.



## COUNTERS



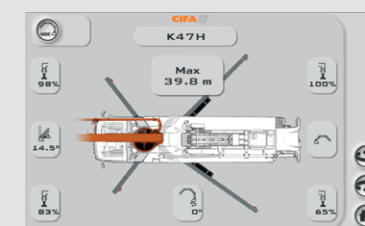
## AUTO RPM

Fully adjustable automatic truck RPM management



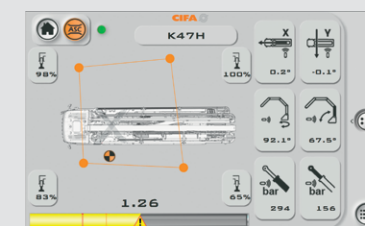
## RAMPS MANAGEMENT

Fully adjustable pumping ramps management



## MBE

Max Boom Extension



## ASC

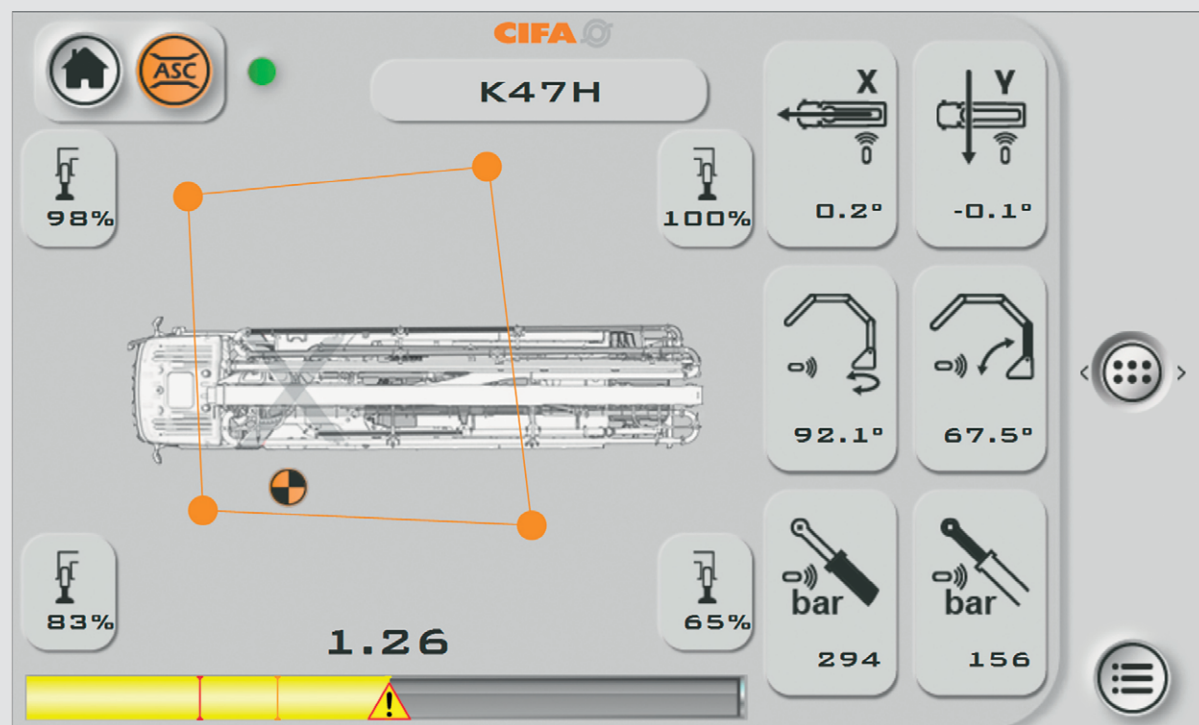
Advanced Stability Control



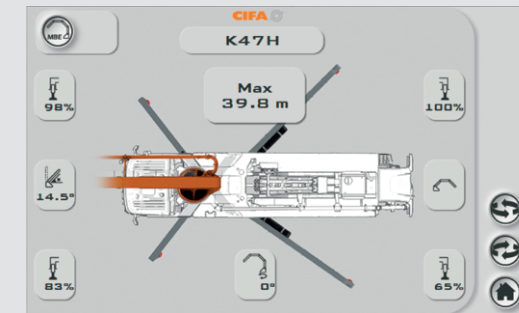
# ASC ADVANCED STABILITY CONTROL

(complying EN 12001:2012)

The ASC system, included in SMARTRONIC GOLD, controls the stability of the truck-mounted pump in real time, in every short-rigging condition. The system is intelligent and maximizes the area reachable by the boom tip according to the actual outriggers configuration. When approaching the stability limit condition the boom is at first slowed down and then even stopped preventing a critical condition.

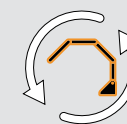


# MBE MAX BOOM EXTENSION



Max Boom Extension is part of the Smartronic GOLD features together with the Auto RPM and the Advanced Stability Control. This function helps the operator to know the maximum distance reachable with the boom with a partial opening of the outriggers, before opening the boom.

# SMARTRONIC ADVANCED



## Automatic Boom Folding and Unfolding

The function allows to open and close the boom automatically using a dedicated command on the radio remote.



## ASC 2.0

Gives the possibility to move some boom sections even when the limit of the safety coefficient is reached.



## Antibouncing System

The Anti-Bouncing function strongly reduces boom oscillations (up to -25%).



## Radio remote control with display





# STABILIZATION

The front stabilization is available in four design concepts: single horizontal, single, double and triple telescopic-X-style outriggers.  
The rear stabilization is available in three design concepts: fixed, single extension and swing-out. Each machine has its stabilization system according to the size of the boom.

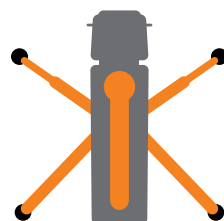
Front: **Single telescopic X style**  
Rear: **Swing-out**

Available for:  
**K40H**



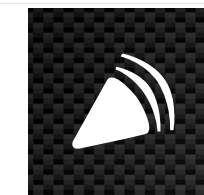
Front: **Double telescopic X style**  
Rear: **Swing-out**

Available for:  
**K47H**



All outriggers are designed to stabilize the machine in the right way in extraordinary tight spaces.  
The sequences of the extension phase are quick in order to accelerate the stabilization.

# SAFETY



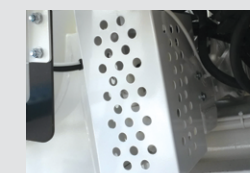
MECHANICAL LOCK  
FOR ALL OUTRIGGERS



WATER BOX GRID  
PROTECTION



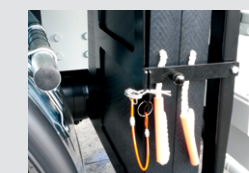
HOPPER GRID  
LIMIT SWITCH



PROTECTION FOR  
S-VALVE CYLINDERS



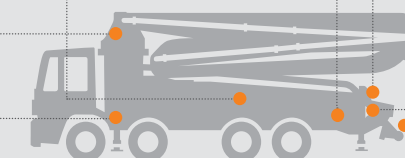
BOOM ROTATION LIMIT  
SWITCH



SUPPORT PLATES  
HOLDER



OUTPUT BEND  
LOCKING SYSTEM





# OPTIONS

## LIGHTS HOLDER UNDER THE HOPPER



CIFA VISTA: Remote machine monitoring



Pumping unit dampening

## TWO DIFFERENT TYPES OF SHUT OFF VALVE AS OPTION

The shut-off valve stops immediately the flow of the concrete.



Shut Off valve on endhose



Shut Off valve in pipeline



Activation by remote control



High pressure water pump



Air compressor for pipeline cleaning



Hopper cover



Rear camera

List of other components available on demand



Wood stocks holders



Ladder to fuel tank access



Light on boom

# DATA SHEET

CARBOTECH



## CARBOTECH K40H

PLACING BOOM	B5HRZ 40/36
PUMPING UNIT	160 m³/h 80 bar 210 yd³/hr 1160 psi
DRIVEN BY	GEAR BOX
CHASSIS	3 AXLES



## CARBOTECH K47H

PLACING BOOM	B5HRZ 47/43
PUMPING UNIT	160 m³/h 80 bar 210 yd³/hr 1160 psi
	180 m³/h 83 bar 235 yd³/hr 1203 psi
DRIVEN BY	GEAR BOX
CHASSIS	4 AXLES





K47H - ITALY



K40H - SPAIN



K60H - FRANCE



K47H - USA



K53H - GERMANY



K40H - BELGIUM



K80H - POLAND

# JOB SITES





Discover more at [www.cifa.com](http://www.cifa.com)

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