CIFA

A ZOOMLION COMPANY

WHY CIFA

Truck Pumps
CARBOTECH Series

WHY CIFA

WE BUILD YOUR WORLD SINCE 1928

Since 1928, CIFA has been a technological leader in the production, transport and management of concrete. Thanks to its customized machines on demand, Service team always keen to provide technical support, award-winning Italian design and cutting-edge R&D and Testing European Center, CIFA has been providing innovative solutions for over 95 years.

RESEARCH AND EXPERIMENTATION CENTRE

ON-SITE TECHNICAL SUPPORT

CURIOSITY to increase satisfaction day after day

INGENUITY to turn products, strategies and visions into reality

FLEXIBILITY to adapt and react to any circumstance

ATTENTION to ensure long-lasting construction

C I F A

CIFA IDENTITY

CUSTOM MACHINES AND TAILORED SOLUTIONS

SUSTAINABILITY

TRAINING FOR OPERATORS

CIFA ACADEMY

MOUNTED ON ALL TRUCK BRANDS

MADE IN EUROPE ITALIAN DESIGN

PLACING BOOMS
Available lengths to reach all distances: from 40 meters to 80 meters.

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.

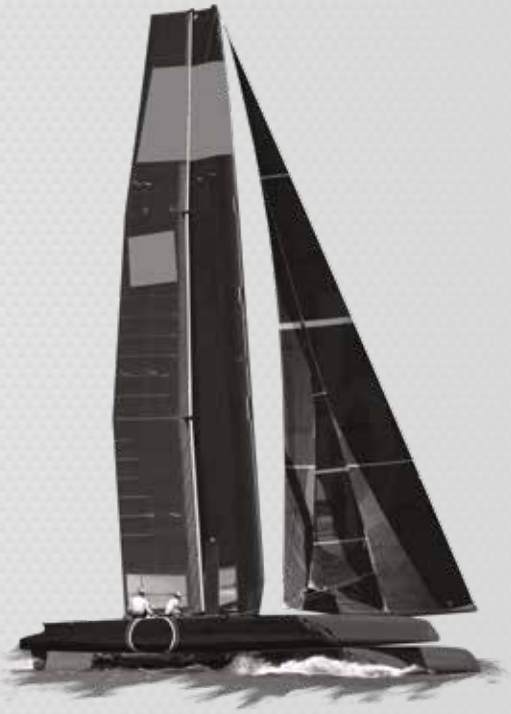
STABILIZATIONS
Different types of stabilization in order to guarantee a safe work in a small area.

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

FINISHING
Customized painting available upon customers' request.

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 40 to 80 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 trasfers 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.

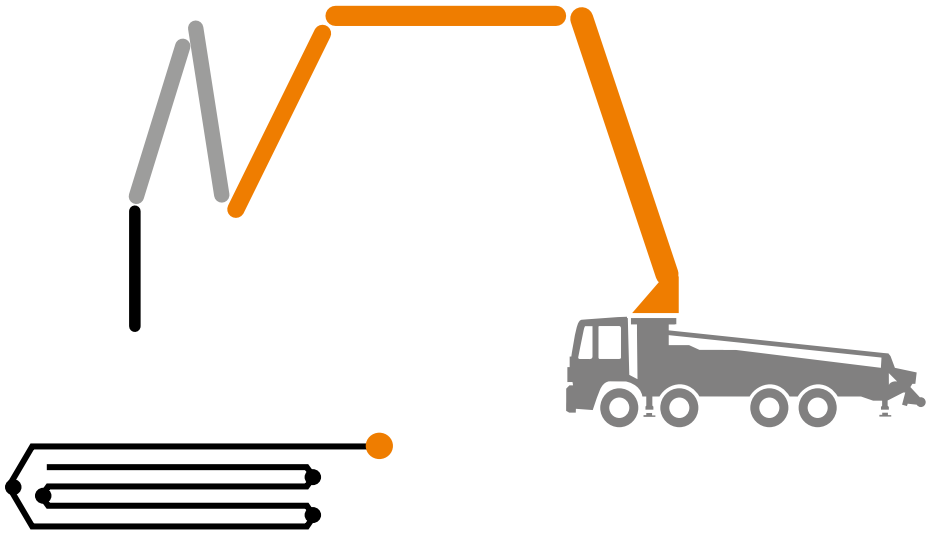
VERSATILITY AND FLEXIBILITY:
The different configurations of the booms on CIFA truck pumps ensure the greatest operative versatility and enable to reach almost any part of the construction yard, even those accessible with the most difficulty. Complete working flexibility together with great working speed, 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 - K53H

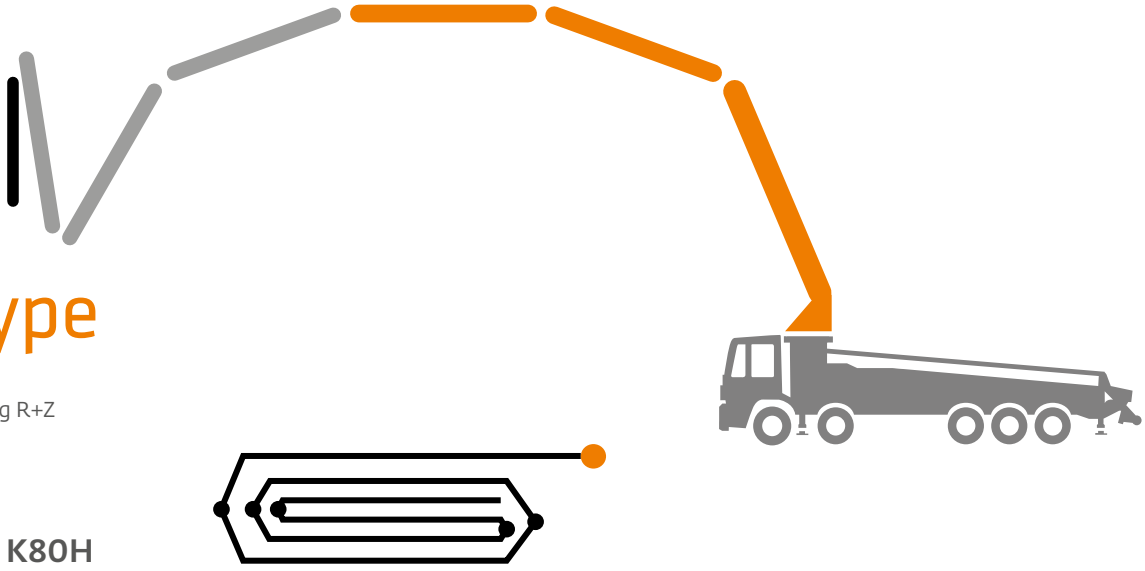


RRZ Type

It provides maximum flexibility by combining R+Z solutions.

Available for:

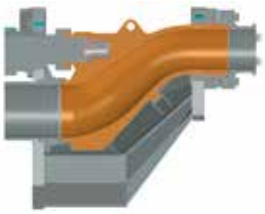
K60H - K67H - K80H



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.

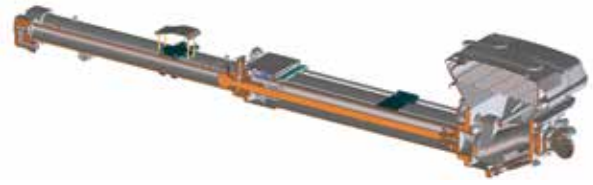
CIFA truck pumps have the first bend outside the pumping unit in long life pipes as standard equipment.

Closed Loop: Electronic management

HP1608EC

Available for:

K40H - K47H



HP1808ECX

Available for:

K47H - K53H - K60H - K67H - K80H

PUMPING UNITS		HP1608EC	HP1808ECX
MAX. THEORICAL OUTPUT	m^3/h	160	180
MAX. PRESSURE ON CONCRETE	bar	80	83
MAX. NUMBERS OF CYCLES PER MIN.	n	31	27
CONCRETE CYLINDERS (DIAM. X STROKE)	mm	230x2100	260x2100
CONCRETE HOPPER CAPACITY	l	550	600
HYDRAULIC CIRCUIT	type	closed	closed

V-Stop

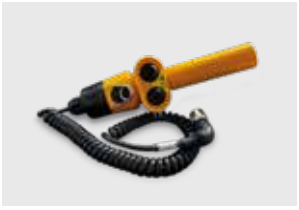
A revolutionary system to drastically reduce vibrations, wear and noise. The "core" of the vibration is caused by the pumping unit movement therefore the system is placed in the 3 main fixing points and, thanks to the rubber absorbers, it reduces the vibrations transferred to the frame keeping the boom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

Smartronic 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 Smartronic advanced package delivering an additional set of features

PLUS

DISPLAY LCD 7"

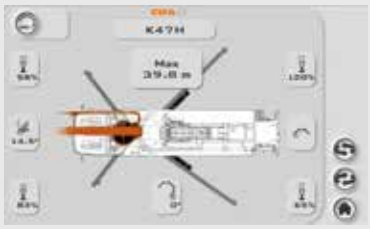
PUMPING UNIT MANAGEMENT
Automatic hopper-grid vibration

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



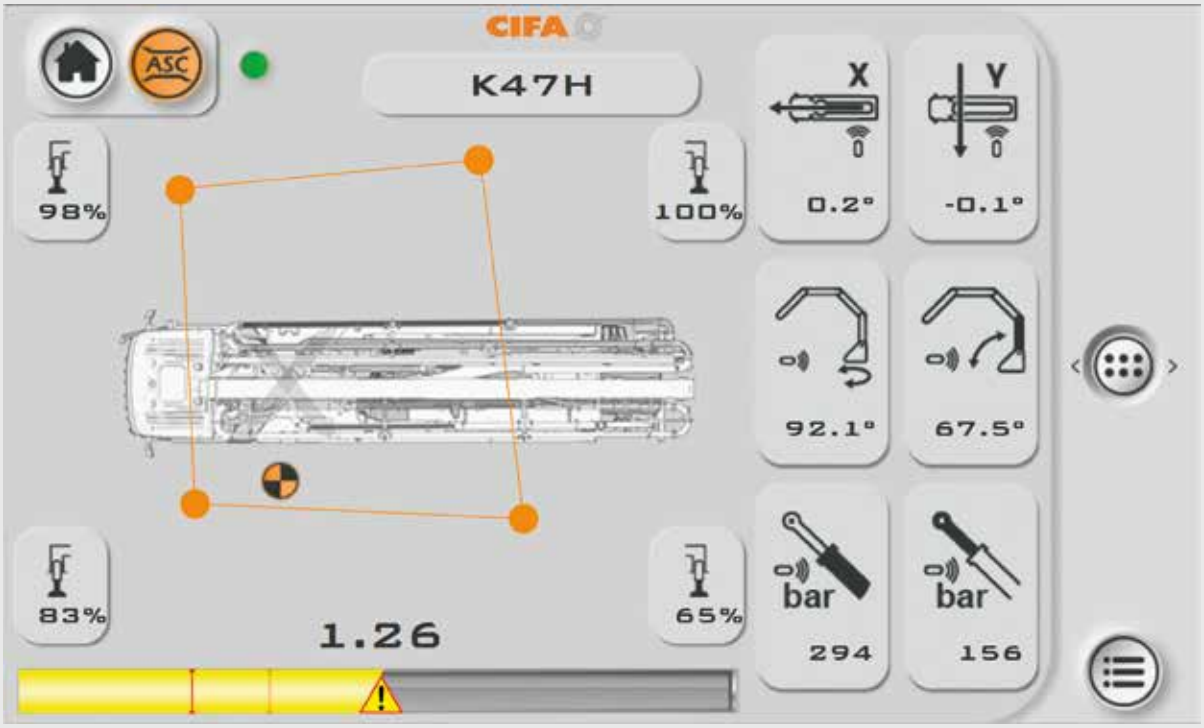
MBE
Max Boom Extension

ASC
Advanced Stability Control

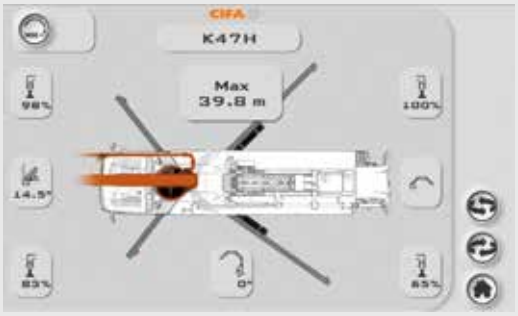
ASC
ADVANCED STABILITY CONTROL

(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 EXENSION



Max Boom Exension 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®

(Opzionale con Smartronic PLUS) (Optional with Smartronic PLUS)

PRO (Opzionale) (Optional)

Ripiegamento e Aispiegatrice Boom Folding and del braccio unfolding

La funzione consente di aprire e chiudere automaticamente il braccio a distanza con un comando dedicato sul radiocomando.

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

Advanced Stability Control 2.0 (ASC 2.0)

Consente di spostare il cursore del braccio oltre la posizione di ribaltamento quando il carico è inferiore al valore limite del coefficiente di sicurezza.

Consent to move the boom cursor beyond the overturning position when the load is lower than the safety coefficient limit value.

Boom Antibouncing System

La funzione Anti-Bouncing riduce le oscillazioni del braccio (fino a -25%).

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

Radio remote control with display

Virtual span

Ruotando il braccio verso destra, la funzione consente di impostare un punto di riferimento per l'altezza massima.

By moving the boom towards the right, the function allows to set a reference point for the maximum height.

Angle fence

Ruotando il braccio verso sinistra, la funzione consente di impostare un punto di riferimento per l'altezza minima e massima.

By moving the boom towards the left, the function allows to set a reference point for the minimum height.

Section block

Il sistema consente di bloccare alcune sezioni, ma sempre a partire dalla prima, procedendo in modo sequenziale (es. 1-2, 1-2-3, 1-2-3-4).

This system allows locking the boom sections, but always starting from the first one and proceeding sequentially (ex. 1-2, 1-2-3, 1-2-3-4).

Constant height

Il sistema mantiene costante l'altezza definita dall'utente durante la fase di estensione e retrazione del braccio.

This system maintains constant the height defined by the user during the boom extension and retraction phase.

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**

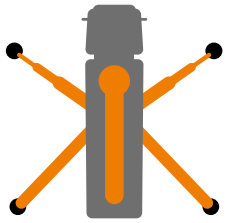
Available for:

K47H - K53H - K60H

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

Available for:

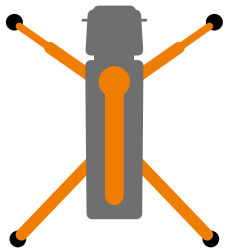
K67H



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

Available for:

K80H



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

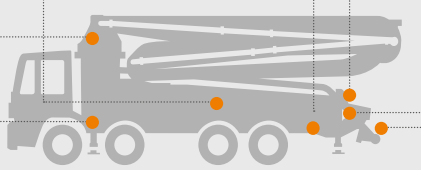
HOPPER GRID
LIMIT SWITCH

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
DRIVEN BY	PTO OR GEAR BOX
CHASSIS	3 axles

CARBOTECH K47H

PLACING BOOM	B5HRZ 47/43
PUMPING UNIT	160 m³/h 80 bar
	180 m³/h 83 bar
DRIVEN BY	PTO OR GEAR BOX
CHASSIS	4 axles

CARBOTECH K53H

PLACING BOOM	B5HRZ 53/49
PUMPING UNIT	180 m³/h 83 bar
DRIVEN BY	PTO OR GEAR BOX
CHASSIS	4-5 axles

CARBOTECH K60H

PLACING BOOM	B6HRRZ 60/56
PUMPING UNIT	180 m³/h 83 bar
DRIVEN BY	PTO OR GEAR BOX
CHASSIS	5 axles

CARBOTECH K67H

PLACING BOOM	B7HRR 67/63
PUMPING UNIT	180 m³/h 83 bar
DRIVEN BY	PTO OR GEAR BOX
CHASSIS	6 axles

CARBOTECH K80H

PLACING BOOM	B7HRRZ 80/76
PUMPING UNIT	180 m³/h 83 bar
DRIVEN BY	PTO OR GEAR BOX
CHASSIS	7 axles

Find more info on trucks configuration at **www.cifa.com/documentation**

K47H - ITALY

K40H - SPAIN

K67H - FINLAND

K60H - FRANCE

K53H - GERMANY

K40H - BELGIUM

K80H - POLAND

JOB SITES

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The catalogue shows models, outfitting versions and configuration possibilities (standard and optional) of machines for the production, transport and pumping of concrete, manufactured and distributed by CIFA SpA. The catalogue is intended for general information purposes only and the information it contains shall not be deemed a contractually binding document, since CIFA SpA may make constructive and outfitting modifications at any moment and during the period between publication of the catalogue, the production of the equipment and the publication of a more updated catalogue.