### ILF KOMMUNAL 143HP



ENERGREEN

## SELF-PROPE HYDROSTA MACHINES



SELF-PROPELLED HYDROSTATIC MACHINES



## BRUSHCUTTER

#### The Essential Multifunction Hydrostatic Machine

ILF Kommunal is a multifunction self-propelled machine equipped with a front quick coupling system that allows the installation of multiple equipments for green maintenance, construction work and multi-season roads maintenance.

Thanks to the fixed cabin and the front-mounted equipment, the operator can enjoy maximum visibility and comfort while working. In addition to the tool setted on the front side, it is possible to arrange different configurations to manage equipments also on the back side.

This self-propelled machine is equipped with the latest generation Deutz engine that provides 143 HP in compliance with the EPA Tier 4f anti-pollution regulations.

#### ILF KOMMUNAL



#### ILF KOMMUNAL

KERENGIHS



#### STRENGTHS



#### Safety and Comfort

- FOPS-ROPS homologated cabin
- High visibility panoramic windscreen
- Excellent working ergonomics
- SCD Stability Control Device



#### Quality

- Deutz 143 HP powerful engine
- EPA Tier 4f emission
- Heavy Duty hydrostatic transmission
- Main parts made with special steel



- 11

#### **Multifunctional**

- Many tools available
- Green maintenance and forestry work
- Winter viability
- Construction works

#### Productivity

- Quick Connection System for the equipment
- More tools applicable at the same time
- Maximum maneuverability on all fields
- Maximum 360° visibility





## POLYVALENT

#### Multipurpose Machine for countless applications

ILF Kommunal is the ideal multifunction machine for those who daily have to face several kinds of works. Equipped with a quick attachment front system, this self-propelled machine can be quickly setted up with several tools for green maintenance, construction sites works, all-season road services.
Moreover, it is possible to arrange different configurations for the setting up of equipments on the back side.





## 360° VISIBILIT



#### **GREAT VISIBILITY OF THE WHEEL**



#### Total view of the Working Environment

When getting inside the **ILF Kommunal** the first surprising feature is the wide glass window that offers a maximum 360° visibility for the full control of the working environment.

The adjustable steering wheel, the comfortable seat and the intuitive and ergonomic system control establish from the first moment, a strong feeling between the operator and the machine, immediately ready to react, for making every day of hard work much easier.



## CABIN COMFORT

#### Maximum Safety and Comfort

ILF Kommunal cabin is homologated according to the FOPS-ROPS regulation that guarantees the protection against overturning and objects fall.

The cabin is completely isolated and efficiently air-conditioned thanks to a sealing system: soft gasket are settled on fixed and mobile glasses and the cabin is mounted on elastic supports on sustain points. In this way, this multifunction machine is suited for working in dusty and noisy environments for many hours per day, still keeping a high level of comfort.

> The cabin is available in three versions: **STANDARD - COMFORT - PRESTIGE**

ENERGREEN







- Homologation FOPS-ROPS.
- Tilting and adjustable steering wheel.
- On-board computer for diesel engine control.
- Tilting and height-adjustable steering column.
- Adjustable air suspension seat.
- Electric reverser of the machine direction.
- Air conditioning system.
- Anti-pollen air conditioning filter.
- Adjustable armrest with joystick.
- Rear windows darked anti u.v.
- Front windscreen wiper.
- Rotating LED lamp.
- Divisible cabin door 60/40.
- Rear glove box.
- Internal courtesy light.
- External electrical socket 12 volt.
- Side pocket.
- Document holder.
- Cigarette lighter.
- Left rear-view mirror.
- Coat hanger.

In addition to the installation of the cabine "STANDARD"

- Cruise Control.
- · Pedal for instantaneous inversion.
- Radio with Bluetooth/DAB.
- Windscreen curtain with selfwrapping.
- LED working lights.
- CRAMMER MAXIMO XXL seat with air suspension and adjustable lumbar shock absorber

In addition to the installation of the cabine "COMFORT"

- Monitor screen with 1 camera.
- Second flashing lights.
- Porthole with grille, curtain and windscreen wiper.
- Windshield wiper on the right side.
- Fire extinguisher.
- GRAMMER MAXIMO EVOLUTION DYNAMIC seat with larger seat dimensions, air suspension system, longitudinal shock absorber, side suspension, lumbar shock absorber and active climate control system



#### ADJUSTABLE STEERING WHEEL



#### MONITOR SCREEN WITH CAMERA



**TOP PORTHOLE WITH GRILLE** 

## MULTIFUNCTIONA

#### Multifunction Machine

The idea at the base of ILF Kommunal project is the extreme level of configuration. The hook and release quick system for the equipment allows a fast re-configuration of the machine, for switching from a kind of job to a completely dfferent one, with a significant cost reduction. Moreover, upon request, it is possible to easily adapt third parts equipments.





FRONT LOADER



"HERCULES" FRONT LIFTER







#### (A) FRONT APPLICATIONS

- Telescopic arm
- Front loader
- Multipurpose bucket
- Concret mixer bucket
- Pallet forks
- Snow blade
- Snow ploughshare
- Snow blower
- Guardrail mower
- Mower
- Sweeper
- Traffic signals
   and road barrier cleaner
- Towing ballast



#### **REAR APPLICATION**

- Blower
- Salt spreader
- Tow hook

## QUICK ATTACHME

ALIGN THE MACHINE TO THE EQUIPMENT

**INSERT THE GUIDES AND** ATTACH THE EQUIPMENT

#### **EASY AND FAST FRONT ATTACHMENT**

The exclusive Energreen quick change design for ILF Kommunal has been inspired by the opportunity for a single operator to hook the attachment in complete autonomy. The system is smart: align the machine with the attachment, insert the guides, block the unit through the hydraulic hook device, connect all hydraulic circuits with only one plate... and now you are ready to experience the maximum work performance! The hydraulic couplings interface is composed by a unique connection plate equipped with an exhaust system that drains the residual pressure in order to make the lock/unlock system much easier.



CONNECT ALL HYDRAULIC **CIRCUITS BY USING** ONE SINGLE PLATE

1:59

IN 4:59 MINUTES. YOU'RE READY FOR THE MAXIMUM **OPERATIVITY!** 





#### CONNECT **Quick Attachment** System

The exclusive quick attachment CONNECT system of ILF Kommunal allows the operator to set the equipments on the front side in a easy and fast way, while sitting in the cabin. It is composed with two ultra-resistent Hardox® slides, integrated into the frame through two bushing for the self-centering of the equipment and with a piston lock valve that allows to lock the two safety hooks.

SAFETY LOCK VALVE AUTO CENTERING BUSHES ANTI-WEAR HARDOX® SLIDE

QUICK MULTI ATTACHMENT SYSTEM

MECHANICAL SAFETY BUMPER

SAFETY HOOKS

#### FRONT QUICK ATTACHMENT



#### MULTI-CONNECTION PLATE



#### **Naturally** Green

.....

Energreen is a specialist in design and construction of machines and equipments for green maintenance and it has naturally used its experience in this multifunction self-propelled machine. Indeed, **ILF Kommunal** is incomparable when talking about green maintenance along routes and in others activity connected to the public green: grass cutting on roads edge, deforestation and also construction works. Together with specific and reliable professional equipments it is the ideal, economic and time-safer solution for all the needs related to communication ways.



сомраст 6.5

compact 7.2

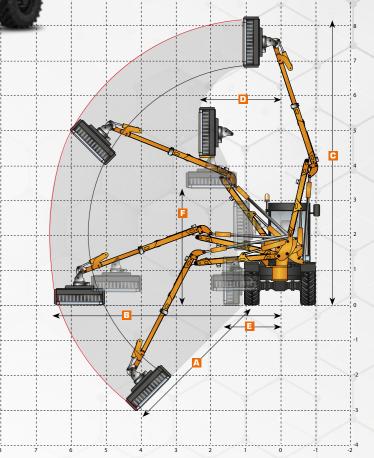




The main feature of the COMPACT arm is the adjustable geometry parallelogram. This one allows to reduce the total size of the arm, cancelling the dead zones on the road edges (in heght too) and it also allows to extend lenghtwise the tool in only one move. This movement is perfect when pruning the tops of hedges.

\* Variable dimensions depending on the equipment.

MOD.	Α	В	с	D	E	F
6.5	15′	22'	28'	8'	5′	11′
7.2	17'	24'	29'	8'	5′	11′







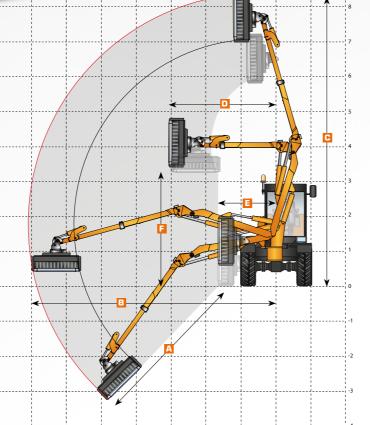
FAST 6 FAST

The FAST telescopic arm has been designed to work with an extension up to 22\* ft and to reach a maximum height of 27,5\* ft. Its particular geometry enhances the characteristics for road maintenance where you want a combination of mowing roadside and finishing work far from the roadside. The sturdy telescopic extension\*\* allows greater work agility and maximum performance even in difficult situations.

\* Variable dimensions depending on the equipment.

\*\* Fast 7

MOD.	А	В	С	D	E	F
6	11,5′	20'	24'	10'	5'	11′
7	17'	24'	27'	10'	5'	11′



20

REDUCED SIZE

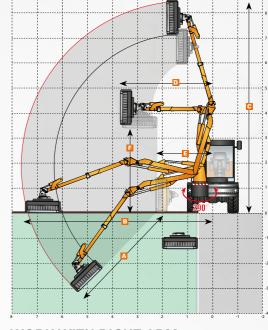


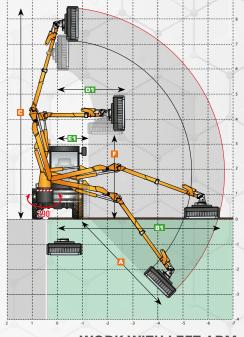
ROTATING UNIT

### ORBITAL 7



ORBITAL 7 is a sturdy telescopic arm designed to work on both sides of the roadway while maintaining minimum size on the road. This is possible thanks to a 290° rotating unit and to a hydraulic sideshift that allows the arm to make a horizontal movement from right to left and vice versa.





WORK WITH RIGHT ARM

WORK WITH LEFT ARM

А	В	С	D	E	F	B1	D1	El
17'	24'	27'	12'	7'	10'	21'	8'	4'

echnical and construction specifications may be subject to change without p





#### THE SUITABLE TOOL FOR EVERY WORK



**CONVEYOR HEAD** 



**CUTTER BAR** 



**POWER SHEARS** 

FORESTRY HEAD



**EXTRA TRUNK** 



ORANGE PEEL GRAPPLE



FORC-ONE



**DITCH CLEANER** 



SAW BAR



#### **STUMP GRINDER**



**TRUNK PINCERS** 



#### **IRON BRUSH**



#### **NEW SPEED** 47" and 59" **CUTTING HEAD**

Special steel frame - Frontal hydraulic opening (Optional) Adjustable roller - Five types of rotors Engine 35 cc (350 bar) - Cutting diameter 3 ½" max.





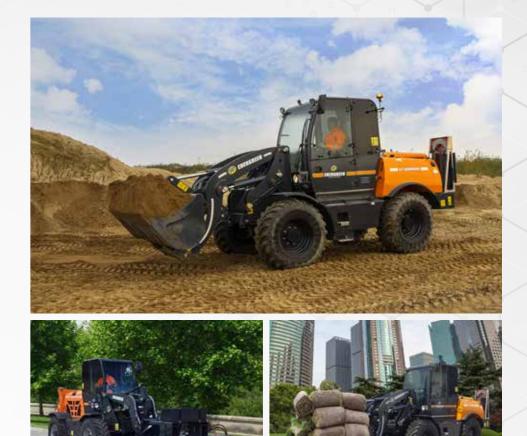


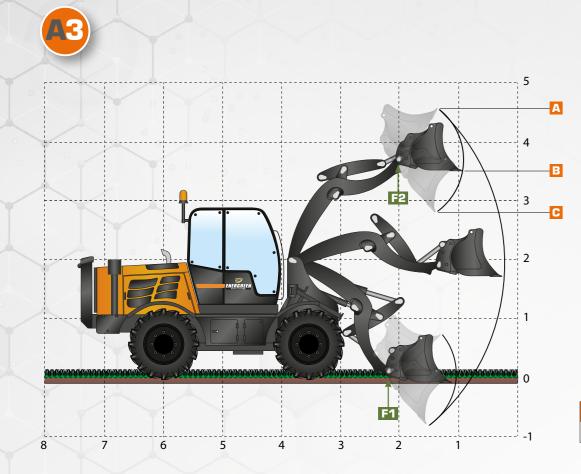
## CONSTRUCTION WORKS

#### The Best option for Construction Works!

Energreen ILF Kommunal is designed to be considered as a construction works machine, for excavation and earthmoving activity, able to respond quickly and completely to the frequent restoration or maintenanc works that a municipal authority normally has to face.

Thanks to the sturdy front loader equipped with hydraulic quick change and various tools equipped also with quick couplings, the machine becomes extremely polyvalent and able to perform multiple jobs even in the construction sector such as earthmoving transport of goods on pallet, sweeper, etc.







#### **FRONT LOADER**

FRONT LOADER with quick coupling. It is equipped with hydraulic quick release for the equipment: bucket, mixer bucket, forks. Maximum reliability and lifting power up to four meters high.

Α	В	С	F1	F2	ft³
15'	11′	9'	6 ton	3 ton	7,06 ft³





#### LINKAGE "HERCULES"

The HERCULES 3-point hitch with PTO front linkage makes the ILF Kommunal a highly efficient machine in any kind of application considering the possibility to install a wide range of commercial accessories by controlling them directly from the cabin, with full and direct control of all working operations.





FRONT SHREDDER



SIDE SNOW BLOWER



TOW KIT WITH HYDRAULIC BRAKING 10 T.



## SERVICE

#### The solution for winter problems

The wide range of winter accessories that can be installed on the ILF Kommunal makes the machine particularly efficient both for salt spreading activity and for the removal of the snow-covered roadway.

**RELIABILITY IN EVERY CRITICAL SITUATION** 



SNOW BLADE WITH ONE SECTION



SNOW PLOUGHSHARE



SNOW BLOWER



SNOW BLOWER SIDE









SELF LOADING SALT SPREADER

#### ILF KOMMUNAL



#### DEUTZ **Power Engine**

ILF Kommunal is equipped with a 143 HP (105 kW) 4-cylinder inline engine with liquid-cooled, external exhaust gas recirculation and EPA Tier 4f emissions.

The powerful Common Rail injection system at high pressure and the electronic engine control (EMR) with intelligent link to the drive management ensure optimum engine performance at low fuel consumption.

• Minimum consumption of operative liquids compared to competitors. • Technical support and diagnosis provided by DEUTZ's worldwide service network.

DEUTZ TCD 3.6



THE ENGINE COMPARTMENT IS EASILY ACCESSIBLE

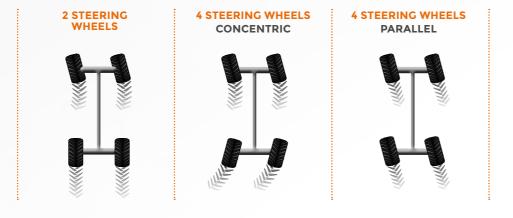
ON-BOARD COMPUTER FOR DEUTZ DIESEL ENGINE CONTROL

#### Agility and Accurancy in the Movements

The polyvalent soul of this machine is highlighted also from the 4-wheel drive traction system, all steering, hydraulically configurable from the cab control in 3 different operating modes:

- 2 front steering wheels, for the maximum agility on road movement.
- **4 steering wheels**, a system that halves the turning range of the machine, ideal for working in narrow areas.
- **4 parallel steering wheels (crab)**, useful for moving special tools or for moving away from an obstacle.







A

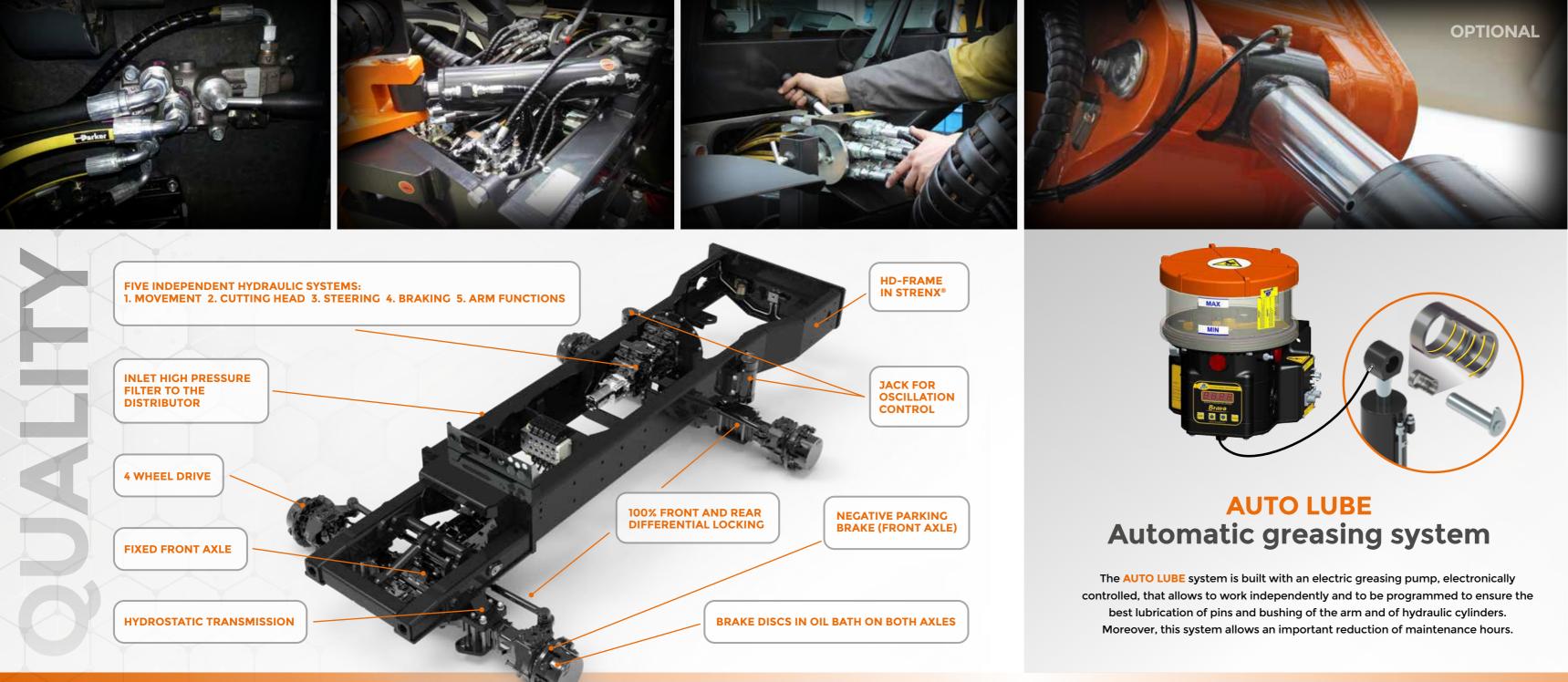
LOCKED AXLE

#### SCD Stability Control Device

The SCD Stability Control Device allows to lock the rear axle oscillation, increasing the stability of the machine, in order to guarantee the maximum level of performance and safety for the operator. This plus is composed by two hydraulic jacks fixed on the chassis of the machine and controlled by the operator inside the cab.

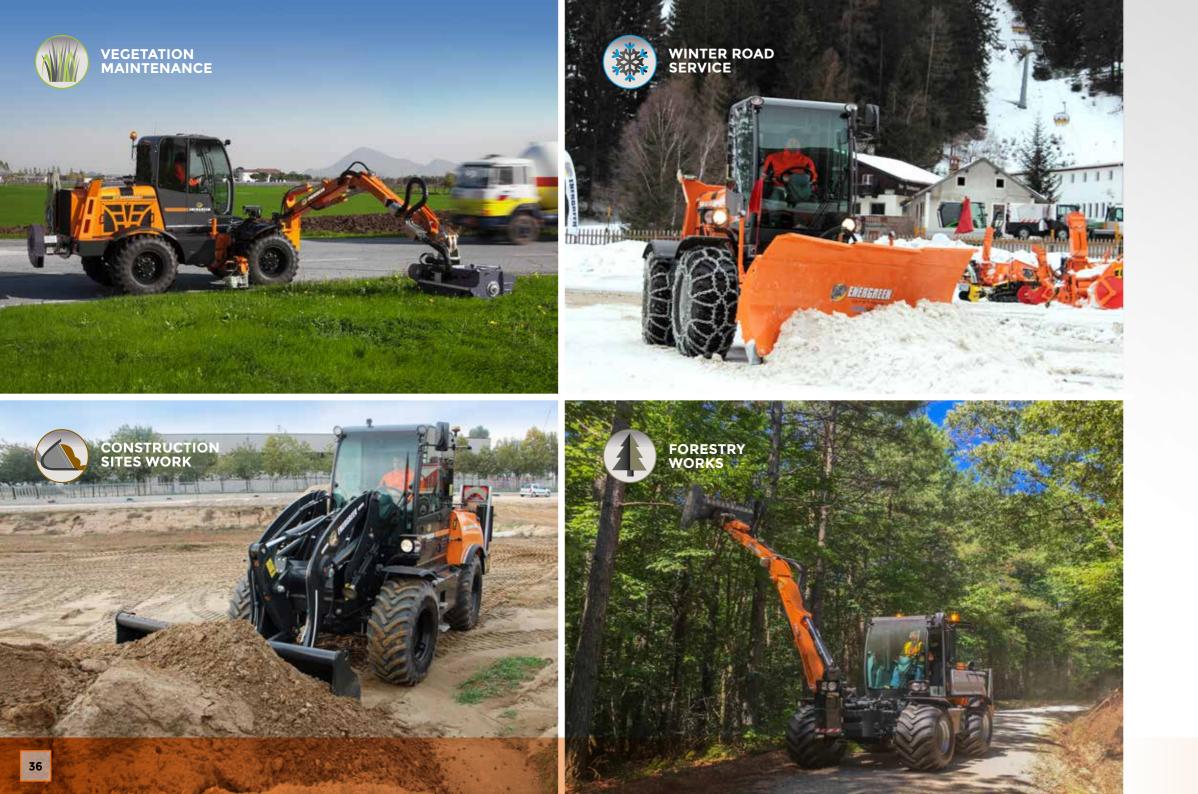
.....

#### JACK FOR OSCILLATION CONTROL



#### JOYSTICK Simple and intuitive

High quality joystick with proportional main controls that allows a precise and smooth control of the equipments. It allows you to move up to 3 arm functions at the same time with an excellent gradual movement.



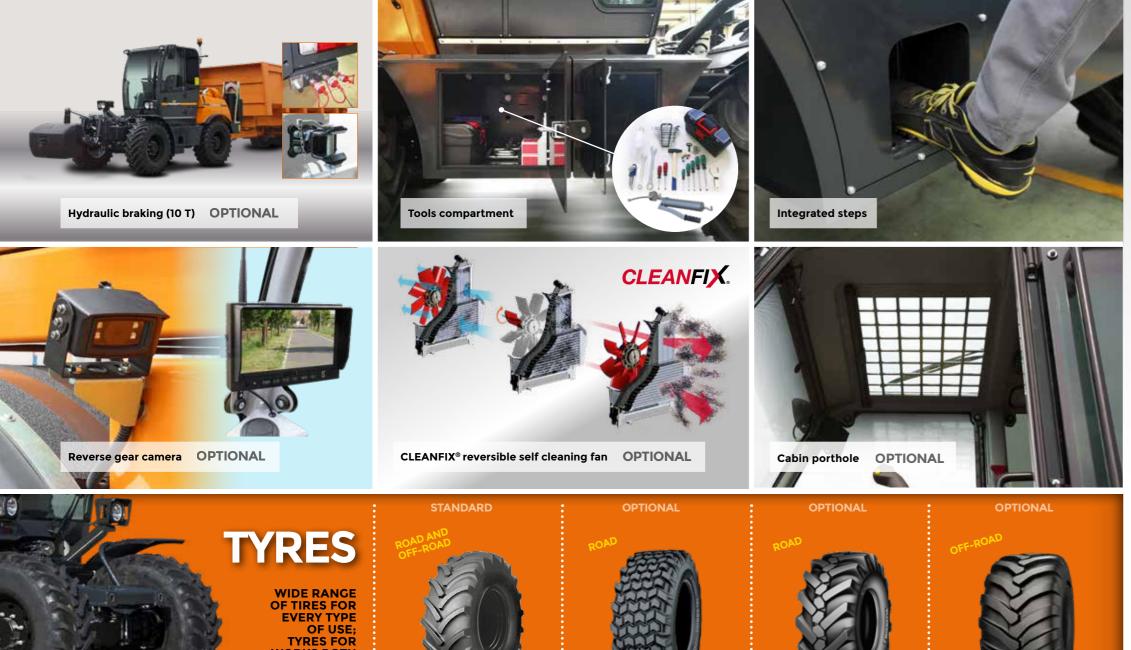
#### **Polyvalent Machine** for 1000 applications

**ILF Kommunal** is a multifunctional machine, indispensable for those who use different equipment for multiple jobs.

It can be configured very quickly with the quick coupling system of the equipment. The wide range of accessories available makes it unparalleled from the point of view of the economic investment compared to an agricultural tractor. It can be used for vegetation and winter roads maintenance, it can replace dedicated machines such as sweepers, forklifts or wheel loaders, etc.

ILF Kommunal is the best choice for a year-round use, a unique multifunctional tool!





WORKS BOTH OFF-ROAD AND ON THE ROAD

CONTINENTAL / MITAS MPT 445/65 R 22,5

NOKIAN 460/65 R 24

MICHELIN XF 445/70 18 R 19,5

ALLIANCE 600/50 22,5 331 8 F offset - 25

**TYRES - ACCESSORIES - OPTIONAL** 

## 5 AND DIMENSIONS

With With

\* \*

П

CHN

Hydrostatic

## Transmission

#### **SIZE AND WEIGHT**

ROPS - FOPS (1° level)

Switch inside the cabin

Darkened anti UV

Air suspension

Deutz TCD 3.6

4 Cylinders Diesel

CLEANFIX (optional)

143 HP (105 kW)

Common Rail

EPA Tier 4f

120 A.

43 gal

Adjustable Electronic

Electronic

12 V

A Height	116 in
B Width	89* - 97** in
C Length	176 in
D Wheelbase	69 in
Peso (Without equipment)	14.374 lb
Peso (With equipment)	23.148 lb

#### **HYDRAULIC SYSTEM**

Computer for visualization engine data

CABIN

Joystick

Cabin homologation

Steering wheel

Rotary lamp

Rear glasses Adjustable seat

Power socket

ENGINE

Brand Туре

Power

Injection

Alternator

Exhaust emissions

Fuel tank capacity

Reversible self cleaning fan

Pre-heating air engine intake Air intercooler radiator

Reinforced cooler radiator

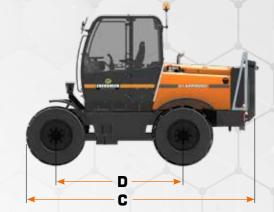
Air conditioning

Pumps and motors in closed circuits	
High flow pump	Piston
Trasmission pump	Piston
Pumps and motors in open circuits	
Arm movements	Gear
Brakes system	Gear
Steering system	Gear
Hydraulic distributor	Proportional
Hydraulic oil	Standard: ISOVG H46

#### **TRANSMISSION AND BRAKES**

Traction	4x4 (permanent)
Steering radius	7 ft
Tires	Standard: 445/65 R. 22,5
Speed variation	0 - 24 mph (continuous)
Manual gearbox	2 gears
Wheel alignment	Electronic control
Front axle	Fixed
Rear axle	Oscillating
Steering axles	2 steering axles
Axle block	Front 100%
	Rear 100%
Parking brake	Negative
Service brakes	6 discs for axle









f 🞯 🔁 🛗 🖿 ENERGREENAMERICA.COM



# <complex-block><text>



ENERGREEN America 1242 Nowell Dr Augusta GA 30901 USA Phone CA 510 593 3144 Phone GA 706 945 2800 info@energreenamerica.com www.energreenamerica.com PROFESSIONAL MACHINES AND EQUIPMENT

SELF-PROPELLED

