



- Over 150 distributors around the world
- 8 plants on 3 continents
- 1,800 people worldwide
- More than 6% of Sales invested in R&D  
Over 330 patents



POCLAIN HYDRAULICS is specialized in the design, manufacturing and marketing of hydrostatic transmissions. Our success is based on the wide range of products, high quality standard and a strong capacity for innovation. Our world-leading expertise enables us to provide customers with innovative solutions including hydraulic motors, pumps, electronics and valves that enhance vehicle performance, energy savings and safety.

MOTORS • PUMPS • ELECTRONICS • VALVES



ON ROAD SOLUTIONS



ON ROAD SOLUTIONS

# AddiDrive Assist™ system

Need additional mobility ?



# AddiDrive Assist™ system

The AddiDrive™ Assist, totally designed and manufactured by Poclain Hydraulics, is a hydraulic transmission providing all wheel drive on demand for vehicles that operate in difficult conditions such as mud, snow or steep grades.

## To ensure efficient mobility whatever the grip conditions

- > Increases safety
- > No additional fuel consumption
- > Easy to install without chassis modification
- > Preserves steering angle
- > Forward and reverse direction
- > Programmable operating system



### MF motor

Provides the tractive effort to the wheels

### Pump

Provides the flow to the hydraulic circuit

### Electronic controller

Manages the system from sensors and driver information

### Freewheeling valve

Manages freewheeling of the motors

### The heart of the system : the MF hydraulic wheel motor

This motor gives greater capabilities thanks to its high torque directly provided to the wheel. In difficult road conditions, the driver rely on the assistance of the hydrostatic transmission on top of the mechanical transmission up to 28 km/h (17,4 mph). At road speed, the hydraulic motors are freewheeled automatically. The system preserves full efficiency because it doesn't generate additional losses.

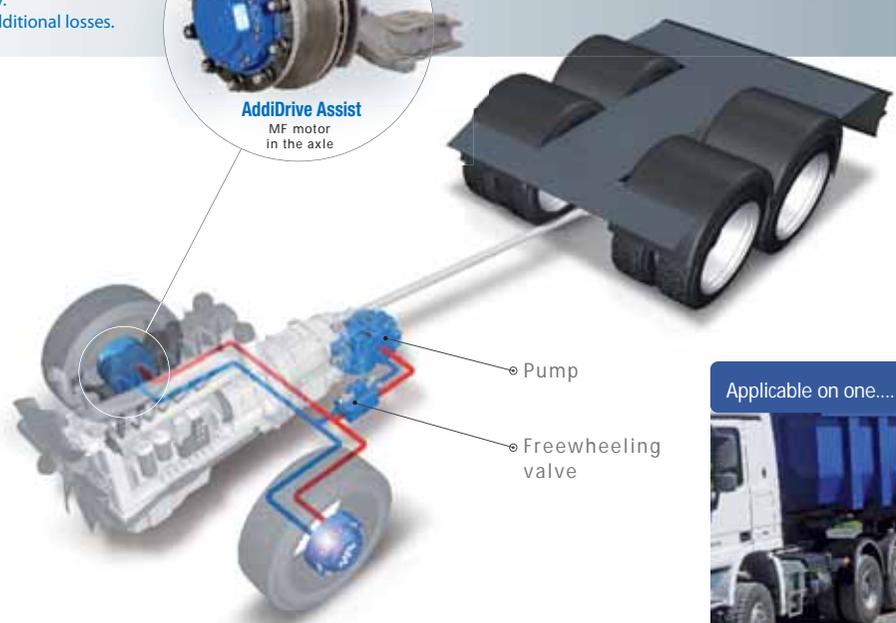


### How does it operate?

Two MF hydraulic motors are directly integrated onto the spindle of either a steering axle or a fixed axle. They are connected by a pump at the output of the gearbox power take-off (PTO) and a hydraulic valve and are electrically controlled from the dashboard, so you can activate this hydraulic transmission on-demand, even when the vehicle is moving. The MF hydraulic become active when desired. These motors momentarily transform a 2WD into a 4WD, thus ensuring a much greater efficiency. The tractive effort is applied to all wheels and the vehicle can drive through difficult terrain, simply avoid sliding off the side of a non-stabilized road.

### What are the benefits?

This system Guarantees the trajectory of the vehicle during descents and thus its safety thanks to the hydraulic's assistance's restraining capacity. Compared to a permanent mechanical all wheel drive, AddiDrive™ Assist saves weight, lowers the center of gravity and shortens turning radius. No need to higher the vehicle's chassis, this Preserves easy access to the cab and easy loading. The hydraulic motors are free-wheeled on highway: no losses due to back driving!



Applicable on steerable....

...or on fixed axle



On front or...



...rear axle

Applicable on one....

...or several trailer axes

