



**ON/OFF HIGHWAY** | DRIVETRAIN SYSTEMS



# WELCOME TO JCB DRIVETRAIN SYSTEMS.

**WITH NEARLY FOUR DECADES OF EXPERIENCE IN SUPPLYING WORLD-CLASS DRIVETRAIN COMPONENTS TO OEM BUSINESSES THROUGHOUT THE WORLD, JCB DRIVETRAIN SYSTEMS PRIDES ITSELF ON ITS COLLABORATIVE APPROACH TO DOING BUSINESS.**

**Renowned for our friendly service and speedy response, we offer a flexibility that is designed to best suit the needs of our customers.**

Whether it is a complete powertrain or a single axle, we work in partnership with our OEM customers to engineer solutions for their on/off highway applications. As the only manufacturer in the world to offer a fully integrated powertrain solution for both conventional and hydrostatic driveline systems in the 30-135kW (40-180hp) range, we have leveraged our experience of supplying high volume customers, including JCB, to offer OEM customers significantly tried and tested solutions. Our comprehensive range of products includes integrated matched drivelines, powertrains, engines, axles (rigid drive, steer drive and dead steer) as well as powershift transmissions with electronic control units (ECU), live pump drive (PTO) and synchromesh transmissions with torque converters and housings. We also supply radiators and controllers for the convenience of our customers.

## **Engineering approach.**

With our modular approach to driveline engineering we have the flexibility to tailor units for machines in a wide range of market sectors including agriculture, construction, mining, industrial, forestry, material handling, aviation ground support, municipal and defence.

## **Research and development.**

Our services include bespoke design and engineering services as well as modifications of existing componentry. To achieve the best possible outcomes we have invested in extensive prototyping and test facilities for every configuration of assembly and component required by an OEM. Thanks to our continued investment in resources and manufacturing procedures we can create cost-effective, specialised solutions to meet every customer requirement.



- 53 acre site in Wrexham
- Production of 140,000 units per year
- Over 500 staff
- 50,000 square metres facility
- Three purpose-built plants



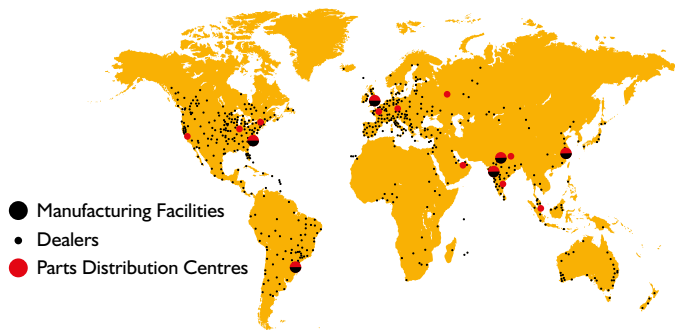
## SERVICE AND SUPPORT.

WHEN YOU WORK WITH JCB DRIVETRAIN SYSTEMS YOU ARE BUYING INTO A BUSINESS THAT PRIDES ITSELF ON ITS PEOPLE AND ITS SERVICE. NOT ONLY THE TEAM IN OUR FACTORIES, BUT OUT IN THE FIELD, IN OUR DISTRIBUTION AND SUPPORT NETWORK AND ANY OF OUR OFFICES AND FACTORIES AROUND THE WORLD.



Our global support network has been carefully selected over many years for its ability to provide the back-up and support that our customers deserve. Today it consists of 750 dealers with 2000 depot locations spanning 150 countries each having fully trained, experienced technicians with a 'can do' ethos that has been cultivated to deliver outstanding customer satisfaction.

Supporting the dealer is JCB's highly advanced global parts network that currently despatches more than a million genuine parts every week; delivering 95% of them anywhere in the world within 24 hours. The state-of-the-art JCB World Parts Centre in the UK ships 30,000 lines per week using hi-tech logistics systems and a reliable network of despatch partners and is supported by 16 regional parts warehouses to guarantee worldwide round-the-clock support. From India to Dubai, Singapore to the USA, France, Moscow and Brazil we have invested in the best facilities and people to keep your business up and running.



However service and support is also flexible. The OEM customer can choose to support our products through their own dealer network with training being provided by JCB. Alternatively, JCB Drivetrains Systems and JCB Power Systems have their own independent distributors, dealers and principal service centres. This coverage in any permutation provides for world-class leading support.

# THE COMPLETE SOLUTION.



## **A** Transmissions.

Range of 3, 4 and 6 speed transmissions, both full powershift and synchromesh versions with torque converter drive. Options include: 2WD or 4WD (permanent and disconnect), pump drive, internal or external park brake and electronic control unit (ECU). Options exist for Lock Up Torque Convertors.

## **B** Cooling packages.

Complete cooling packages matched to the powertrain including radiator, transmission and hydraulic oil cooler and fan can be supplied.

## **C** Hydraulics and ancillaries.

Hydraulic cylinders for axles plus engine or transmission driven pumps can be supplied with all supporting ancillaries to complete the drivetrain.

## **D** Powertrain.

JCB 4 & 6 cylinder NA, Turbo, and Turbo aftercooled engines can be offered, with suitable torque converter and transmission to suit the OEMs own driveline system. 3L, 4.4L, 4.8L and 7.2L displacement engines are available.

## **E** Axles.

Range of steer drive, rigid drive and dead steer axles with pad, pin or trunnion mounting and either cardan shaft or hydrostatic motor input. Options include: various axle ratios, differential types, service and park brakes.

## **F** Service brakes.

'Wet' multi-disk brakes available on most axles to suit a master cylinder or hydraulic brakes. Dry disc brake options on independent driveheads, wheel end drop boxes and certain axle models.

# MODULAR AND SINGLE COMPONENTS.

JCB DRIVETRAIN SYSTEMS DESIGNS AND BUILDS A COMPREHENSIVE RANGE OF PRODUCTS THAT CAN BE SPECIFIED AS PART OF A MODULAR SYSTEM OR AS SINGLE SUBASSEMBLIES.

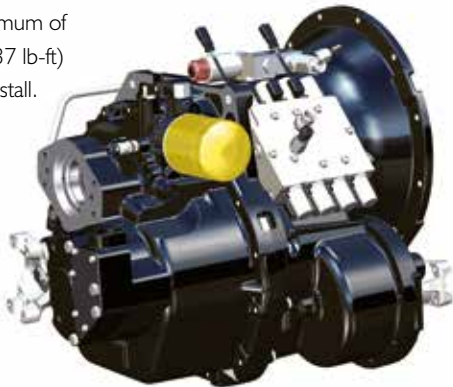
## AXLES



A range of steer and rigid axles up to 12000kgs (26500lbs) dynamic load capacity.

## TRANSMISSIONS

A range of transmissions up to a maximum of 1000Nm (737 lb-ft) at converter stall.

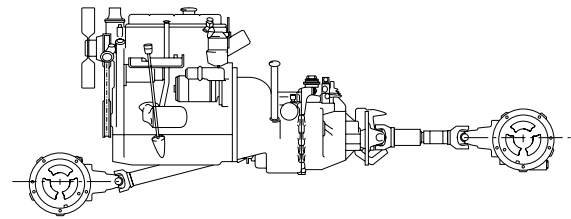


## DRIVELINES/TRAINS



A wide range of driveline configurations – with or without engines – up to 165kW (220hp).

## DRIVETRAIN CONFIGURATION EXAMPLE



### 2 or 4 wheel drive driveline comprising

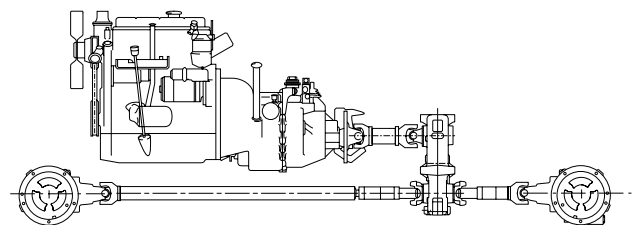
- Power train
- Steer axle
- Rigid drive axle

Two rigid axles would be fitted for articulated steer vehicles.

## TRANSFER BOXES



A range of transfer boxes up to 90kW (120hp) and wheel end drop boxes up to 200kW (300hp).



### Articulated driveline comprising

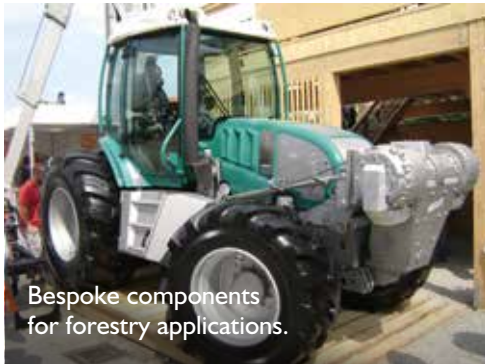
- Power train
- Transfer box
- Rigid drive axles

This illustration shows optional fan, transmission brake calliper and filler/dipstick.



## PROVEN IN THE FIELD.

WE SUPPLY OUR PRODUCTS TO THE WIDEST RANGE OF MACHINERY TYPES IN A VARIETY OF MARKET SECTORS INCLUDING CONSTRUCTION, AGRICULTURE, FORESTRY, INDUSTRIAL, MATERIALS HANDLING, AVIATION GROUND SUPPORT, MINING, UTILITY, MARINE, MUNICIPAL AND DEFENCE.



Bespoke components for forestry applications.

# AGRICULTURAL



Bespoke wheel end drop box, independent differential and transmissions for crop sprayers.

# MATERIALS HANDLING



Powershift transmissions and axles supplied to USA manufacturer of carry deck cranes.

# GROUND SUPPORT EQUIPMENT



Transmissions and axles for tow tractors.

# CONSTRUCTION



Transmissions and transfer cases for Thwaites site dumpers.



Full drivetrain is supplied for Sellick rough terrain forklifts.

# INDUSTRIAL



Transmission solutions for Zanello Graders.



**The only off-highway in-house manufacturer of transmissions,  
axles and engines in 30-135kW power range.**

#### **JCB Drivetrain agents and distributors**

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