

# BUILT TO GROW A CENTURY OF POWER, NOW FOR AGRICULTURE.

**STAGE V ENGINES** 





### FROM FRANCE TO GLOBAL POWER

100 years of power. 1 millions engines worldwide. A future built greener.

Since 1918, Baudouin has been designing and manufacturing engines that endure. From our origins in Cassis, France, we have grown into a global brand recognized for performance, reliability, and innovation.

Today, as part of Weichai Group, one of the largest power system manufacturers in the world, we are backed by the strength of a company with over millions engines in operation worlwide. This scale gives us a unique advantage: the ability to understand customer needs, deliver the best lead times, and provide worldwide service and support.

FR French Heritage since 1918

Global strength as part of Weichai Group

100+ years of engineering expertise

1M+ engines produced per year

Fastest lead times available on the market

Stage V solutions





Our production capacity reflects this global strength. Baudouin operates two state-of-the-art manufacturing sites:

CASSIS in France: our historic headquarters and engineering hub, with 35,000 m<sup>2</sup> dedicated to production, testing, and R&D.

**WEIFANG in China**: a world-class facility of over 765,000 m<sup>2</sup>, enabling large-scale production & optimized logistics worldwide.

At the same time, we remain committed to building a greener future. Our Stage V engines integrate advanced aftertreatment technologies to reduce emissions and improve efficiency, helping agriculture move forward sustainably.

### BUILT TO GROW, BAUDOUIN STAGE V ENGINES



Baudouin's Stage V line-up covers the full spectrum of agriculture – from compact tractors and sprayers to large harvesters and irrigation systems. With seven engine families from 4 to 6 cylinders, the range spans 33 kW to 566 kW (44 HP to 760 HP).

Available in both structural and non-structural versions, the range offers OEMs maximum design freedom. Farmers and equipment manufacturers alike can count on proven performance, simplified integration, and reliability tested in the harshest conditions.





4M06	2.5 L	33-56 kW	76 HP
4M09	3.6 L	60-105 kW	140 HP
4M12	4.6 L	102-147 kW	200 HP
6M13	7.8 L	156-257 kW	350 HP
6M16	9.5 L	249-294 kW	400 HP
6M21	12.5 L	293-405 kW	550 HP
6M28	16.6 L	409-566 kW	760 HP

#### STANDARDS ACROSS THE RANGE

• Service interval: 600 h

• Warranty: 3 years / 3,000 h

• Urea Tank included

• Cold start capability down to -40°C

• Continuous operation up to +50°C

• Reliable performance up to 4,700 m altitude

• Engine lifespan B10: 30,000 h

#### **PLUS BENEFITS**

- Integrated aftertreatment for Stage V compliance
- Optimized for agricultural duty cycles
- Global service & parts support network (100+ countries)

Configurations & Availability:

Bare engines available from Q4 2025

PowerPacks with integrated cooling available from Q2 2026

#### STAGE V TECHNOLOGY

#### Robust Strategy for Cleaner Air



Every Baudouin Stage V engine is engineered with farming in mind. Stronger pistons, optimized combustion, and compact systems make our engines efficient, reliable, and easy to integrate.

The result? Longer working hours, lower operating costs, and more comfort in the field.

- High-strength pistons withstand heavy-duty cycles
- Optimized airflow and combustion improve fuel efficiency
- Compact after-treatment system saves space and simplifies installation
- Reduced noise and vibration for better operator comfort

#### Stage V compliance is more than meeting the standard.

Baudouin's advanced SCR systems, crystallization control, and intelligent thermal management guarantee uptime, extend system life, and protect both productivity and the environment. Fully HVO-compatible, our engines offer an immediate pathway to lower CO<sub>2</sub> emissions and more sustainable operations — without any modification or performance loss.

- Cleaner exhaust: 96% NOx reduction, 98% PM reduction, 94% CO reduction
- Full power across duty cycles with no compromise on output
- Crystallization control prevents failures and extends ATS life
- Thermal management ensures reliability in extreme climates
- Proven durability: thousands of bench and field hours

### **4M09**3.6 L VERSATILITY IN EVERY FIELD



With a compact 3.6L footprint, the 4M09 delivers the output of a 4L class engine. From tractors, telehandlers to irrigation pumps and compressors, it adapts to multiple applications with minimal maintenance.

Rated Power kW @ rpm	105 @ 2,300	
Peak Torque Nm @ rpm	580 @ 1,500	
Nb cyl	4L	
Turbo	WG-TCA	
Displ	l 3.6	
Dry Weight Kg (w/o ATS)	330	
Dimensions mm (w/o ATS)	857(L)×668(W)×765(H)	
Aftertreatment	DOC - DPF - SCR - EGR	

Ratings available: 60 / 75 / 90 / 105 kW Compact 3.6L design, 4L performance

Maintenance-free ATS 600 h oil change interval

Max torque reserve: up to +40%

Flexible use: mobile & stationary applications

#### 6M13

### 7.8 L ENGINEERED FOR THE TOUGHEST AGRICULTURAL DEMANDS



The 6M13 is designed for heavy-duty tractors and large harvesters. With wet cylinder liners, compact ATS integration, and low-noise operation, it combines strength, reliability, and comfort for demanding conditions.

Rated Power kW @ rpm	257 @ 2,100	
Peak Torque Nm @ rpm	1,400 @ 1,600	
Nb cyl	6L	
Displ	l 7.8	
Dry Weight Kg (w/o ATS)	760	
Dimensions mm (w/o ATS)	1,333(L)x867(W)x960(H)	
Aftertreatment	DOC - DPF - SCR - EGR free	

High power density

Low noise & vibration with rear gear housing Wet cylinder liners for cooling and durability Compact ATS on cylinder head Built for heavy-duty tractors & harvesters

Ratings available: 156 / 190 / 223 / 257 kW Compact 7.8L design, 8L performance Maintenance-free ATS 600 h oil change interval

Max torque reserve: up to +40%

Flexible use: mobile & stationary applications



### PROVEN IN THE FIELD, BUILT TO LAST

#### The Right Power for Every Agricultural Application

Every Baudouin Stage V engine is subjected to extensive validation programs to ensure reliability in real agricultural duty cycles. From endurance bench tests to full field trials, our engines are proven to deliver performance and uptime where it matters most.

#### **HIGHLIGHTS**

- 10,000 hours of bench testing per engine family
- 3,000 hours of field testing under real farm duty cycles
- Validated in extreme climates and varying loads
- Rigorous durability testing for after-treatment systems (ATS)
- Proven compliance with Stage V across all applications





### GLOBAL SERVICE, SPARE PARTS, & NETWORK SUPPORT

Baudouin Stage V engines are designed for agriculture, but our commitment goes far beyond the engine itself. We provide farmers and OEMs with the confidence of knowing they are backed by a strong, reliable service and support structure.

Our engines are supported by a global network of certified distributors and service partners, ensuring availability of spare parts, technical expertise, and fast assistance wherever it is needed.

Baudouin offers best-in-class lead times, efficient spare parts delivery, and professional service support to keep machines running when it matters most.



Global network coverage with certified service partners

Genuine spare parts always available for fast replacement

Factory-trained technicians providing expert service

Efficient logistics and supply chain for quick delivery



AVARADEX HY UDS VARIABLE OPINE SYSTEMS

## BUILT TO E R

RELIABLE TURNKEY SOLUTIONS,
POWERED BY COMBINED EXPERTISE.

ENGINEERED AS ONE



### ENGINEERED AS ONE

Baudouin goes beyond engines. Together with Aradex, VDS, and LHY, we deliver fully integrated solutions for the agricultural industry. By combining power, electronics, drivetrains, and hydraulics into one system, OEMs benefit from faster integration, higher efficiency, and a single point of accountability.

#### **HIGHLIGHTS**



Hybrid and power electronics for efficient energy management



Drivetrain solutions tailored to agricultural machinery



Hydraulics and transmissions for precision control





#### **DeV-Series Hybrid Powertrain**

#### FROM 60HP TO 170 HP

Designed for seamless hybrid operation, this modular system delivers the perfect balance of mechanical and electric power, enhanced by a CVT transmission for smooth, efficient power transfer in all conditions.

### Dh-Series Diesel Hydrostatic Powertrain FROM 75 HP TO 450 HP

Built for precision and endurance, the DH-Series integrates advanced hydrostatic transmission technology for superior control and efficiency. Designed for telehandlers and harvesters, it delivers exceptional torque, smooth power delivery, and optimized fuel economy.

#### **DhV-Series Diesel Powertrain**

#### **FROM 220 HP TO 340 HP**

Engineered for maximum tractive force and efficiency, it delivers superior traction and intelligent speed control. With its CVT transmission, power flow remains seamless and fuel use optimized in every condition.

### DeV-Series Hybrid Powertrain FROM 60HP TO 170 HP



Combined Output: Up to 170 HP and 700 Nm peak torque Instant Response: Full tractive force available from standstill Electric Autonomy: Up to 4 hours of pure electric operation Fast Charging: 30-minute DC recharge for maximum uptime Clutchless Architecture: Smooth, stall-free performance in all conditions

**Stop & Start Function**: Reduced fuel consumption and  $CO_2$  emissions during idle









#### **BAUDOUIN ENGINE**

#### **ENGINE 4M06**

4 cyl 2.5 L Stage V

56 kW @ 2,400 rpm

300 Nm @ 1,700 rpm

DOC/DPF/EGR - SCR Free

Structural configuration with provision for front loader

Flat power and 35% torque reserve

**HVO** compliant

#### ARADEX MOTOR, INVERTER & BATTERY

#### **MOTOR VM6**

PM-RSM with high efficiency

56 kW @ 2,400 rpm (up to cont. 69 kW @ 6,000 rpm)

Peak torque 420 Nm @ 1,700 rpm

#### **INVERTER VP600**

Single/Double Traction Inverter

Max. 860 VDC (Operation voltage from 200 to 850 VDC)

Cont. Power from 50 to 250 kW

Peak up to 960 A for 60 s

#### **BATTERY 2xB30 LFP**

Nom 76 kWh - 308 VDC

#### **VDS TRANSMISSION**

#### **TRANSMISSION eVTP500**

Rated power 170 HP

Output torque 2,600 Nm

4WD 50/50 differential

PTO as drive through

Ratio: REV −5.47 − ∞

FWD ∞ - 0.89

#### Dh-Series Diesel Hydrostatic Powertrain FROM 75 HP TO 450 HP



Power Range: 75 – 450 HP for telehandlers and harvesters

 $\textbf{High Torque Output:} \ \ \textbf{Up to 580 Nm} \ \ \textbf{@ 1,500 rpm with strong}$ 

transient response

Hydrostatic Transmission: Delivers precise control and seamless

power delivery

Heavy-Duty Performance: Built for demanding lifting, pulling,

and loading operations

Fuel Efficiency: Optimized low-end torque enhances overall fuel

economy

Hydraulic Precision: High-pressure system ensures accurate

boom control and superior safety







#### **BAUDOUIN ENGINE**

#### **ENGINE 4M09**

4 cyl 3.6 L Stage V 140 HP @ 2,300 rpm 580 Nm @ 1,500 rpm DOC/DPF/SCR/EGR 15% power reserve and 33% torque reserve HVO compliant

#### LHY VD PUMP & VD MOTOR

#### **VD PUMP CPV115**

Swashplate pump 115 cc/rev (available from 65–175 cc/rev) 500 bar max pressure With integrated gear pump

#### **VD MOTOR CMV115**

Axial piston motor in bent axis 115 cc/rev 787 Nm output torque

### DhV-Series Diesel Powertrain FROM 220 HP TO 340 HP



Power Range: 220 - 340 HP with up to 4,500 Nm output torque for heavy duty applications, agricultural and forestry machinery Optimized Efficiency: Maintains ideal engine RPM while independently adjusting ground speed

**Seamless CVT Operation**: Stepless speed control for perfectly matched traction and load conditions

**Superior Tractive Force**: Integrated K-Series hydraulic unit delivers exceptional torque multiplication

Advanced Control: Ensures maximum yield, precision, and operator comfort without compromise









#### **BAUDOUIN ENGINE**

#### **ENGINE 6M13**

6 cyl 7.8 L Stage V 350 HP @ 2,100 rpm 1,400 Nm @ 1,200 rpm DOC/DPF/SCR – EGR free 15% power reserve and 20% torque reserve HVO compliant

#### LHY POWERTRAIN

#### **COMPACT UNIT K-SERIES**

Closed Circuit Pump + Motor HPV-02 and HMF-02 back-to-back in common unit 55/55-105 cc/rev 500 bar max pressure 374-719 Nm torque

#### **VDS TRANSMISSION**

#### **TRANSMISSION VTP1100/1400**

Rated power 220–340 HP Output torque up to 4,500 Nm GVW 12 t – 18 t Ratio: REV –0.75 –  $\infty$ FWD  $\infty$  – 0.842

