



**Mackwell**



# A35

## Engine

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Mackwell A35 Engine

## ***Empowering Energy Sovereignty***

**The A35 redefines the way you source, generate and use energy.**

The Mackwell A35 creates an opportunity for energy sovereignty in a world of energy dependence, empowering industries and communities to regain control over their energy generation, distribution and consumption.



### **Our message to you:**

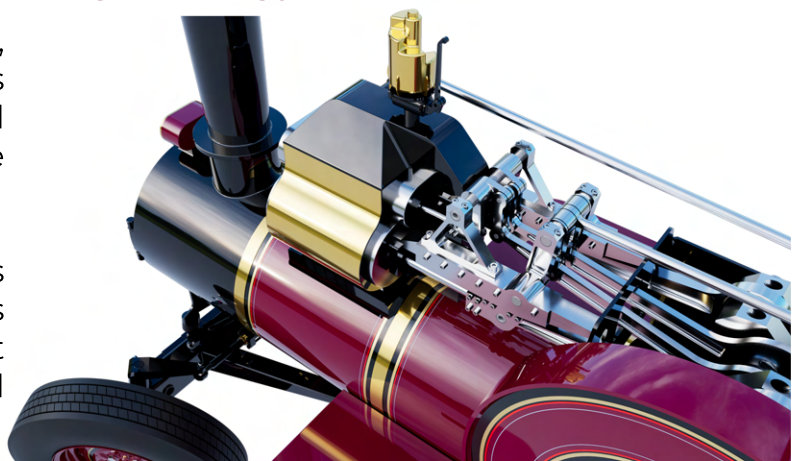
- Grow, manage and maintain your own fuel supply.
- Future proof your energy systems.
- Generate beneficial social and environmental outcomes.

## ***The cutting edge of low tech...***

**Our innovative technology is designed to utilise biomass directly with minimal processing, preserving it's high Energy-ROI.**

Opting for wood and steel over computers, high tech fuels and plastic, the A35 is designed to keep business and communities connected, even in the toughest of conditions.

Mechanical simplicity and the customers right to repair ensures Mackwell engines are resilient against events which disrupt the global supply of energy, materials and spare parts.





# What the A35 has to offer...

## Towing

### Remain connected, indefinitely.

The A35 offers a unique zero-carbon transport solution which reduces overall costs by 35% and carbon dioxide emissions by 96% (in comparison to an equivalent diesel).

#### Towing Capabilities:

- 7.6 tonnes
- 40 km/h
- 150 km range (Approx., full load)



## Electricity, Heat & PTO

### Meet critical needs, any place, any time.

The Mackwell A35 couples to an optional alternator and heat exchanger to generate 26kW-e and 180kW of hot water.

#### Heat and Power Capabilities:

- 26kW of electricity (enough to power at least 5 homes).
- 180kW of piping hot and sanitary water.
- 26kW PTO for stationary use.



## Safety, Warranty & Customisation

### The A35 redefines the way you source, generate and use energy.

#### Safety

- Zero spark emissions.
- Inherently safe with a low volume, high pressure boiler.
- Quiet operation minimising low frequency noise and vibration.

#### Warranty & Service

- 5 year warranty on all parts, except consumables.
- 24/7 after sales support.
- Significant reduction in maintenance and service costs.

#### Custom Options

- Colour scheme.
- Personalised name plate.





# Mackwell A35™ Initial Technical Specifications<sup>1</sup>

Engine	
Rated power, kW (hp)	26 (35)
Max. power, kW (hp)	48 (64)
Crankshaft torque, N·m	1750
Rated crankshaft speed, rpm	400
Cylinder bore, mm (in)	108 (4.25)
Stroke, mm (in)	165 (6.50)
Cylinders	2
Cycle	Regenerative Simple Expansion
Steam pressure, MPa (psi)	2.14 (310)
Steam temperature, °C (°F)	400 (752)
Transmission	
Speeds	2
Road gear, km/h (mph)	40 (25)
Field gear, km/h (mph)	20 (12.5)
Drive	
2WD	Standard
4WD	Optional Q3 2024
Hydraulics	
Hydraulics	Optional Q1 2024
Wheels & Tyres	
Front	6.50-16
Rear	280/85R28
Capacities	
Maximum towing capacity on 12% gradient, kg (lb)	7,600 (17,000)
Range, km (mi.)	305 (191)
Bunker, wood/biomass (wood chip), kg (lb)	125 (275)
Feed tanks, water, L (gal)	500 (132)
Time between refuelling at 48% load factor <sup>2</sup> , h	4

Cab	
Open operator station	Standard
Open canopy	Optional
Fully enclosed, air-cycle air conditioning (HFC free)	Optional Q3 2024
Generator	
26 kW alternator	Optional
Dimensions	
Wheelbase, mm (in)	2,000 (79)
Width x height x length, mm	1,600 x 2,470 x 3,900
Ground clearance, mm (in)	260 (10)
Shipping weight, kg	1,500
Operating weight, full supplies, kg	2,100
Power Take-Off	
Independent Power Takeoff	Optional Q3 2024
3 Point Hitch	
3 Point Hitch	Optional Q3 2024
Brakes	
Engine (dynamic service brake)	Counter-pressure steam brake
Rear axle	Independent mechanical drum brakes
Pneumatic trailer brake	Optional Q4 2023
Hydraulic trailer brake	Optional Q4 2023
Suspension	
Front axle	Leaf spring
Steering	
Type	Hydrostatic

<sup>1</sup> All specifications are subject to change.

<sup>2</sup> California Air Resources Board, *Analysis of California's Diesel Agricultural Equipment Inventory according to Fuel Use, Farm Size, and Equipment Horsepower*, California, 2018.

