

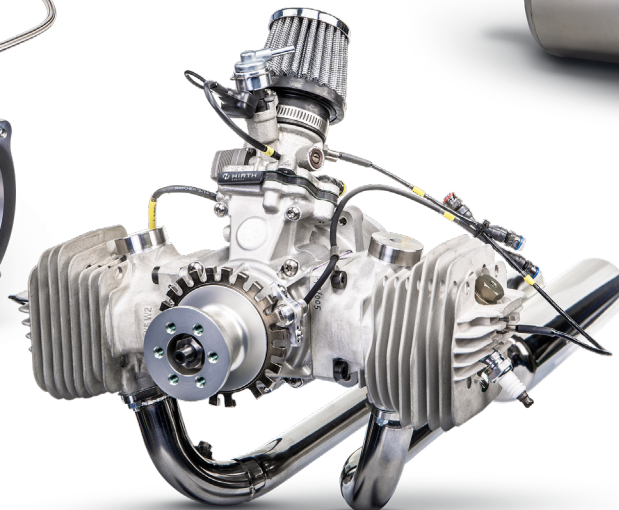
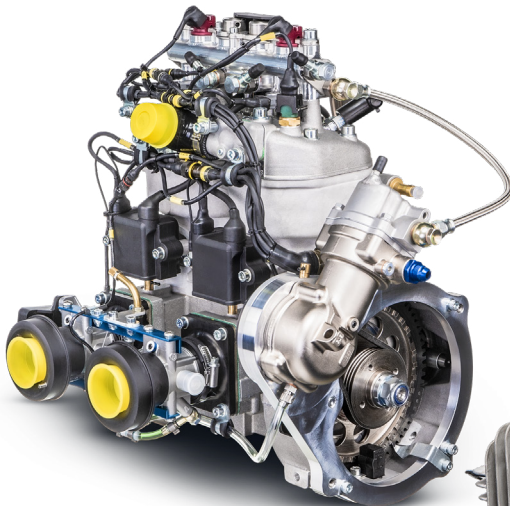
Where Precision and Reliability Soar!

Northwest UAV



HIRTH UAV ENGINES & Sport Aviation Engines + MRO

With 90 years of developing aviation technology, Hirth Engines GmbH offers the UAV market proven aviation solutions. Rely on the power of Hirth and the expertise of NWUAV to help you discover the right engine and maintenance plan for your mission.



- Two-Stroke
- Injection System
- Innovative Design
- Impeccable Service
- Rigorous Testing

Innovative. Lightweight. Reliable.



HIRTH POWER.

ENGINES

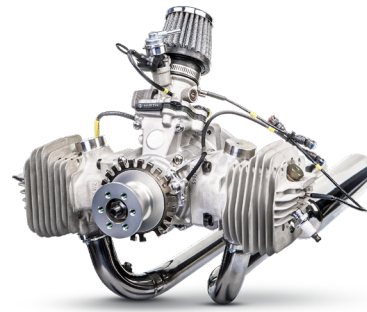
INNOV

With an earned reputation as market leaders who provide proven technologies and superior service. Hirth offers innovative two-stroke propulsion systems with a history of engineering excellence. Rely on the performance and efficiency built into every Hirth Engine, and on NWUAV's commitment to ensuring your propulsion solution is reliable, cost-effective, and well maintained.



8 HP – 41 SERIES

- Latest unmanned aerial vehicle (UAV) technology
- Exceptional reliability
- Maximum performance in extreme conditions



15 HP – 42 SERIES

- Best performance for UAV
- State-of-the-art engine technology
- Ultimate control in extreme conditions



30 HP – 33 SERIES

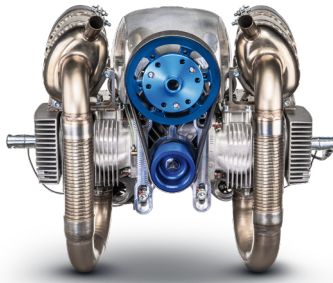
- Lightweight
- Best suited for light aviation and powered parachutes

SPECIFICATIONS	41 Series / 4103	42 Series / 4201	33 Series / F33 AS
Type	Two-cylinder/Two-stroke (Opposed)	Two-cylinder/Two-stroke (Opposed)	Single-cylinder/Two-stroke
Displacement	6.3 in ³ (100 cm ³)	11.5 in ³ (183 cm ³)	19.1 in ³ (312 cm ³)
Stroke	1.34 in (34 mm)	1.57 in (40 mm)	2.72 in (69 mm)
Bore	1.73 in (44 mm)	2.13 in (54 mm)	2.99 in (76 mm)
Maximum Torque	-	-	23.8 ft-lb (32.3 Nm) at 5800 rpm (AS)
Maximum Performance (According to DIN 70020)	8 hp (5.96 kW) at 6700 rpm	15 hp (11 kW) at 6500 rpm	30 hp (22.37 kW) at 6500 rpm (AS)
Speed Range	1800-6500 rpm		-
Mixture Formation	Fuel Injection		-
Carburetion	-	-	Float Type Carburetor
Ignition System	CDI Controlled by ECU		CDI
Fuel Mixture	Fuel/Oil Mixture 1:80 ²		Fuel/Oil Mixture 1:50 ⁶ / Mixture 1:80-100 ⁷
Weight	7.5 lb (3400 g) ³ / 1.33 lb (600 g) ⁴	12.5 lb (5700 g) ³ / 1.33 lb (600 g) ⁴	28.0 lb (12.7 kg)
Dimensions (LxWxH)	10.20x11.25x12.12 in (259x286x308 mm)	8.38x12.99x6.29 in (213x330x160 mm)	11.79x14.96x11.81 in (299.5x380x300 mm)
Starting Device	-	-	Recoil Starter
Generator Power	-	-	-
Running Direction (View to Output Shaft)	Clockwise		Counter-clockwise
Cooling	Air Cooled		
Control	Integrated Throttle Servo (Fa. Volz)		-
OPTIONS	Two Exhaust Styles Oil Injection 500W Starter/Generator	Two Exhaust Styles Oil Injection Up to 1kW Starter/Generator (Options): - 1.76 lb (800 g) 1kW Generator - 1.33 lb (600 g) 0.5kW/28V Starter/Regulator Box - 0.88 lb (550 g) 0.5kW/28V Regulator Box	Dual Ignition Electric Starter (Only in Combination with G33) Belt Reduction G33 (1:1.8 / 1:2.2 / 1:2.5) 50W Generator Power Cylinder Head Maximo

Northwest UAV

YOUR AUTHORIZED HIRTH DISTRIBUTOR/
MRO FOR NORTH AND CENTRAL AMERICA

VARIABLE. LIGHTWEIGHT. RELIABLE.



50 HP – 23 SERIES

- World standard power-to-weight ratio
- Fit to take on any challenge in light aviation



Heavy-Fuel

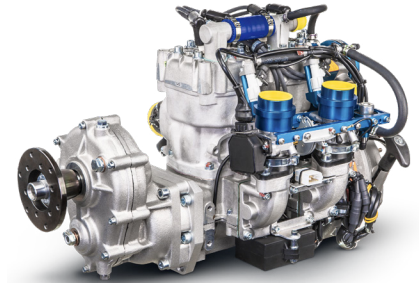
60 HP – 35 SERIES

- Maximum performance in extreme conditions
- Highest power-to-weight ratio
- NATO compliant



65 HP – 32 SERIES

- Ultimate power-to-weight ratio
- Ideal for light aviation, hovercraft, gyro or helicopters



70/58 HP – 35 SERIES

- Highest power-to-weight ratio
- Perfect for light aviation, hovercraft, gyro or helicopters

23 Series / F23 Lightweight	35 Series / 35HF	32 Series / 3203	35 Series / 3503, H35
Two-cylinder/Two-stroke (Inline)	Two-cylinder/Two-stroke (Inline)	Two-cylinder/Two-stroke (Inline)	Two-cylinder/Two-stroke (Inline)
31.79 in ³ (521 cm ³)	38.1 in ³ (625 cm ³)	38.1 in ³ (625 cm ³)	38.1 in ³ (625 cm ³)
2.52 in (64 mm)	2.72 in (69 mm)	2.72 in (69 mm)	2.72 in (69 mm)
2.83 in (72 mm)	2.99 in (76 mm)	2.99 in (76 mm)	2.99 in (76 mm)
38.9 ft-lb (53 Nm) at 6300 rpm	57.0 ft-lb (67.5 Nm) at 6000 rpm	52.8 ft-lb (72 Nm) at 5000 rpm	57 ft-lb (77.3 Nm) at 6000 rpm (3503) 58 ft-lb (79 Nm) at 5000 rpm (H35)
50 hp (36.7 kW) at 6500 rpm	60 hp (44 kW) at 6300 rpm Specification with 194°F Coolant	65 hp (48.47 kW) at 5500 rpm	70 hp (52 kW) at 6500 rpm (3503) 58 hp (43 kW) at 5200 rpm (H35)
-	-	-	-
-	-	-	-
Slide Carburetor (Mikuni) (AS)	Air-assisted Direct Injection	2x Slide Carburetor (Dell Orto) or Fuel Injection	Multipoint Injection (E) or 2x Carburetor (V)
CDI	Electronic Ignition Controlled by Engine ECU		CDI
Fuel/Oil Mixture 1:50 ⁶ / Mixture 1:80-100 ⁷	Kerosene Based: Jet A, Jet A1, JP5, JP8		Fuel/Oil Mixture 1:50 ⁶ / Mixture 1:80-100 ⁷
48.4 lb (22 kg) ⁵	79.0 lb (36 kg) ¹	68.4 lb (31 kg)	79.0 lb (36 kg) ¹
11.25x22.44x13.30 in (286x570x338 mm)	18.97x17.83x14.44 in (481.8x453x443 mm)	14.84x23.11x15.07 in (377x587x383 mm)	18.58x16.14x14.17 in (472x410x360 mm)
Recoil Starter	Electronic Start		Recoil Starter
250W/12V	-	-	-
	Counter-clockwise		
Air Cooled	Liquid Cooled	Air Cooled	Liquid Cooled
-	-	-	-
Dual Ignition Electric Starter Polyflex Belt Reduction G23 (1:1.8 / 1:2.0 / 1:2.5 / 1:3.1)	Gearbox G 50 (1:2.16 / 1:2.29 / 1:2.59 / 1:3.16 / 1:3.65) Electronic Throttle Control via Integrated Servo Integrated Starter/Generator 1-3kW/28V	Dual Ignition Electric Starter Fuel Injection Belt Reduction G 27 (1:1.8 / 1:2.0) Gearbox G 50 (1:2.16 / 1:2.29 / 1:2.59 / 1:3.16 / 1:3.65) Separate Lubrication	Dual Ignition Electric Starter Gearbox G 50 (1:2.16 / 1:2.29 / 1:2.59 / 1:3.16 / 1:3.65) Separate Lubrication

¹ With exhaust and water in the engine.

² Two-stroke oil API TC or BLUEMAX, MOGAS o. AVGAS fuel min. 95 octane (RON).

³ Weight with exhaust system, sensors, and wiring harness.

⁴ Weight of subcomponents (ECU, ignition system, and fuel supply).

⁵ Without exhaust.

⁶ Two-stroke oil, fuel min. 95 octane (RON).

⁷ With BLUEMAX 2-stroke oil, fuel min. 95 octane.



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