

# FR420F

## EXCAVATOR

Rated Power **247kW/2000rpm**

Operating Weight **37000kg**

Bucket Capacity **1.9 m<sup>3</sup>**



# TECHNICAL SPECIFICATIONS



## Engine

Engine Model	WEICHAI WP10H
Number of Cylinders	6
Max. Torque/Speed	1470N·m/(1200-1600)rpm
Displacement	9.726L



## Hydraulic system

Max. Main Pump Flow	576L/min
Main Safety Valve Pressure	34.3MPa



## Main Performance

Bucket Digging Force	218kN
Arm Digging Force	169kN
Max. Traction Force	289kN
Max. Walking Speed	5.4km/h
Min. Walking Speed	3.0km/h
Rotary Speed	7.8r/min
Gradeability	35°
Ground Pressure	69kPa



## Oil Capacity

Fuel Tank	630L
Hydraulic Tank	340L
Engine Oil	38L





## EFFICIENCY

Using Weichai Linde powertrain technology, the operating efficiency of the whole machine is increased by 15% compared with the generation E, and the fuel efficiency is increased by more than 20%.

Engine thermal efficiency leads the industry. The minimum fuel consumption is 180g / kWh.

Large displacement main pump, the main pump displacement increased by 12.5%. Using plunger pack sliding boots, 21° swing angle technology, compact structure, high power density. Double variable cylinder accurate inclined plate control, good consistency, faster response speed, main pump displacement output accuracy a higher accuracy, accurate output of the required flow.

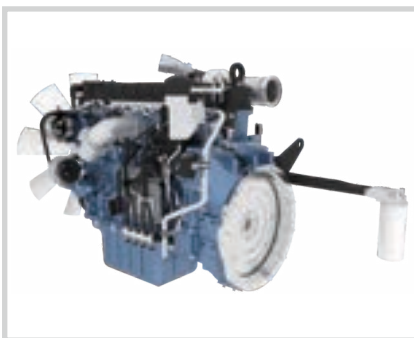
Large displacement displacement, low rotation speed;  
Large torque, and high power. Power increased to 247KW; torque, increased to 1470N · m.

The large flow main valve is adopted, the diameter of the valve core increases by 21.4%, and the flow capacity of the main valve is increased by 50L / min.

Linde exclusive custom tuning, internal flow channel optimization, smaller pressure loss, better response.







## RELIABILITY

Weichai high-end H platform engine, the life of up to 30,000 hours.

### Noise reduction wheel system

Low speed ratio, noise reduction fan, air conditioning high position, convenient maintenance.

### High efficiency intake system

Meet the requirements of 3,500 meters without reducing the power.

### Large capacity oil bottom shell

Meet the 35° inclination requirements and 500 hours of oil change cycle, structural reinforcement, noise suppression.

### Machine filter, burning filter far transmission

Convenient maintenance, maintenance cycle of 500h, standard fuel water hanbao.

### Rear gear room

Reduce NVH.



## COMFORT



### Safe and comfortable: Driving meets the ROPS regulatory requirements, and driving is safer.

Adopt new structure, extended to meet 50 tons of ROPS regulatory requirements, safer.

Panoramic skylight, break through the concept of conventional construction machinery.

### All new air duct and air outlet design, storage space increase.

After NFD analysis, the air conditioning duct has lower wind resistance and lower noise. With the optimized air outlet position, it provides a cool and comfortable space for drivers in the hot summer.

More storage space, can accommodate the driver's daily trivial items, to provide a cleaner driving environment.

### Seat improvement and upgrade, standard rear view camera.

Wideseat wider, ride more comfortable; SIP point three adjustment to meet the needs of different height.

With a standard rear-view camera, the driver can easily find obstacles behind the car and improve driving safety.

## INTELLIGENCE



The newly developed Leo intelligent operating system can realize power system management, intelligent interaction, automatic identification of working conditions, auxiliary operation, personalized customization and other functions.

### Intelligent vehicle control

The driver can remotely control the excavator by using the mobile phone to connect to the Bluetooth in the vehicle to power on/off, start/off, turn on/off the air conditioning, turn on/off the lights, and also enable simple mobile phone remote operation, etc.

### Intelligent multimedia

the driver can use the mobile phone to answer the phone and play music through the monitor.

### Accompanying you

Home At night, when the driver finishes work and leaves the excavator, the work light is switched off on a delayed basis to light the way home.





# INCREASE YOUR PRODUCTIVITY AND PROFIT WITH NASR ATTACHMENTS

You can easily expand the performance of your machine by utilizing any of the variety of NASR Attachments.

Each NASR Attachments is designed to fit the weight and horsepower of NASR Excavator for improved performance, safety, and stability.



Quick Coupler



Hydraulic Shear



Hydraulic Hammer



Standard Bucket



Scarifier



# STANDARD CONFIGURATION

## Engine

Turbocharged 4 stroke water-cooling direct injection type

Complying with China Stage II emissions

Automatic idle system

Engine oil pan drain valve

Radiator with protective net

Double filter elements dry air filter element

Air pre-filter

Air intake heater

Fan guard

## Hydraulic System

Automatic hydraulic system (confluence system)

Anti-swing valve

Boom and arm block valve

Multi-stage filtration system

Cylinder buffer device

Auxiliary hydraulic valve

Automatic two-speed travel motor

## Electronic Control System

24V power supply

Diagnostic interface

Emergency stop switch

Display brightness adjustment

Maintenance tips

Automatic diagnostic system

Automatic idle system

One-touch pressure augmentation

Safe stop / start function

Main power switch

Anti-theft system

Engine starting protection

Multilingual display

## Cab

Ashtray

Cigar lighter

Seat belt

Front sunshade

Storage box

Escape hammer

Thermostatically controlled air conditioner

Shock absorber (silicone oil and rubber pad)

Flexible antenna

Radio (with interfaces of MP3 and USB)

Hydraulic safety lock

Sun-protection safety glass

Floor mat

Large storage area

Pull-up front window

Removable lower windshield

Sunshade window

Front-bottom glass protective screening

Wipers

Open skylight

## Swing Platform

Passage with railing

Tool box

Anti-skid plate

Large pedal

Large armrest

Bottom protection plate

Anti-collision beam

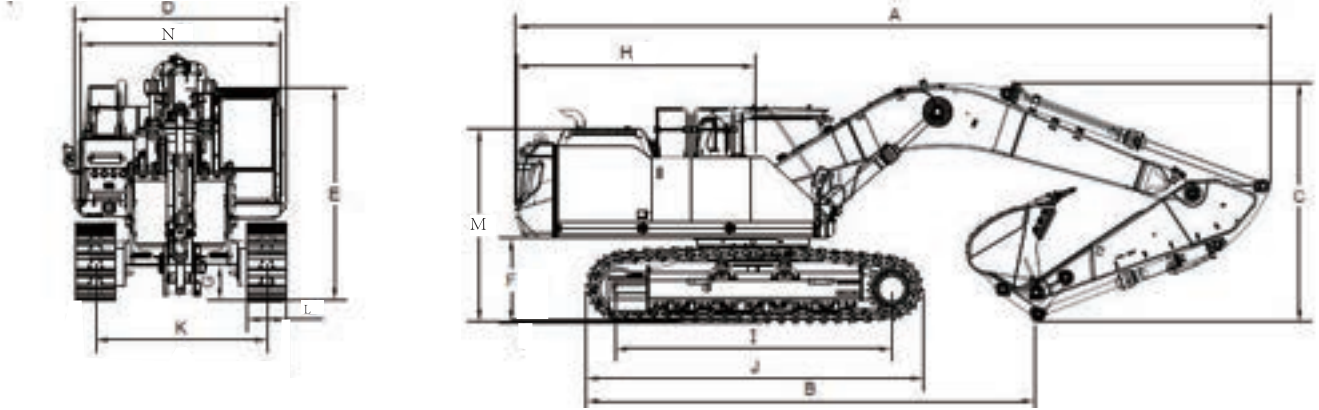
## Chassis

Fixed chassis

600mm, three-tooth track shoe



# TECHNICAL SPECIFICATIONS



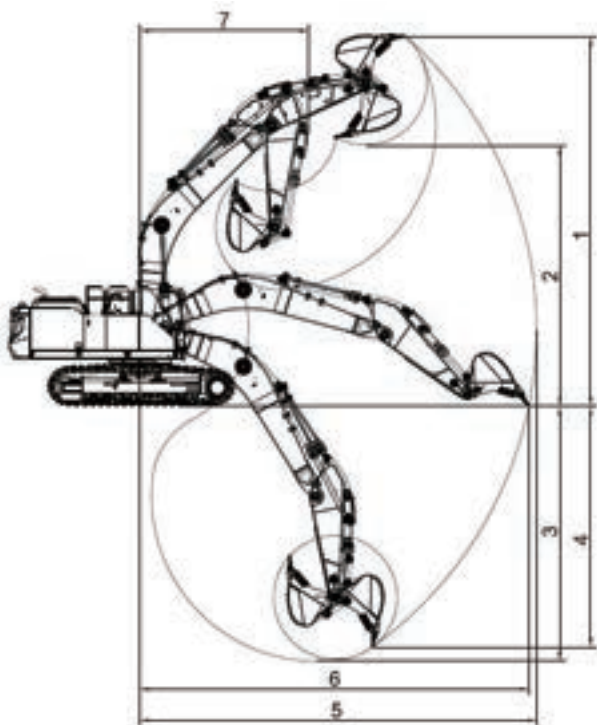
## Working Range

Max. Digging Height	1	10025mm
Max. Dumping Height	2	7070mm
Max. Digging Depth	3	6960mm
Max. Vertical Digging Depth	4	4707mm
Max. Digging Radius	5	10770mm
Max. Ground Digging Radius	6	10556mm
Min. Turning Radius	7	4427mm



## Dimensions

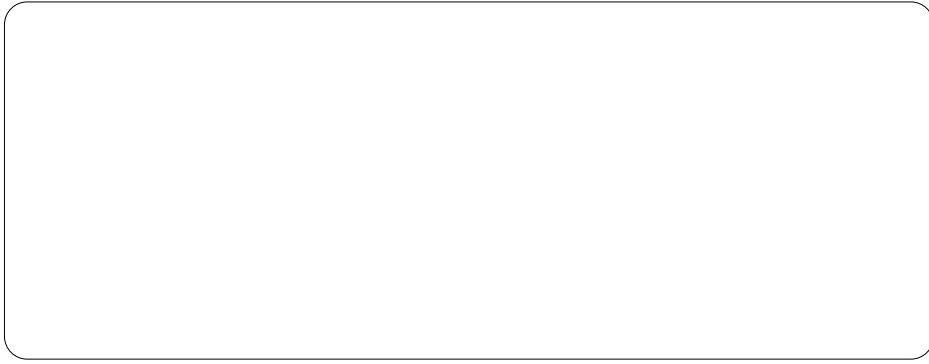
Shipping Length	A	11350mm
Shipping Ground Length	B	6760mm
Boom Height	C	3615mm
Shipping Width	D	3200mm
Cab Height	E	3246mm
Ground Clearance of Counter Weight	F	1224mm
Min. Ground Clearance	G	516mm
Tail Turning Radius	H	3610mm
Length to Center of Rollers	I	4140mm
Track Length	J	5070mm
Track Gauge	K	2590mm
Track Shoe Width	L	600mm
Hood Height	M	2892mm
Rotary Platform Width	N	3025mm



## Other Specifications

Boom Length	5700mm
Arm Length	2925mm
Track Section Number (each side)	49
Track Roller Number	8/9





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