

سنيو پارس

SNOW PARS

One Step Ahead...



**MINI SP EC-60
EXCAVATOR**

40 years of experience in working with the customers and by recognizing the different needs in the construction, urban development, road construction....activities directed us towards developing a new solution by designing mini-excavator.

The SP-EC-60 Mini Excavator in a small size provides you with maximum power and efficiency in a wide scope of usages.

MINI *SP EC-60* **EXCAVATOR**

The Product of the Manufacturing Power
and Technical Knowledge of Snow Pars

LAND PRESSURE

32 KPA

WORK LOAD

6.0 T

ENGINE

KW / 60 BHP 66



MINI *SP EC-60* EXCAVATOR

- The pre-heating system for easy start in cold weather
- Cabin in FOPS & RROPS Standard
- The steel structure designed for hard working conditions
- Additional hydraulic circuit for hammer and other tools
- Beautiful, comfortable and ergonomic cabin
- Efficient hydraulic with variable pump



- **Accessibility** higher maneuver power of mini-excavator allows the excavator to enter in narrow spaces.
- **Ease in use** teaching operators to work with this system takes only a few minutes.
- **Less noise** especially when passing hard surfaces, ideal for residential neighborhoods
- **Less damages** the light weight of the machine means less scrapping and scratches of the surface.
- **Easy transportation** It can be loaded with a small trailer truck.
- **Function like a large excavator** including a full 360-degree rotation without displacement.
- **Cost saving** lower investment and higher output- less expensive maintenance and services





- **Small while efficient**

Excellent performance, the kinematic of the equipment, rapid connection and mini-size design makes the machine compatible to work in any conditions.

This is a key factor in your business profitability.

- **Flexibility = Profitability**

The SP EC-60 machine performs the drilling, loading and lifting and has the potential of being equipped with many mountable tools. Owing to rapid hydraulic connection, the operator can replace and change the tool in just a few seconds. The specific kinematic of the facilities guarantees and secures the efficiency of the mini-excavator.

User Friendly

Easy operation, unique and unmatched safety and comfort improves the driver-operator's performance. In addition, the user-friendly nature controls and the hydraulic performance makes SP EC- 60 very efficient in any working conditions.

The small size of SP EC-60 fulfils the efficiency and benefits you might anticipate in the road, drainage and drilling, in the sites with limited space,.



- **Comfort**

A cabin equipped with ventilation system, adjustable wrist rest and suspending seat create a comfortable space for long time of work.

- **Easy operation**

Working with hydraulic controls is very easy and the LCD monitor has made the system adjustment and tuning very simple.

- **High output- mini-design**

Increasing the productivity by multi-purpose performance helps a high efficiency work.

- **Safety in work**

Your safety is our top priority, the SP- EC-60 cabin is designed in a way to keep you safe during the work. The very highly efficient lights and the seat with foldable safety belt are just a few of the safety features of this system.

- **Easy service in shortest time**

The repair and maintenance in SP EC-60 is performed easily and rapidly.

All places for check, service and maintenance are easily accessible from ground.

- **Unique support**

We are here for you to help you achieve the goal of your business. Snow Pars is prepared to assist you from providing you with the practical solutions to training the operator to service and maintenance of the machine, supply of parts and beyond it.



- Engine

The engine of Hydromac excavators is specifically designed for mini excavators. The engines have turbochargers with EU Stage IIIA pollution standards. High efficiency and output, long life and reliability of the engine in all working conditions have led to its high acceptance rate and popularity in many markets.

- Chassis

The chassis of the mini excavator is designed for working in difficult conditions. The X-shaped main frame of the chassis shows high resistance against bending forces and the vibration-caused stress; as its homogenous structure distributes the pressures on it fairly well and neutralize the forces. The lower rollers (rollers) are fixed on the hexagon joints in lower chassis which increases the resistance and length of the chassis life.

The standard chassis maximizes the machine balance during its work. The upper rollers, the lower rollers and the front idlers are suitable to work in all types of lands and are sealed for lifetime by permanent seals. The under pins and sleeves are greased, lubricated and sealed to reduce the chain noise and increase the life of undercarriage parts.

The three-gear 600 mm pads are self-cleaning.



- Cabin

The cabin is designed in a way that allows operator work easily even in the most difficult conditions. The opening front glass window has been designed to create an excellent view for the operator. It can be easily opened by sliding it towards the roof. Other facilities for increasing the operator's comfort and ease include the seat and a front consul. The standard seat of the excavator can be adjusted in various positions and makes it possible for the operator to work for long hours with high performance and efficiency without becoming tired.

To maintain the operator, his seat is equipped with safety belt. The impacts of excessive noise, the impacts, vibration of the machine and shakes caused by tools such as hammer are controlled and restricted. In addition, an excellent ventilation system is fixed in the cabin which creates a suitable working environment for the operator.

A digital LCD monitor which shows the images even in harsh sunshine light makes it possible to check all important information rapidly for optimized performance of the machine.

- Working hours
- Controlling the engine rotation
- Temperature of engine water
- Temperature of hydraulic oil
- Hydraulic pressure
- Working with menus
- The remaining period to next service and maintenance work
- Code of performance errors
- Controlling the equipment installed on hammer circuit



MINI *SPEC-60* EXCAVATOR



- **Smart and safe hydraulic system**

- Easy control
- High efficiency
- Constant control of power generation depending on the amount of the load
- Highest operation possible in all working conditions
- Re-use of the return flow from the tools in the main control valve

- **Hydraulic pump**

By using a twin pump, piston-center variable discharge system has maximized the performance of the system and the life length of hydraulic pump. The hydraulic pump and the system engine are fully compatible with each other to ensure the consistency of the power generated by the engine and the power needed by the pump in facing different loads and thus, there will be no interruption in the engine performance.

- **Main control valve**

The main control valve guarantees the smooth and vibration free of components in all combined movements. The operator can focus on his work since the prioritization of the boom, stick and rotator is automatically done by the main control valve. The returning currents of jacks without entering into the hydraulic tank are re-sent by main control valve to be used for other hydraulic use and in this way, not only the hydraulic improves, but the speed of machine function increases as well.

- **Hydro motor and gearbox**

The motion of the chain excavators of the two-phase hydro motor along with the connected reducer gearbox gives the operator the choice of selecting two types of motion:

- Moving with high moment and low speed (turtle speed)
- Moving with low moment and high speed (rabbit speed)

SP EC-60

Capacities

Gasoline tank	95 Liter
Hydraulic tank	115 Liter
Hydraulic system capacity	130 Liter
Radiator	15 Liter
Motor oil	12 Liter
Rotating gearbox	1.2 Liter
Motion gearbox	2 x 2 Liter

Control system

Number of pads	39 in each side
Number of upper rollicks	1 in each side
Number of lower rollicks	5 in each side

Electric system

System voltage	24 volt
Battery capacity	12 V 85 Ah
Dynamo	DC 12 V / 40 A
IStart	DC 12 V (1.7 Kw)

Bucket efficiency

Standard bucket capacity	0/25 m ³
Drilling force of the bucket	40KN
Drilling force of the arm	28KN

Work load

Weight (with standard facilities)	6065 kg
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Engine

Manufacturing	YANMAR
Number of cylinders	4
Inner diameter of cylinder and piston course	110x98
Engine power	58/6 Hp (44KW)
Maximum momentum	250 N/m per 1200 rpm
Volume of engine carry	3/319 Ltr
Diameter x cylinder piston course	98 x 110 mm
Pollution standard	Euro IIIA
- Pre-heater for start in cold weather	

Hydraulic system

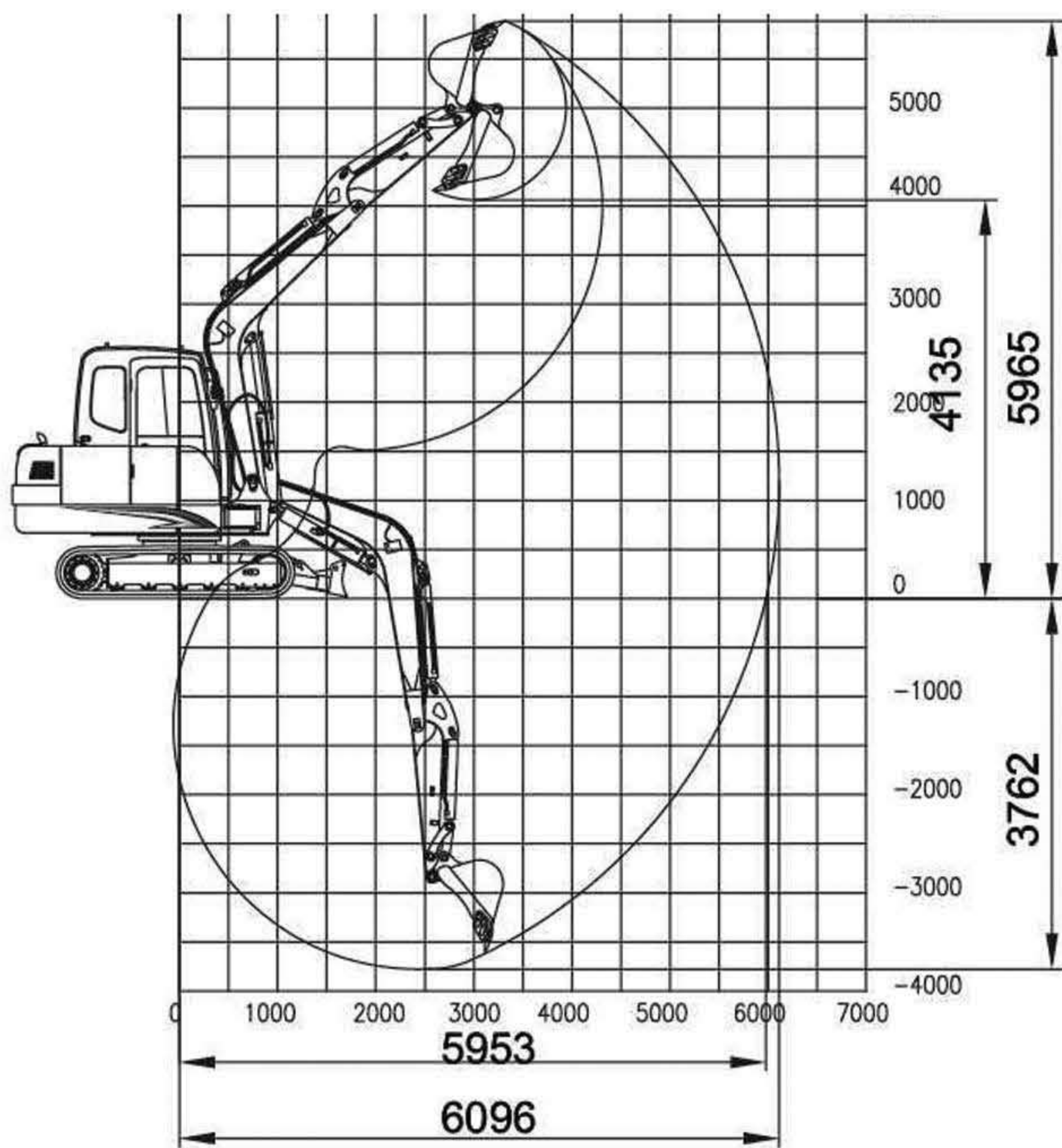
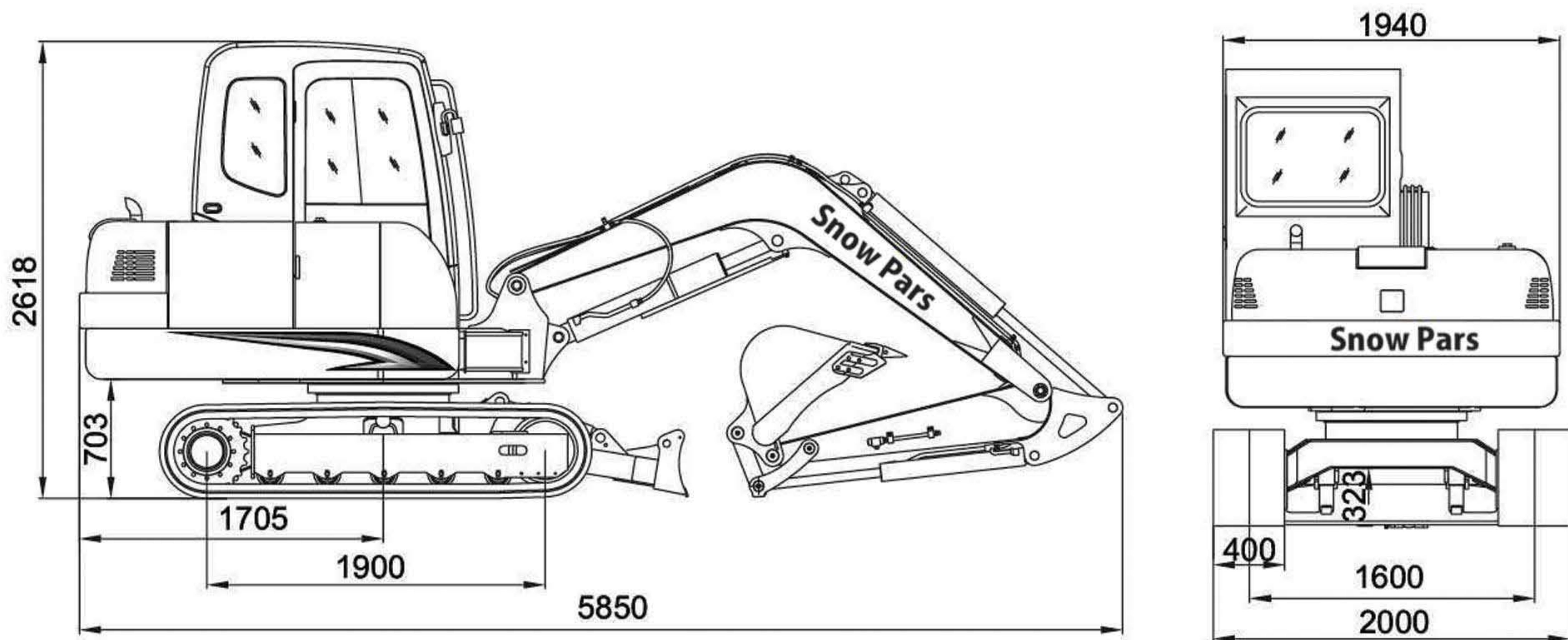
Main pump	Axial piston pump with variable replacement
Discharge rate of main pump	156.2 Lt. per minute
Work pressure of hydraulic system	245 Bar
Work pressure of jacks	275kgf/cm ²
Work pressure of moving system	255kgf/cm ²
Work pressure of rotating system	219kgf/cm ²
The High flow Systems	Available
-Shock absorber valves Oil coolant radiator to ensure uninterrupted work in hot weather.	

Motion system

Motion hydro motor	Axial piston hydro motor
Reductive system	Available
Maximum speed	5-5/2Km/h
Maximum slope angle before	(70%) 35°
Maximum drag force	3/58KN

Motion System

Rotating hydro motor	Axial piston hydro motor
Maximum rotation speed	11rpm
Reductive system	Available
Rotating brake	Available
Land pressure	32Kpa

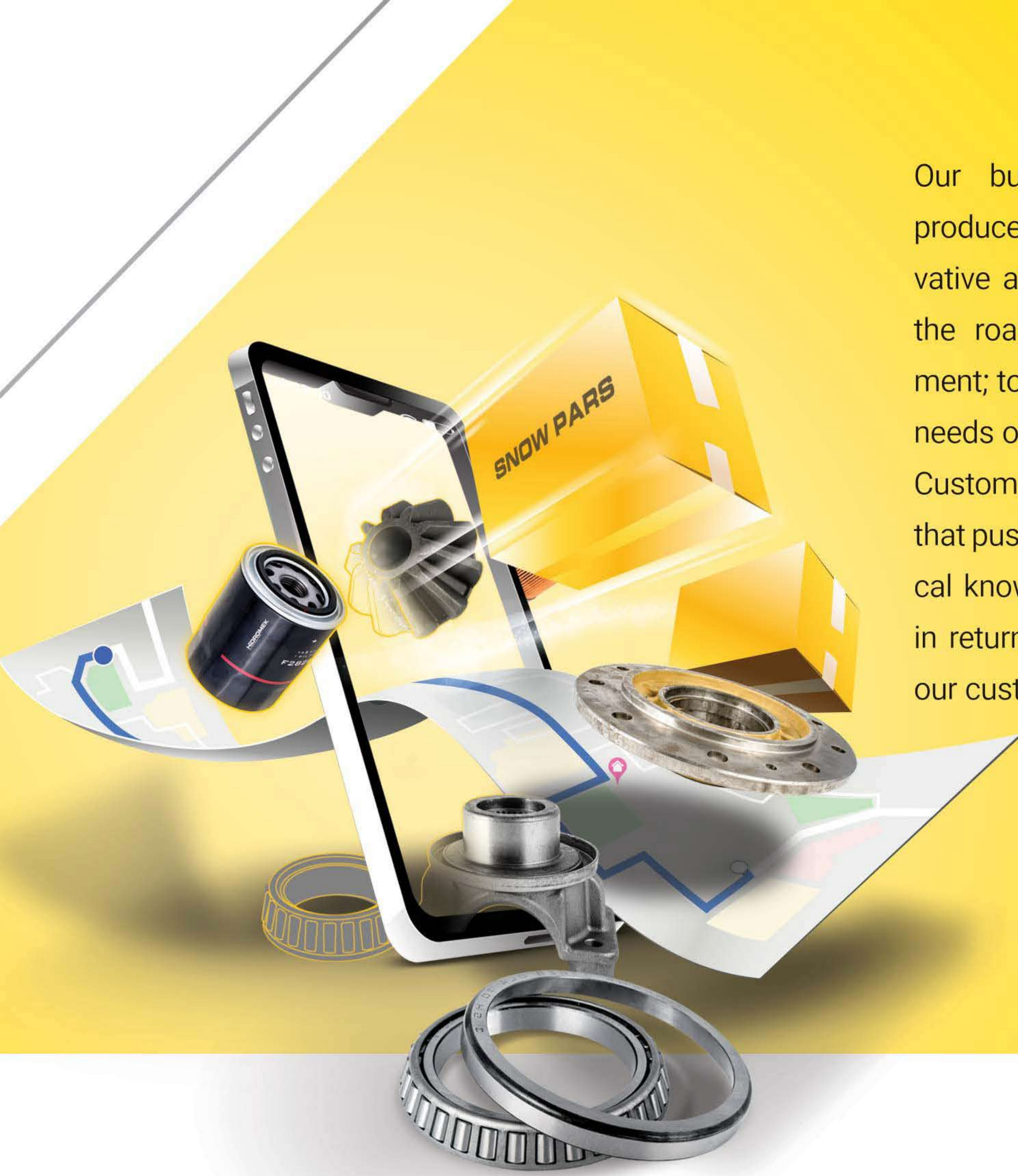


General dimensions

Dimensions of the boom (tower)	3000mm
Dimension of stick (arm)	1550mm
A Total length	5842mm
B General height (to the end of arm)	4070mm
C General width	2000mm
D- The distance center to the center of Idler and Sprocket	1900mm
E - The distance of end of the ball to the center of chassis rotator	1700mm
F- Distance of upper chassis to the ground level	703mm
G- Height of chain	580mm
H- Least free distance to land floor	323mm
I-Distance of the center to the chain center	1600mm
Width of pad	400mm
J-Total length of the chain	5370mm
K-Least distance of the bucket pin to the end of chain	3545mm
L-General height (to the top of cabin)	2618mm
M-Width of upper chassis	1940mm

Work dimensions

Tower (boom) dimension	3000mm
Dimension of sticks	1550mm
S-Highest drilling distance accessible	6096 mm
T-Highest drilling distance accessible on the land surface	5953 mm
U-Highest depth of excavation	3762 mm
V-Highest depth of the drilling	5965 mm
W-Highest height of load discharge	4135 mm
Y-Least radius of upper chassis rotation	2205 mm



Our business is design, develop, produce and commercialize the innovative and high-quality equipment for the road construction and development; to meet the extensive spectrum needs of our customers.

Customer is the heart of Snow Pars that pushes us forward with the technical know-how and team attitude; and in return, we contribute in developing our customer's business.

Distinguished in system Distinguished in services

Parts support

By establishing a separate organizational unit as "Spare Parts Unit" Snow Pars has focused on:

- The on-time supply of parts
- Competitive price
- Customer's satisfaction

In Snow Pars, we have a full complex of main parts for all its products with any budget available. Our goal is to ensure our customers' machines can work 24/7 in the entire 365 days of the year. The Parts Team of Snow Pars are at your service upon receiving your one call to supply you with your ordered parts at any time and any place; and support your business.

The parts order app (snowparsclub)

It is very important for your work to have available the parts in suitable time and place and it is for this reason that Snow Pars has merged its best online tools in one website and app.



After-sale-services

By its limitless after-sale-service, its well-equipped fleet with advanced facilities and professional technicians, Snow Pars is at service of its valuable customers:

- 24-hour round the clock
- Service at your place
- Standard services

The after-sale-service structure of Snow Pars is committed to show a full support of your orders including implementation, commissioning, repairs and maintenance of machines, and help you to improve the output and lower the operational costs of your machine.

The after-sale-service team knows everything about the Snow Pars machines and provides you with the best solution for your machines in the fastest time.

High satisfaction of the customer

A customer-based approach has been adopted in all our executive operations to meet the customer's satisfaction in highest possible level and gain the customer's loyalty.



