

# EMS GROUP

We manufacture  
ESF Series Vibratory Hammers  
PS Series Power Packs

Customer **satisfaction** is our main principle.  
Our customers will benefit from our expertise,  
our experience and commitment to the **quality**  
standarts.

WELCOME TO THE **EMS GROUP**

EMS Group Hydraulic Machine Ind.Co.Ltd.  
Ankara- TURKEY  
[www.esfvibro.com](http://www.esfvibro.com)  
[www.emsgroup.com.tr](http://www.emsgroup.com.tr)



# About Us

## ESF Series Vibratory Hammers...

*"Making sheet piling quick and easy."*

We are an internationally operating company and determined to become one of the biggest manufacturer in the hydraulic vibratory hammers sector since 2009.



Our company is capable to manufacture any size of hydraulic vibratory hammers in a very short time by means of the stock level of each part for all models. We always check the quality of each unit by testing after manufacturing completed. Our engineering department makes cross check the items and signs quality confirmation letter.



By our determination, we at EMS Group, manufacture the best quality hydraulic vibratory hammers today and in the future. We believe that the high quality of our products and services make our group well known in the hydraulic machinery sector.



Each part is under cross-check quality control. Our engineering department is always making quality control before mounting the parts to the related positions. The parts number are recorded and monitored even after sale.

We never compromise on quality by using SKF or FAG bearings, Rexroth or Parker Hydromotors in our vibratory hammers, in our PS Series power packs we mount VOLVO Penta, Cummins, or FORD diesel engines.



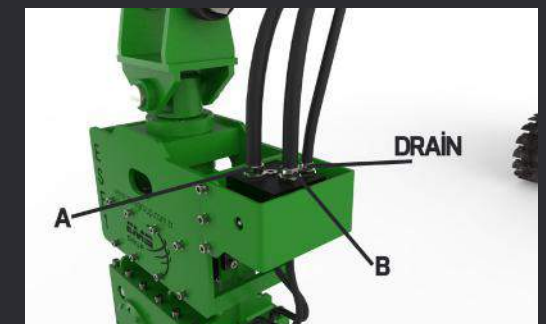
# B Type

## Excavator Mounted Hydraulic Vibratory Hammers

“The values of our models are demonstrated by our first class quality and innovative designing process. We always anticipate market demands and change our strategies by innovative designs and actions to adapt current conditions accordingly. ”



Our excavator mounted vibratory hammers are attached easily to excavator pump system and can be operated in a very short time. A line is a feeding line for hydromotor and B line is for clamp open action. Drain line is a connection from hydromotor oil leakage to excavator tank.



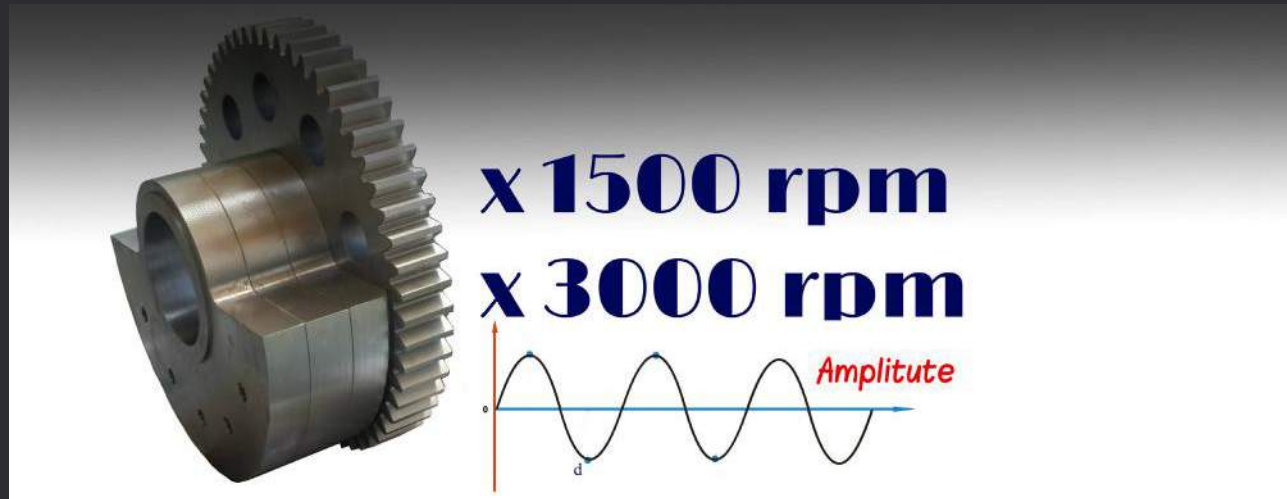
OPTION : A line + Electric Line to open clamp  
 The clamp can be opened by remote control in excavator cabin.

Also we offer our customers small power packs to operate without excavator oil supply displacement. All of the power packs have wireless or wire type remote control utility.

### Operator Friendly

We manufacture connection hitches as per the excavator boom dimensions to help operator to connect the unit easily.

If needed to extend the boom height of your excavator, we also manufacture extension booms from 2 mt up to 4 mt. Our extension booms are ready with hydraulic lines.



**x 1500 rpm**  
**x 3000 rpm**

The ground formation and the eccentric moment with centrifugal force are the basic parameters of the driving process by vibratory hammers.

ESF Series Vibro Hammers are designed to apply energy in high frequencies from the excavator to the soil.

The goal of the use of the hydraulic vibro hammer is piling and extracting the shaped material made of steel, called "sheet pile", the length of which extends from 4 meters up to 10 meters and which, when driven one after another, behaves as a channel wall in narrow and deep excavations in watery, loose, sandy, clayey grounds.

A hydraulic vibro hammer is a hydraulic machine powered by the excavator that it is attached or by an external power unit.

Note : Pile Weight is subject to change these parameters.

Driving Depth as per ESF models.

Eccentric Moment kgm	03	1	2	3	4	6	7	8
Loose Soil	3-5 m	4-6 m	5-7 m	6-8 m	7-8 m	100	9-10 m	10-12 m
Normal Soil	3 m	4 m	5 m	6 m	7 m	100	9 m	9 m
Dense Soil	X	X	3 m	3 m	4 m	100	5 m	5 m
Clay ( Very Dense Soil )	X	X	X	X	X	100	X	2 m
Eccentric Moment kgm	12	14	20	23	55	88	110	200
Loose Soil	12-14 m	15-18 m	17-20 m	18-20 m	20-25 m	30-35 m	35-40 m	40-45 m
Normal Soil	12 m	15 m	17 m	18 m	20 m	30 m	40 m	45 m
Dense Soil	6 m	8 m	10 m	12 m	15 m	18 m	20 m	25 m
Clay ( Very Dense Soil )	4 m	6 m	8 m	10 m	12 m	14 m	16 m	20 m

We are offering our customers for any size of material driving to the ground. The mini size vibratory hammers for Vinyl PVC sheet piles and small posts and big size vibratory hammers for any diameter steel tube driving projects.

We calculate the eccentric moment needed for your driving project and offer the right size ESF vibratory hammer.



After any demand for hydraulic vibratory hammer, our construction engineers checks the ground formation like ( SPT values ) and equipment to be attached. Then, our company recommends the right model as per customers project.

# ESF 03B

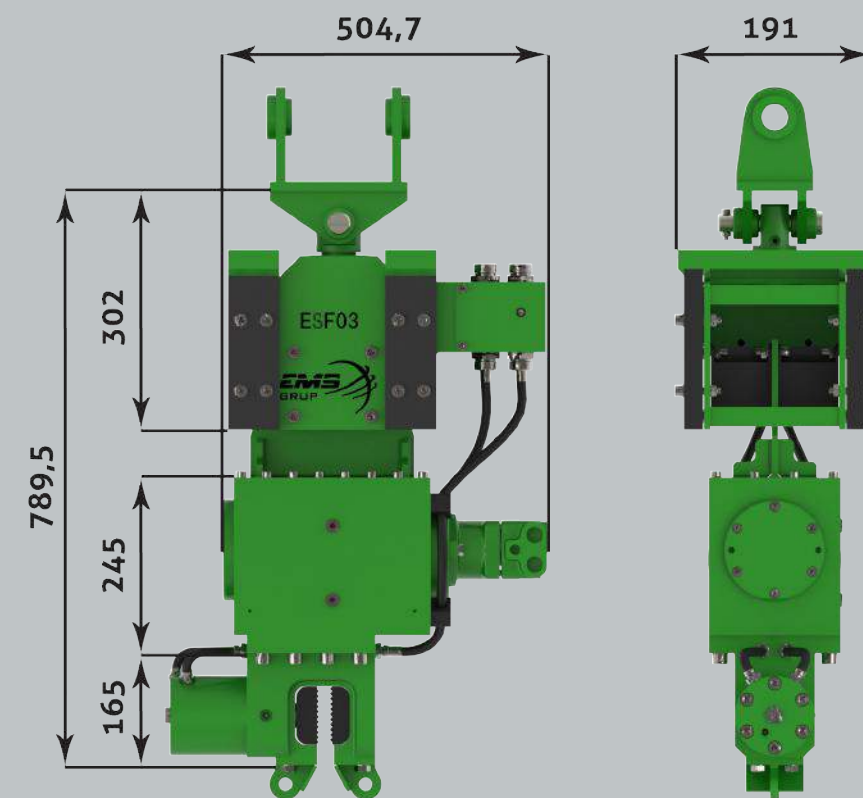
## Excavator Mounted Hydraulic Vibratory Hammer

ESF03 is the smallest vibratory hammer in the world. Available as excavator mounted or suspended working of a small 30 lt/min. power pack. The unit weight is 160 kgs in mounted mode and 190 kgs in suspended due to the addition of reaction weights on unit.



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Excavator Class	tons	5
Centrifugal Force	kN	33
Eccentric Moment	kgm	0,33
Speed	rpm	3000
Pulling Force	kN	15
Push Down	kN	15
Total Weight (incl.Clamp)	kg	160
Dynamic Weight (incl.Clamp)	kg	120
Amplitude	mm	5.5
Power	kW	8.8
Displacement	liter/min	30
Working Pressure	bar	150
Height	mm	790
Width	mm	191
Length	mm	505



# ESF 1B

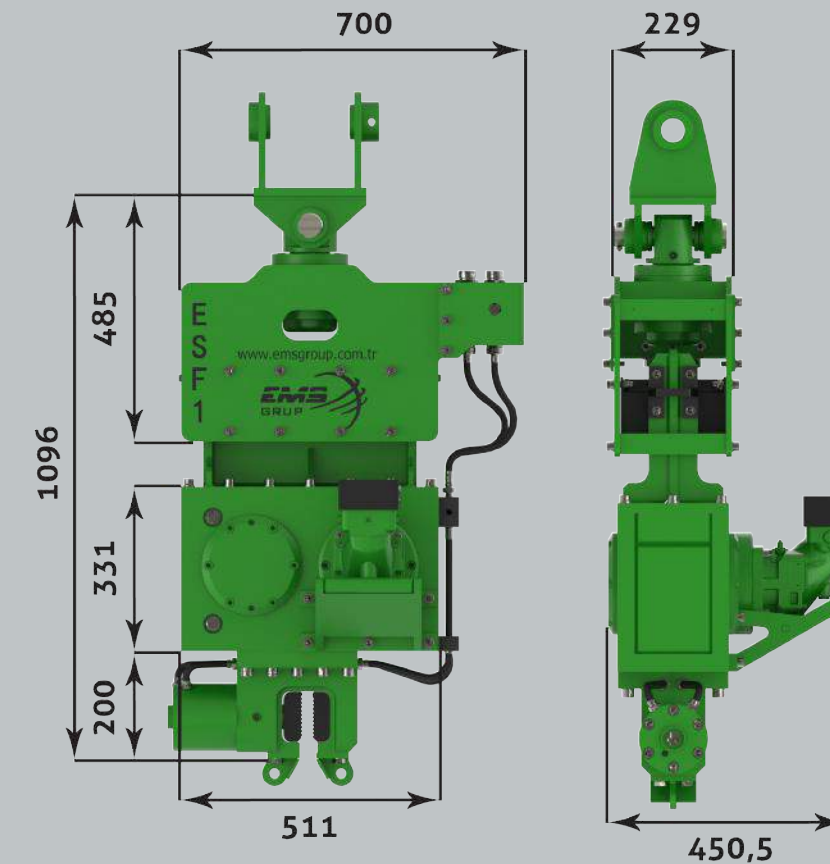
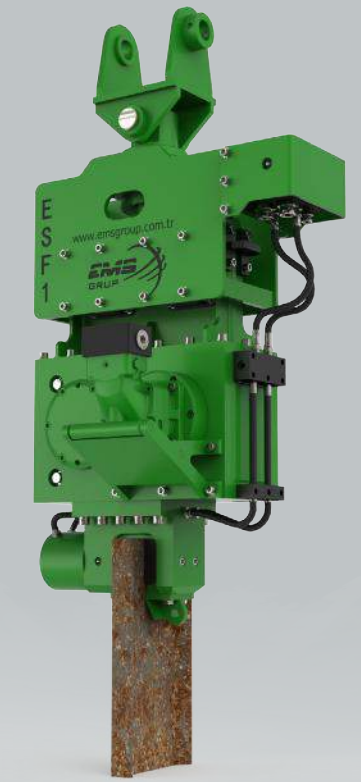
## Excavator Mounted Hydraulic Vibratory Hammer

ESF1 model micro vibro hammer is a very unique and special for small size pile driving applications. This model is attached to Back Hoe loaders and mini loaders.



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Excavator Class	tons	8-10
Centrifugal Force	kN	81
Eccentric Moment	kgm	1
Speed	rpm	3200
Pulling Force	kN	30
Push Down	kN	20
Total Weight (incl.Clamp)	kg	375
Dynamic Weight (incl.Clamp)	kg	290
Amplitude	mm	6
Power	kW	60
Displacement	liter/min	100
Working Pressure	bar	320
Height	mm	1096
Width	mm	451
Length	mm	700



# ESF 2B

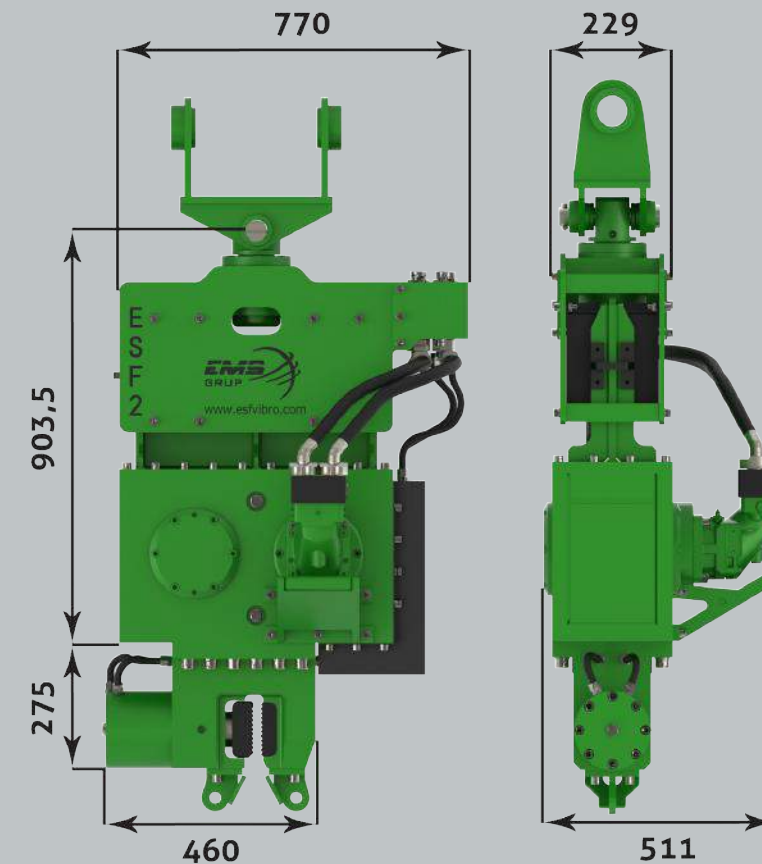
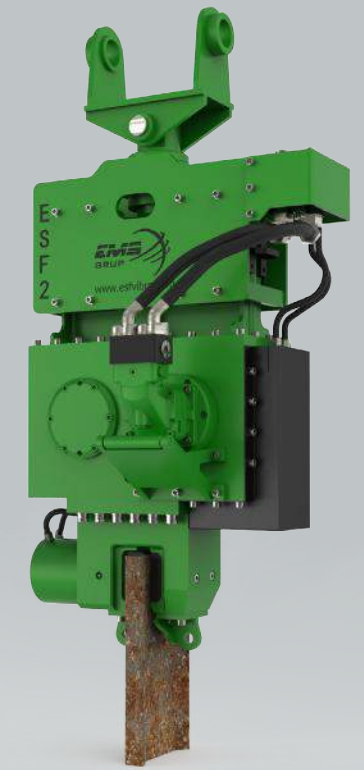
## Excavator Mounted Hydraulic Vibratory Hammer

ESF2 model vibro hammer is a very unique and special for small size pile driving applications. This model is attached to 14 tons class excavators.



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Excavator Class	tons	10-12
Centrifugal Force	kN	258
Eccentric Moment	kgm	2
Speed	rpm	3200
Pulling Force	kN	60
Push Down	kN	40
Total Weight (incl.Clamp)	kg	610
Dynamic Weight (incl.Clamp)	kg	495
Amplitude	mm	9
Power	kW	60
Displacement	liter/min	110
Working Pressure	bar	320
Height	mm	1215
Width	mm	511
Length	mm	770



# ESF 3B

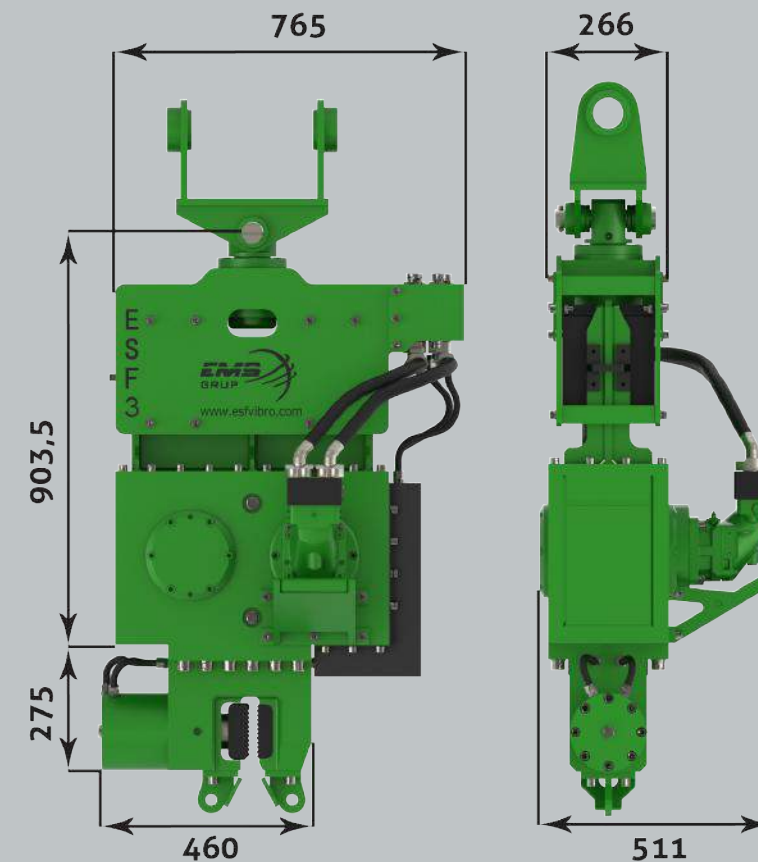
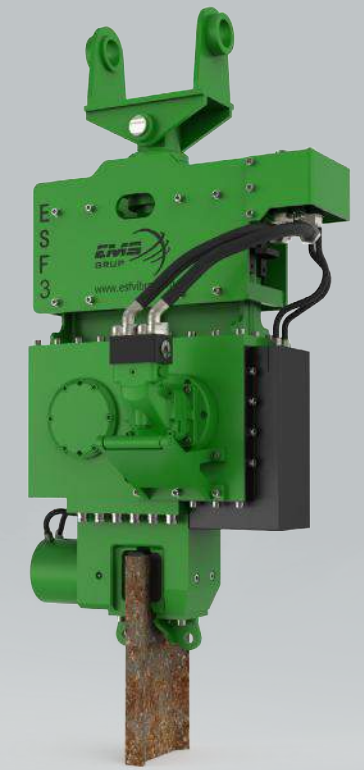
## Excavator Mounted Hydraulic Vibratory Hammer

ESF3 model vibro hammer is a very unique and special for small size pile driving applications. This model is attached to 16 tons class excavators. This size is optimum for PVC sheet piles driving.



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Excavator Class	tons	12-15
Centrifugal Force	kN	297
Eccentric Moment	kgm	3
Speed	rpm	3000
Pulling Force	kN	60
Push Down	kN	40
Total Weight (incl.Clamp)	kg	635
Dynamic Weight (incl.Clamp)	kg	515
Amplitude	mm	12
Power	kW	60
Displacement	liter/min	110
Working Pressure	bar	320
Height	mm	1215
Width	mm	511
Length	mm	770

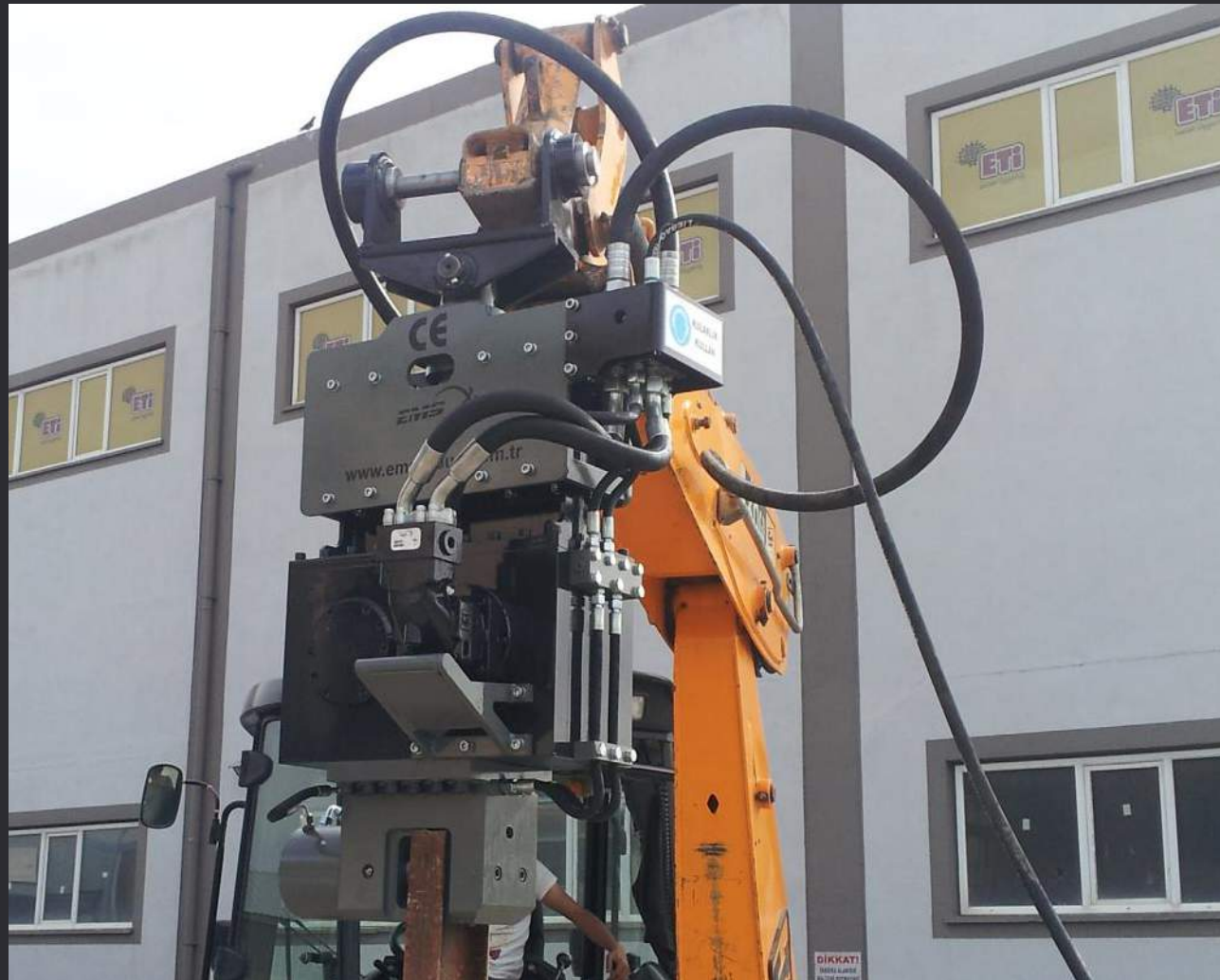




# ESF 4B

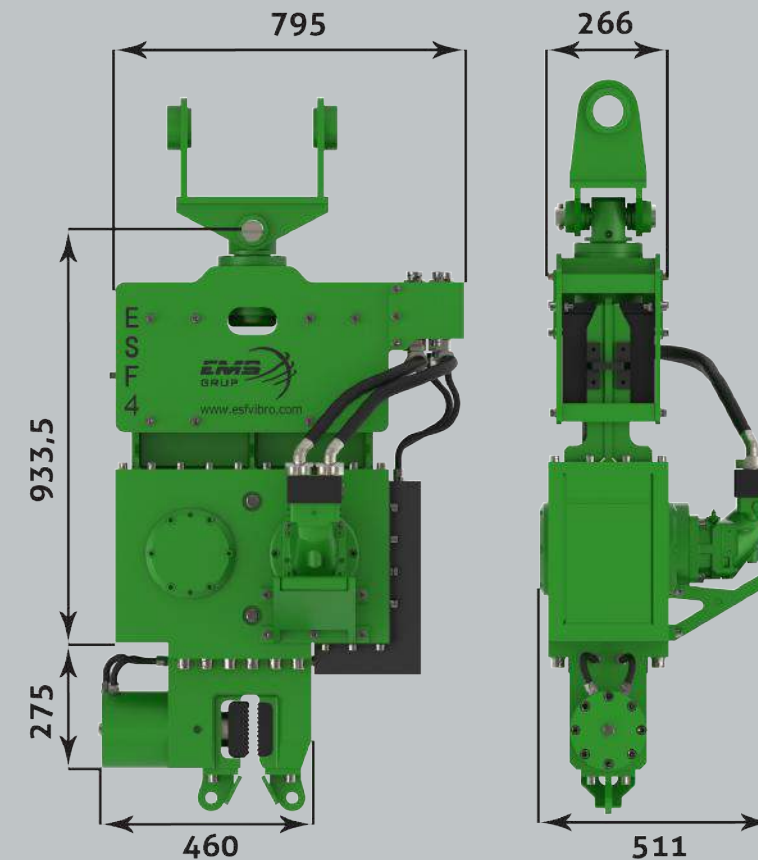
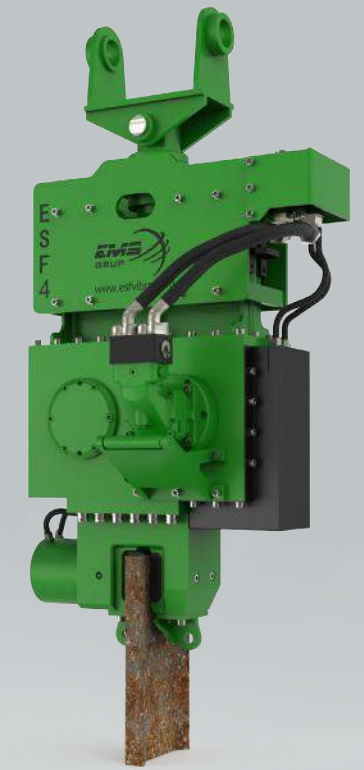
## Excavator Mounted Hydraulic Vibratory Hammer

ESF4 model vibro hammer is attached to 18/20 tons class excavators. In normal soil conditions and low weight materials enough to drive posts and sheet piles up to 6 mt.



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Excavator Class	tons	15-20
Centrifugal Force	kN	322
Eccentric Moment	kgm	4
Speed	rpm	3750
Pulling Force	kN	60
Push Down	kN	40
Total Weight (incl.Clamp)	kg	650
Dynamic Weight (incl.Clamp)	kg	530
Amplitude	mm	15
Power	kW	60
Displacement	liter/min	110
Working Pressure	bar	320
Height	mm	1215
Width	mm	511
Length	mm	770



# ESF 6B

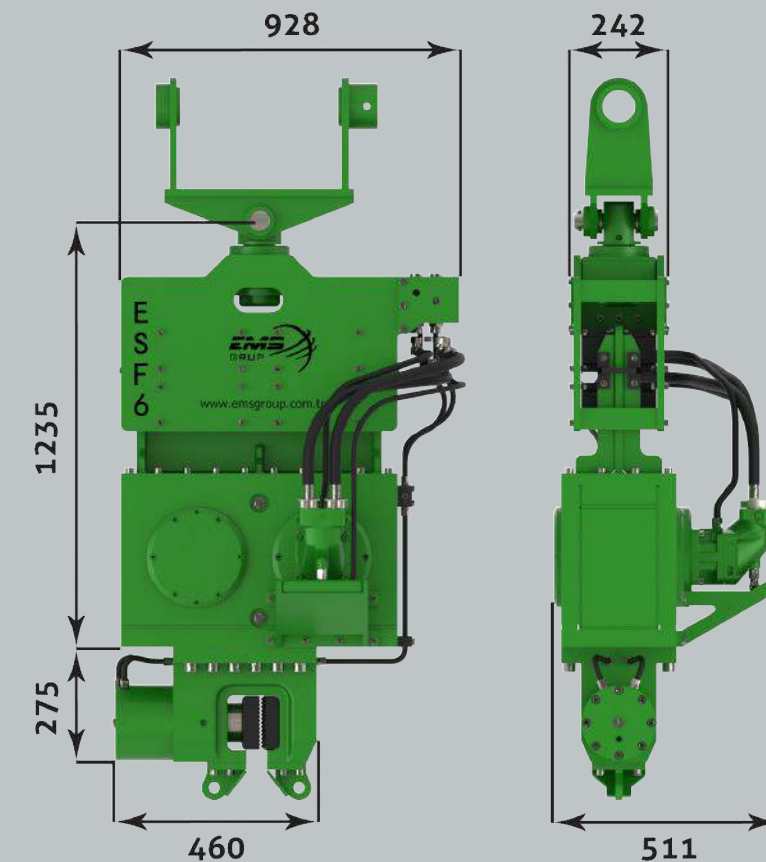
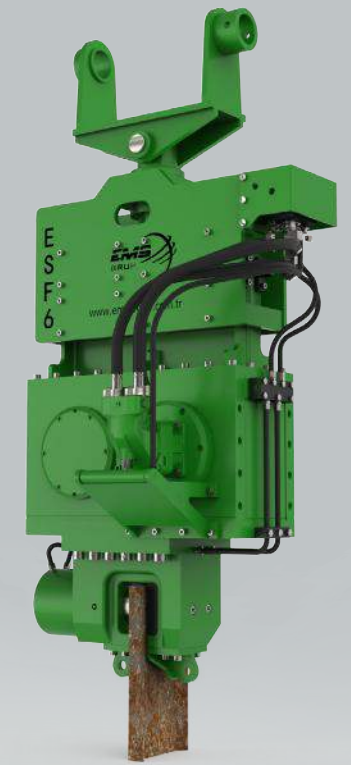
## Excavator Mounted Hydraulic Vibratory Hammer

ESF 6 size vibratory hammer is attached to 30 tons class excavators. This size vibratory hammers is efficient to drive sheet piles or steel tubes up to 10 meters in normal soil conditions.



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Excavator Class	tons	25-30
Centrifugal Force	kN	349
Eccentric Moment	kgm	6
Speed	rpm	2300
Pulling Force	kN	120
Push Down	kN	80
Total Weight (incl.Clamp)	kg	1210
Dynamic Weight (incl.Clamp)	kg	1000
Amplitude	mm	12
Power	kW	123
Displacement	liter/min	210
Working Pressure	bar	300
Height	mm	1631
Width	mm	621
Length	mm	928



# ESF 8B

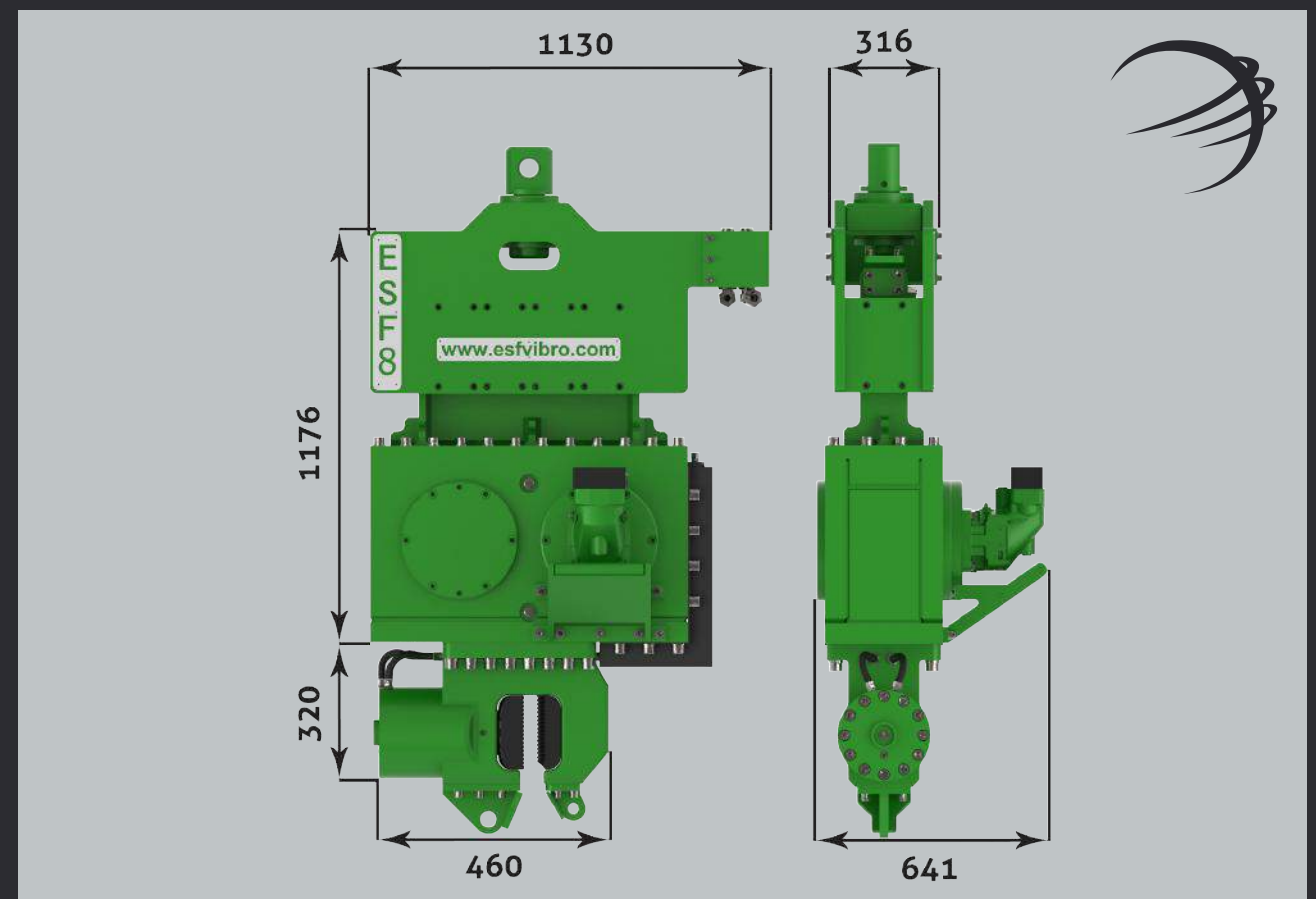
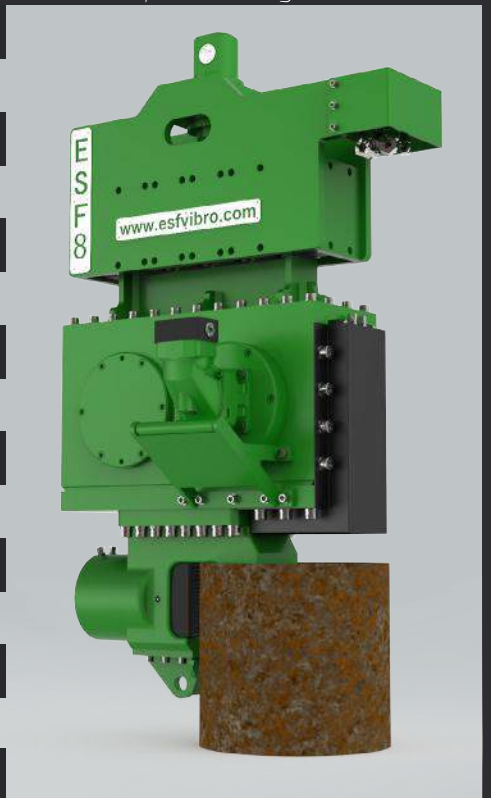
## Excavator Mounted Hydraulic Vibratory Hammer

ESF 8 size vibratory hammer is attached to 38-40 tons class excavators. Capable to drive steel sheet piles, steel tubes up to 12 meters in normal soft ground formations.



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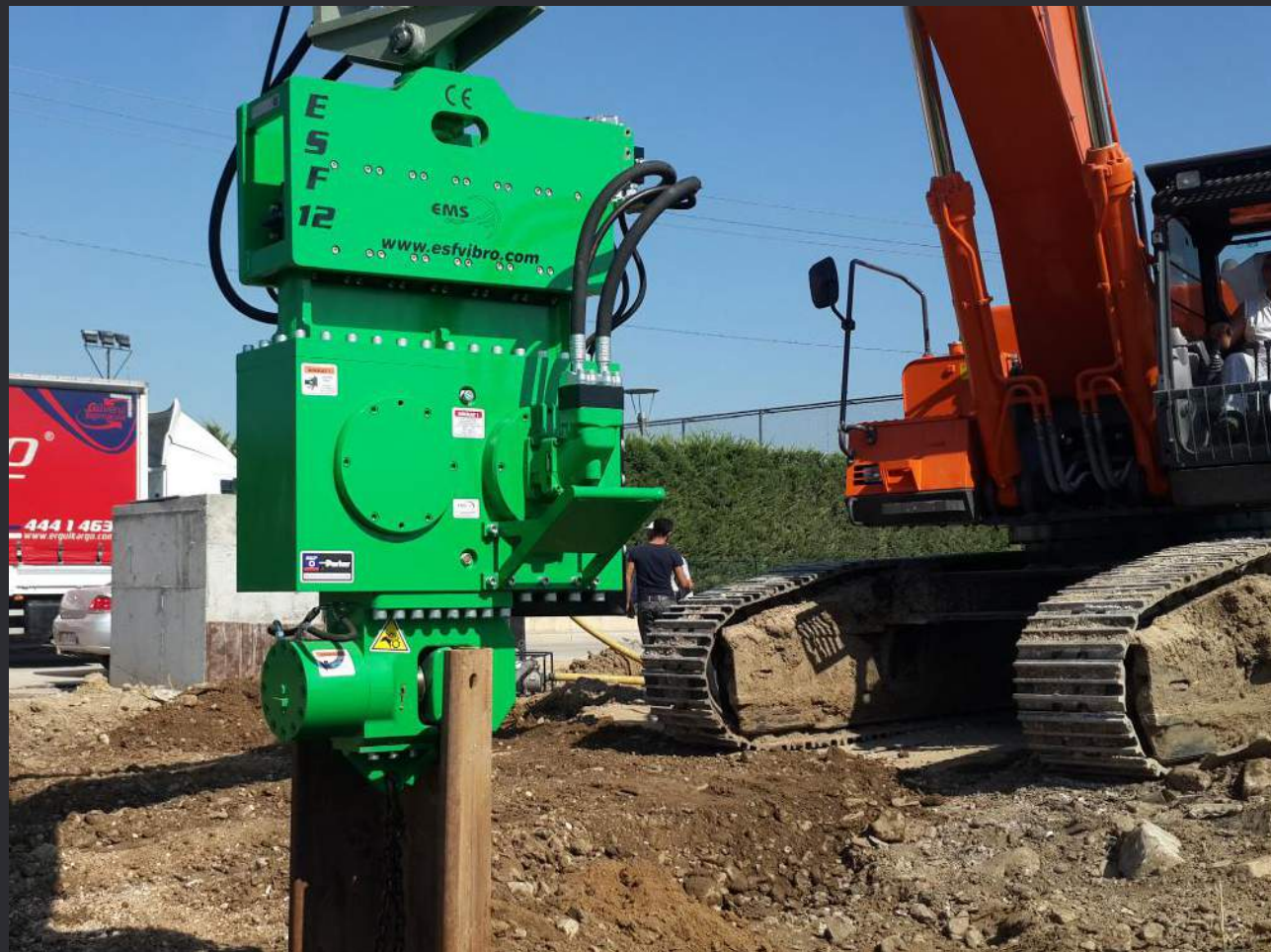
Excavator Class	tons	38-40
Centrifugal Force	kN	464
Eccentric Moment	kgm	8
Speed	rpm	2300
Pulling Force	kN	150
Push Down	kN	90
Total Weight (incl.Clamp)	kg	1610
Dynamic Weight (incl.Clamp)	kg	1290
Amplitude	mm	13
Power	kW	148
Displacement	liter/min	253
Working Pressure	bar	350
Height	mm	1750
Width	mm	641
Length	mm	1130



# ESF 12B

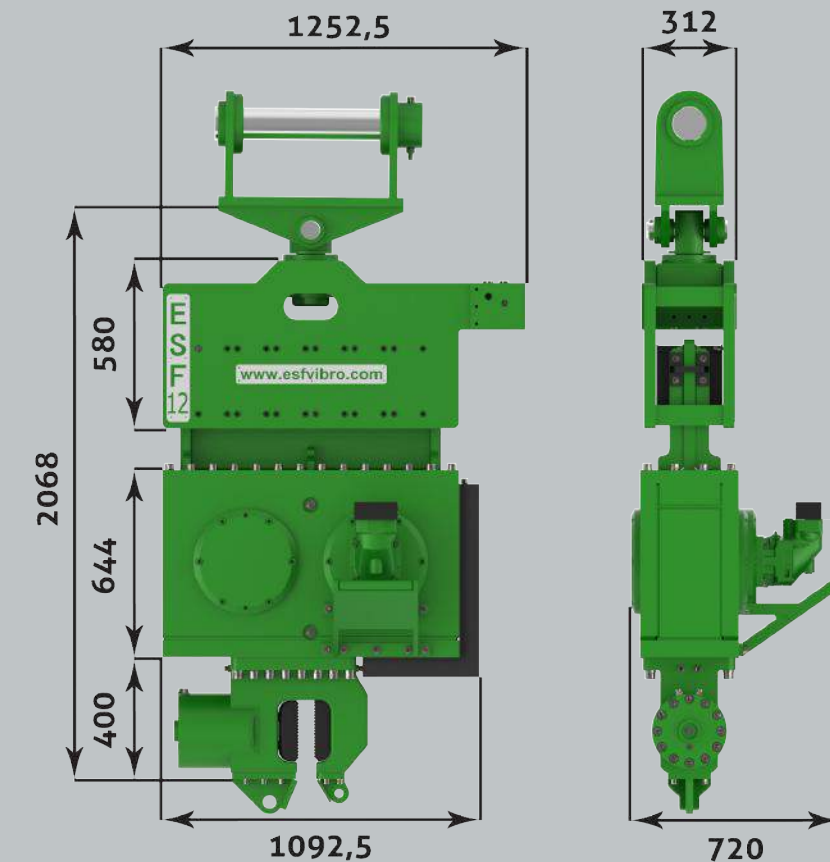
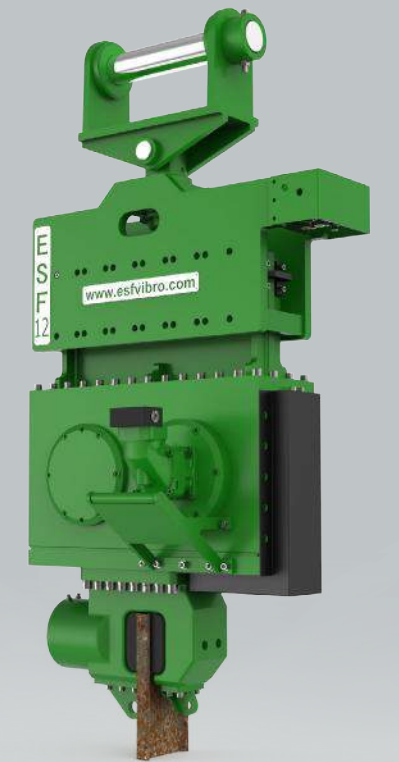
## Excavator Mounted Hydraulic Vibratory Hammer

ESF12 size vibratory hammer is attached to 47-50 tons class excavators or can be operated by power pack unit like PS 300. ESF 12 Vibratory Hammer is the biggest excavator size vibratory hammer and can drive sheet piles or steel tubes up to 15 meters in hard ground formations.



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Excavator Class	tons	45-50
Centrifugal Force	kN	934
Eccentric Moment	kgm	12.6
Speed	rpm	2600
Pulling Force	kN	200
Push Down	kN	200
Total Weight (incl.Clamp)	kg	2350
Dynamic Weight (incl.Clamp)	kg	1700
Amplitude	mm	14.8
Power	kW	185
Displacement	liter/min	315
Working Pressure	bar	300
Height	mm	2100
Width	mm	720
Length	mm	1093





www.esfvibro.com

ISO-9001 & CE certified company



***ESF Series vibratory hammers ,  
making sheet piling quick and easy...***

# M Type

## Excavator Mounted Hydraulic Vibratory Hammers

We manufacture M Type excavator mounted vibratory hammers as per request. The biggest advantage of this type is the increase of total length of the sheet pile or steel tube. We recommend these M types for un-skilled new sheet pile excavator operators. M type is easy used on the other hand, in hard conditions B type is more effective types.



# ESF 6M

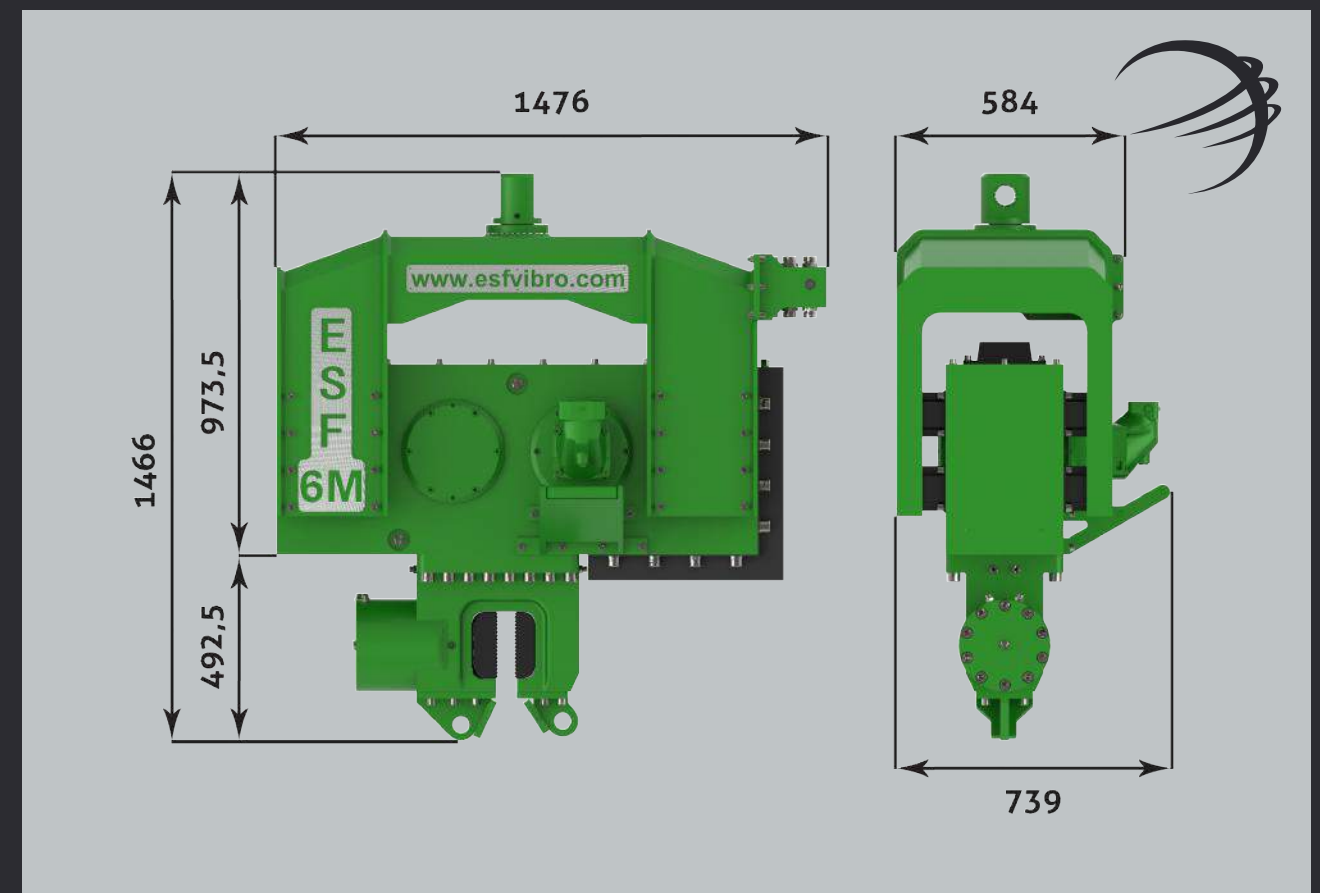
## Excavator Mounted Hydraulic Vibratory Hammer

ESF 6M is suitable to attach to 25 tons class excavators and capable to drive up to 8 mt sheet piles or steel tubes in normal ground formations.



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Excavator Class	tons	25-30
Centrifugal Force	kN	434
Eccentric Moment	kgm	6
Speed	rpm	2500
Pulling Force	kN	80
Push Down	kN	80
Total Weight (incl.Clamp)	kg	1300
Dynamic Weight (incl.Clamp)	kg	1000
Amplitude	mm	12
Power	kW	128
Displacement	liter/min	200
Working Pressure	bar	300
Height	mm	1466
Width	mm	584
Length	mm	1476



# ESF 7M

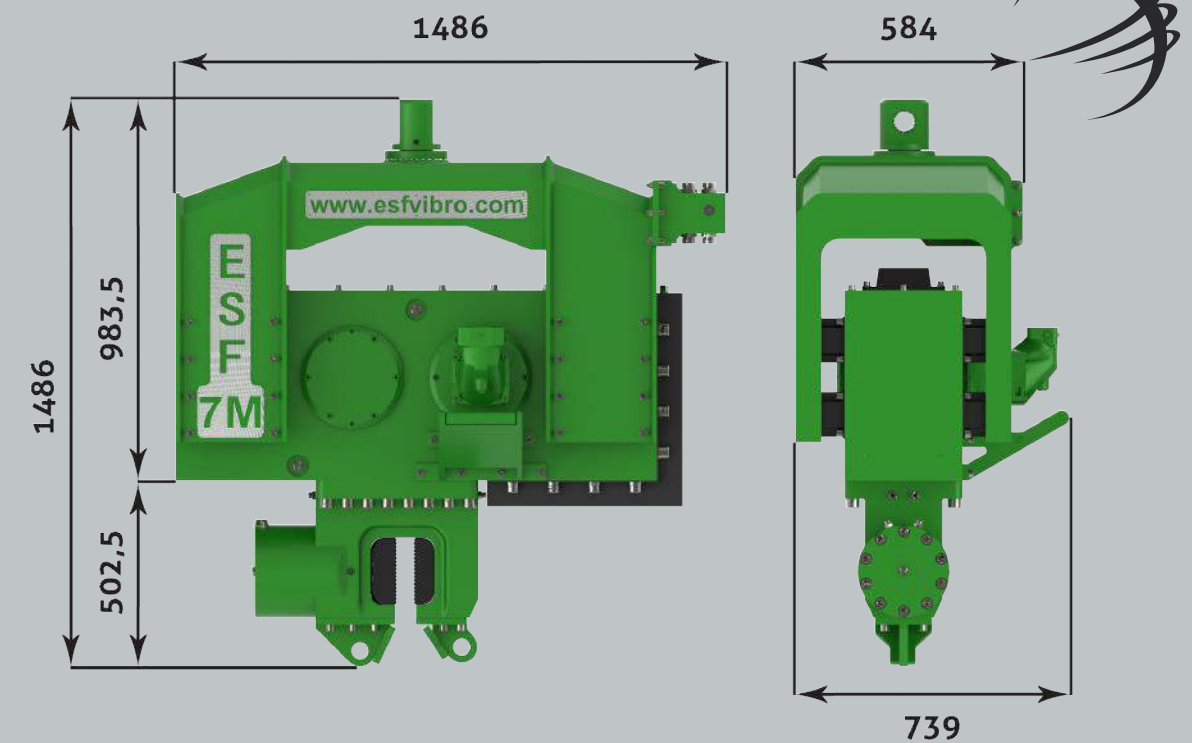
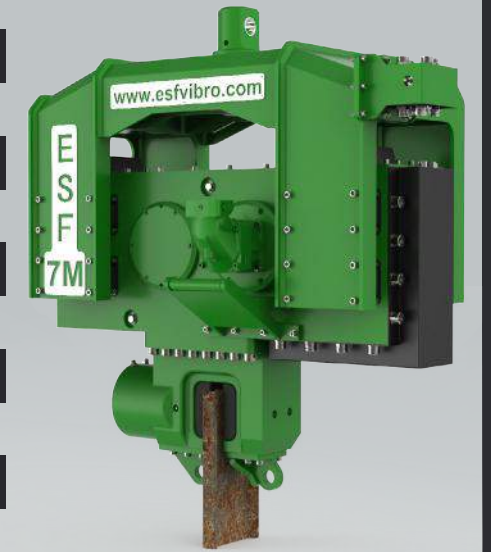
## Excavator Mounted Hydraulic Vibratory Hammer

ESF 7M is attached to 30 tons class excavators and capable to drive up to 10 mt steel sheet piles or steel tubes in soft soil formations.



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Excavator Class	tons	30
Centrifugal Force	kN	604
Eccentric Moment	kgm	7
Speed	rpm	2800
Pulling Force	kN	150
Push Down	kN	150
Total Weight (incl.Clamp)	kg	1590
Dynamic Weight (incl.Clamp)	kg	1160
Amplitude	mm	12
Power	kW	131
Displacement	liter/min	224
Working Pressure	bar	300
Height	mm	1486
Width	mm	584
Length	mm	1486





# ESF 8M

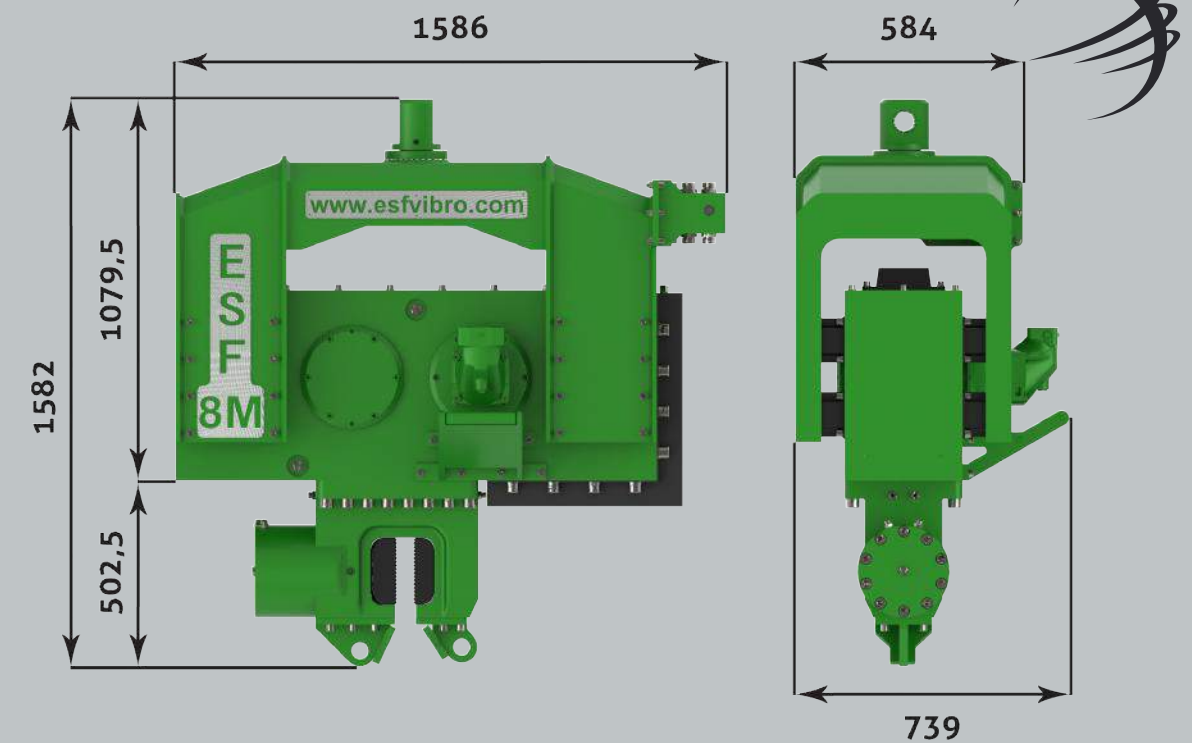
## Excavator Mounted Hydraulic Vibratory Hammer

ESF 8M is attached to 40 tons class excavators and capable to drive steel sheet piles and steel tubes up to 12 mt in normal ground formations.



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Excavator Class	tons	35-40
Centrifugal Force	kN	751
Eccentric Moment	kgm	9,4
Speed	rpm	2700
Pulling Force	kN	150
Push Down	kN	150
Total Weight (incl.Clamp)	kg	1960
Dynamic Weight (incl.Clamp)	kg	1470
Amplitude	mm	13
Power	kW	143
Displacement	liter/min	243
Working Pressure	bar	300
Height	mm	1582
Width	mm	584
Length	mm	1586



# ESF 12M

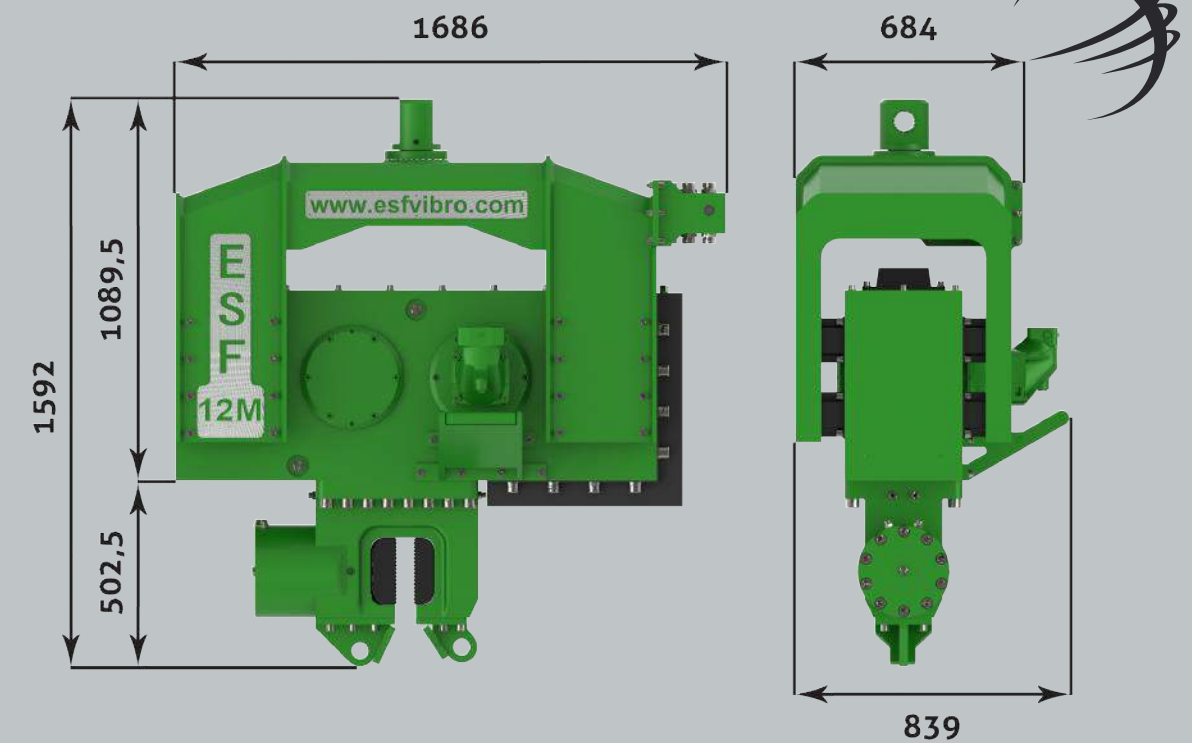
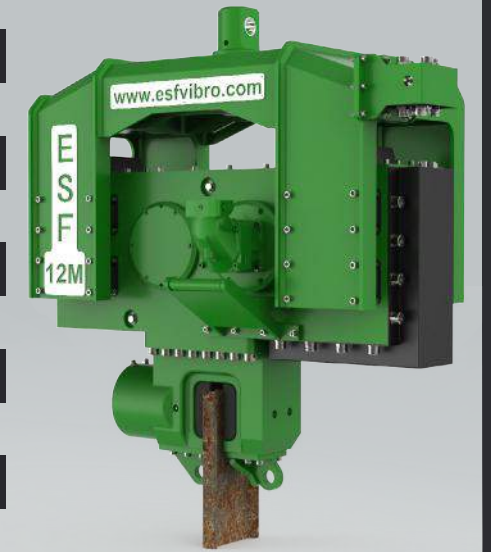
## Excavator Mounted Hydraulic Vibratory Hammer

ESF 12M is attached to 45-50 tons class excavators and capable to drive steel sheet piles and steel tubes in hard - clay ground formations.



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Excavator Class	tons	45 -50
Centrifugal Force	kN	934
Eccentric Moment	kgm	12,6
Speed	rpm	2600
Pulling Force	kN	200
Push Down	kN	200
Total Weight (incl.Clamp)	kg	2300
Dynamic Weight (incl.Clamp)	kg	1700
Amplitude	mm	14,8
Power	kW	185
Displacement	liter/min	315
Working Pressure	bar	300
Height	mm	1592
Width	mm	684
Length	mm	1686



# FREE

## Free Hanging Crane Mounted Hydraulic Vibratory Hammers

Crane mounted vibratory hammers are designed for long sheet pile or long steel tubes driving projects where excavator booms are not long enough. For instance, it is not possible to drive 25 meter or longer sheet piles by excavator mounted type vibratory hammers.



Crane mounted vibratory hammers are operated by separate hydraulic power packs as there is no hydraulic oil supply in cranes.



Crane mounted vibratory hammers are used in big bridge, sea port projects. These types are also used in stone-column projects. Because of the high level of centrifugal force, crane mounted vibratory hammers are preferred in hard soil conditions.



# ESF 14

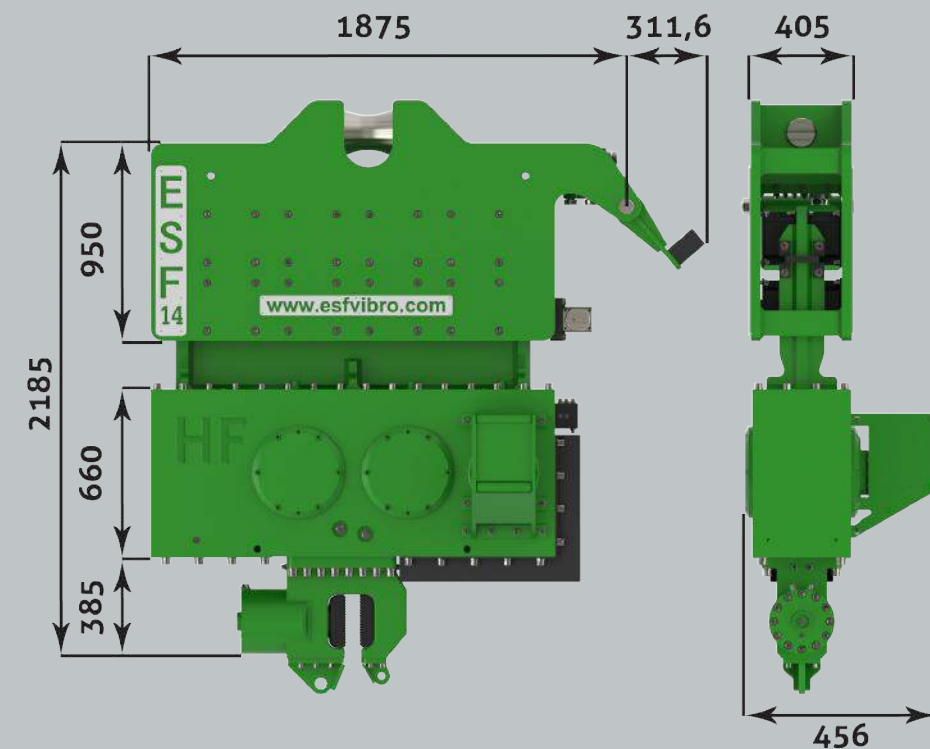
## Crane Mounted Hydraulic Vibratory Hammer

ESF 14 crane mounted high frequency vibratory hammer with gear box cooling system is designed for sheet pile or steel tube driving projects in hard soil conditions. ESF14 HF is operated by PS350 Power Pack. The dimensions are designed for easy transport. 1xFCM90 Sheet Pile and 2xFCM60 pipe clamp can be mounted.



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Centrifugal Force	kN	743
Eccentric Moment	kgm	14
Speed	rpm	2200
Pulling Force	kN	320
Total Weight (excl.Clamp)	kg	3750
Dync. Weight(excl.Clamp)	kg	2400
Amplitude	mm	12
Power	kW	189
Displacement	liter/min	322
Working Pressure	bar	300
Height	mm	2185
Width	mm	405
Length	mm	1875



# ESF 20

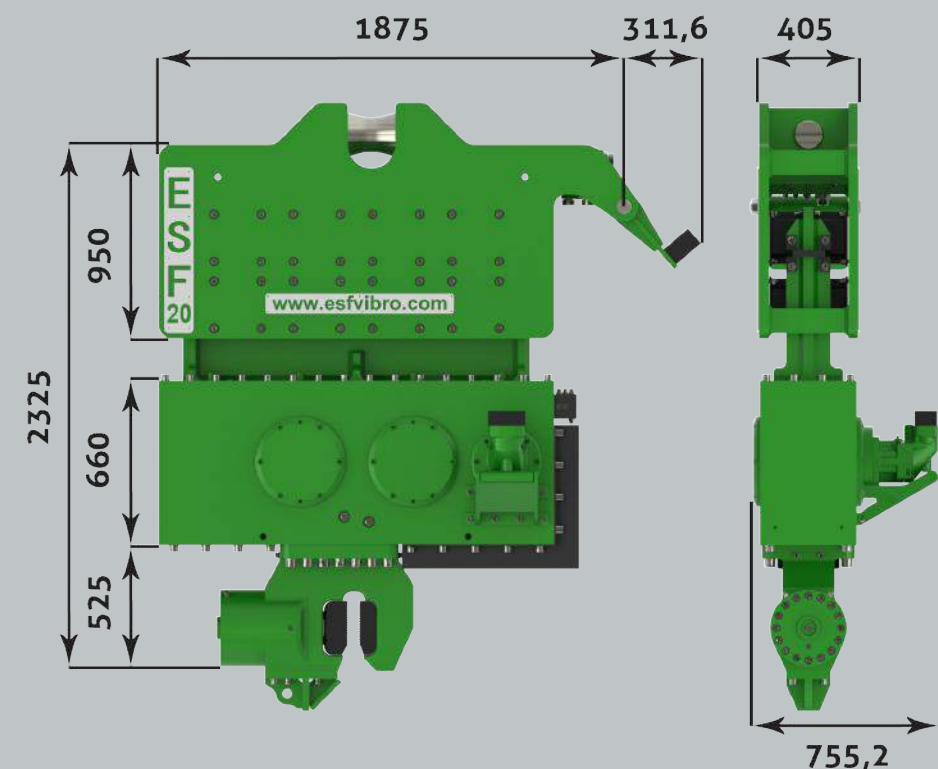
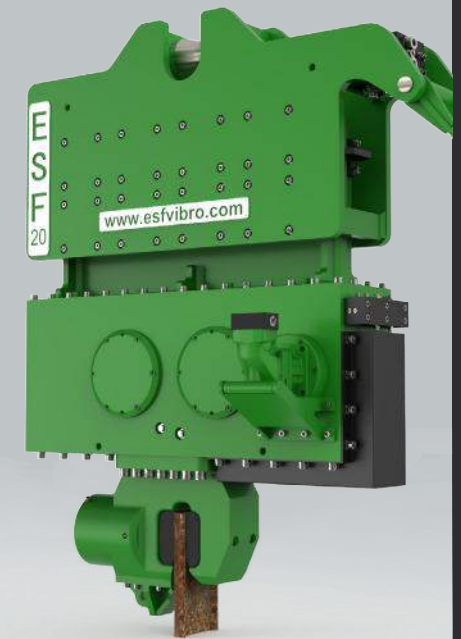
## Crane Mounted Hydraulic Vibratory Hammer

ESF 20 is Normal Frequency vibratory hammer with gear box cooling system as standard. As it is Normal Frequency it is operated by PS300 power pack. The FCM100 sheet pile clamp and 2xPCM60 pipe clamp can be mounted.



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Centrifugal Force	kN	562
Eccentric Moment	kgm	20
Speed	rpm	1600
Pulling Force	kN	320
Total Weight (exl.Clamp)	kg	3750
Dync. Weight (exl.Clamp)	kg	2600
Amplitude	mm	23,5
Power	kW	137
Displacement	liter/min	275
Working Pressure	bar	300
Height	mm	2325
Width	mm	755,2
Length	mm	1875



# ESF 23

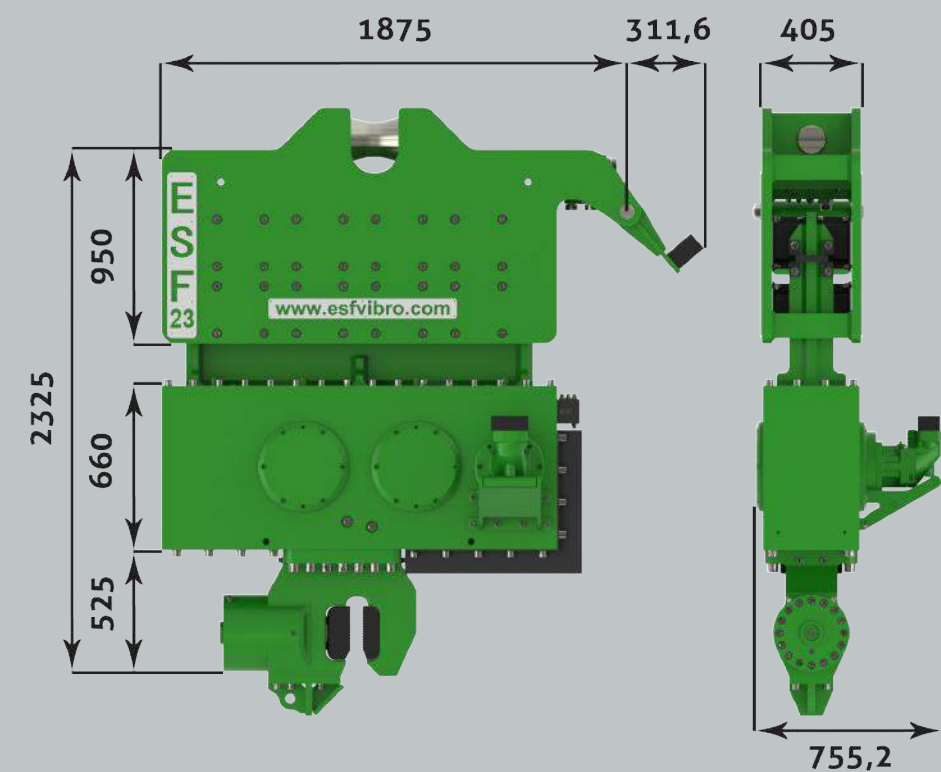
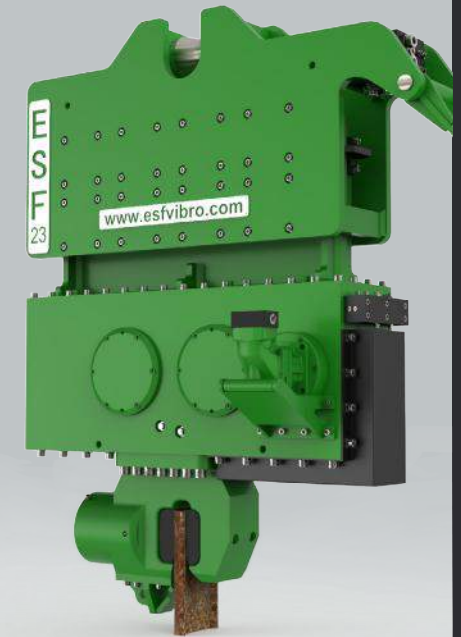
## Crane Mounted Hydraulic Vibratory Hammer

ESF 23 is Normal Frequency vibratory hammer with gear box cooling system as standard. As it is Normal Frequency it is operated by P5350 power pack. The FCM100 sheet pile clamp and 2xPCM60 pipe clamp can be mounted.



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Centrifugal Force	kN	645
Eccentric Moment	kgm	23
Speed	rpm	1600
Pulling Force	kN	645
Total Weight (incl.Clamp)	kg	3050
Dynamic Weight (incl.Clamp)	kg	1770
Amplitude	mm	26
Power	kW	137
Displacement	liter/min	275
Working Pressure	bar	300
Height	mm	2325
Width	mm	755,2
Length	mm	1875



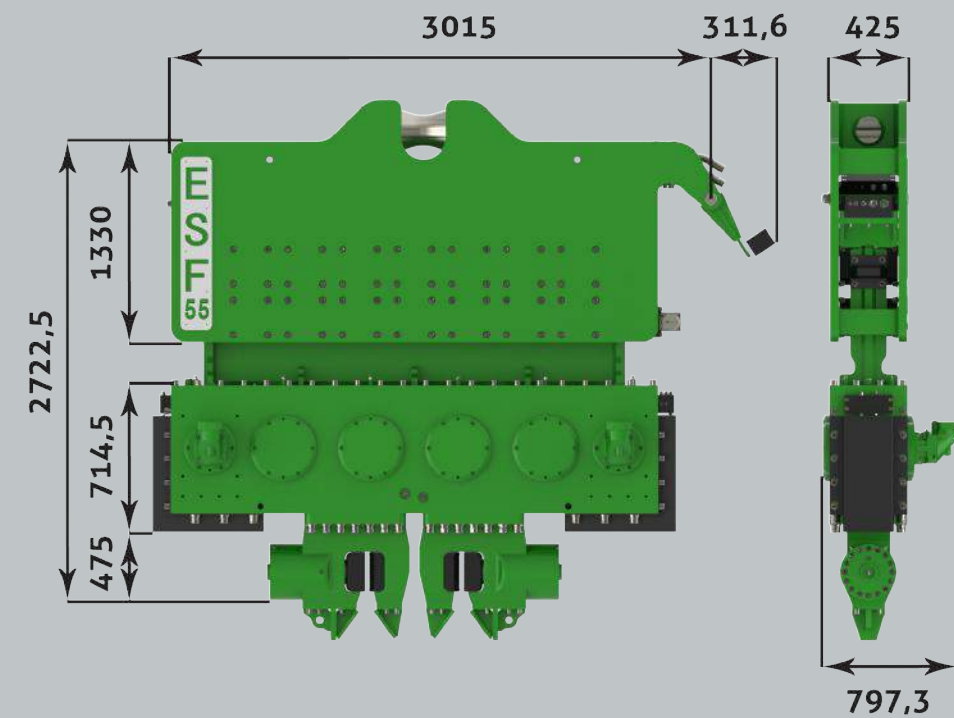
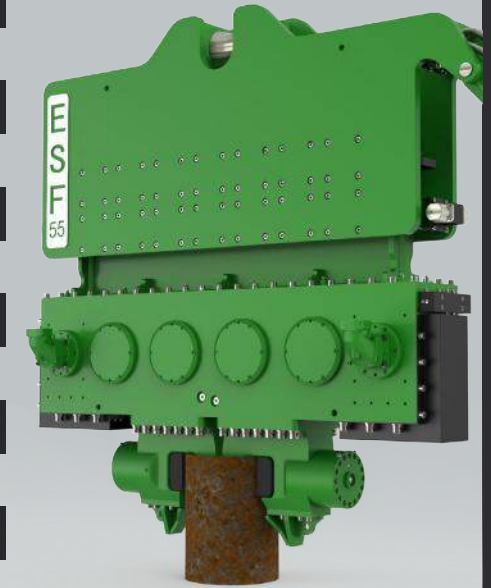
# ESF 55

## Crane Mounted Hydraulic Vibratory Hammer

ESF 55 is Normal Frequency vibratory hammer with gear box cooling system as standard. As it is Normal Frequency it is operated by P5600 power pack. The FCM180 sheet pile clamp and 2xPCM100 pipe clamp can be mounted.



Centrifugal Force	kN	1545
Eccentric Moment	kgm	55
Speed	rpm	1600
Pulling Force	kN	800
Total Weight (excl.Clamp)	kg	5800
Dynamic Weight (excl.Clamp)	kg	3680
Amplitude	mm	30
Power	kW	412
Displacement	liter/min	600
Working Pressure	bar	350
Height	mm	2722,5
Width	mm	797,3
Length	mm	3015



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# ESF 55C

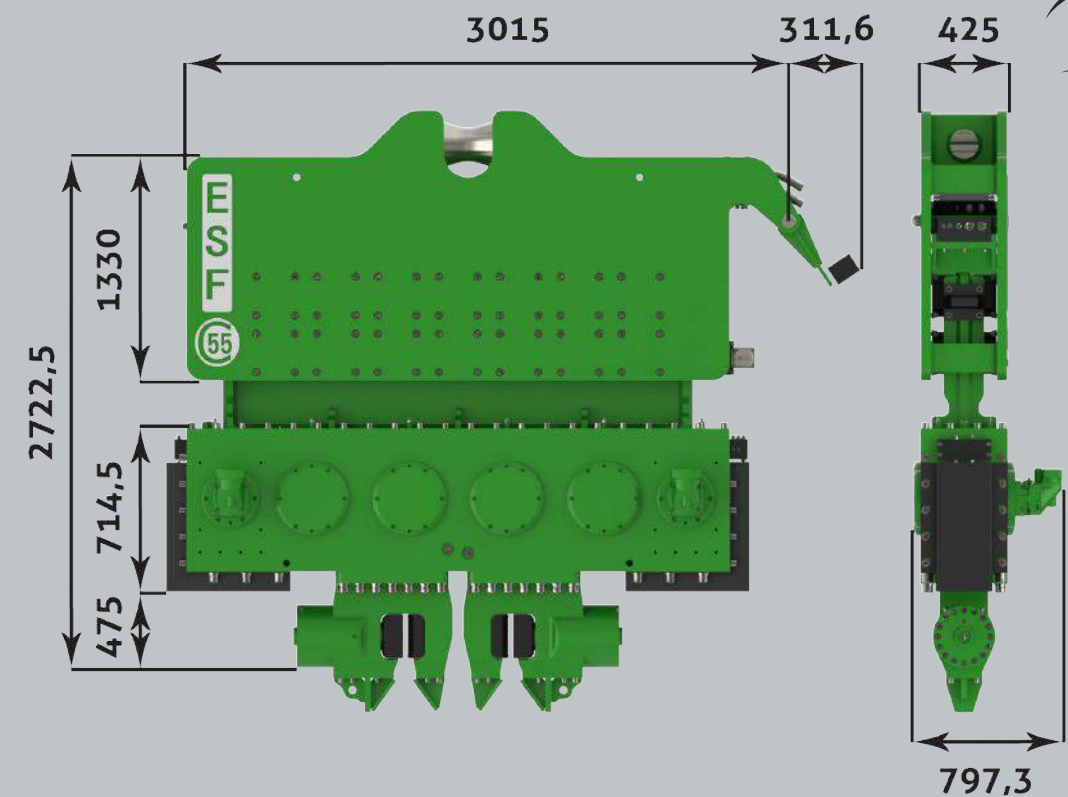
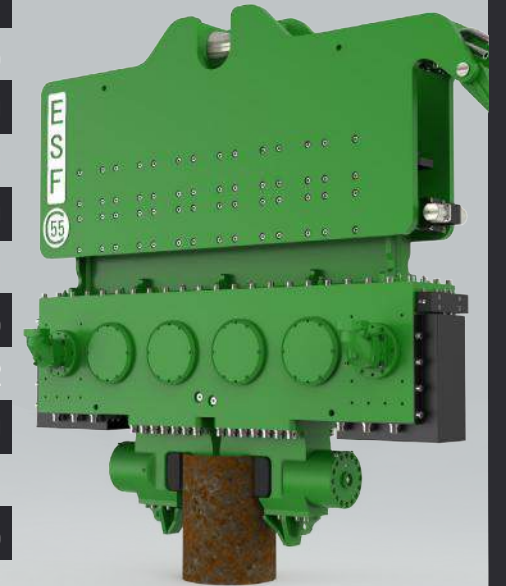
## Crane Mounted Hydraulic Vibratory Hammer

ESF 55C is High Frequency vibratory hammer with gear box cooling system as standard. As it is High Frequency it is operated by PS600 power pack. The FCM180 sheet pile clamp and 2xPCM100 pipe clamp can be mounted. This model is specially designed for hard-clay ground formations.



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Centrifugal Force	kN	1948
Eccentric Moment	kgm	55
Speed	rpm	1900
Pulling Force	kN	800
Total Weight (excl.Clamp)	kg	8100
Dynamic Weight (excl.Clamp)	kg	3850
Amplitude	mm	28,5
Power	kW	412
Displacement	liter/min	600
Working Pressure	bar	350
Height	mm	2722,5
Width	mm	797,3
Length	mm	3015





# ESF 88

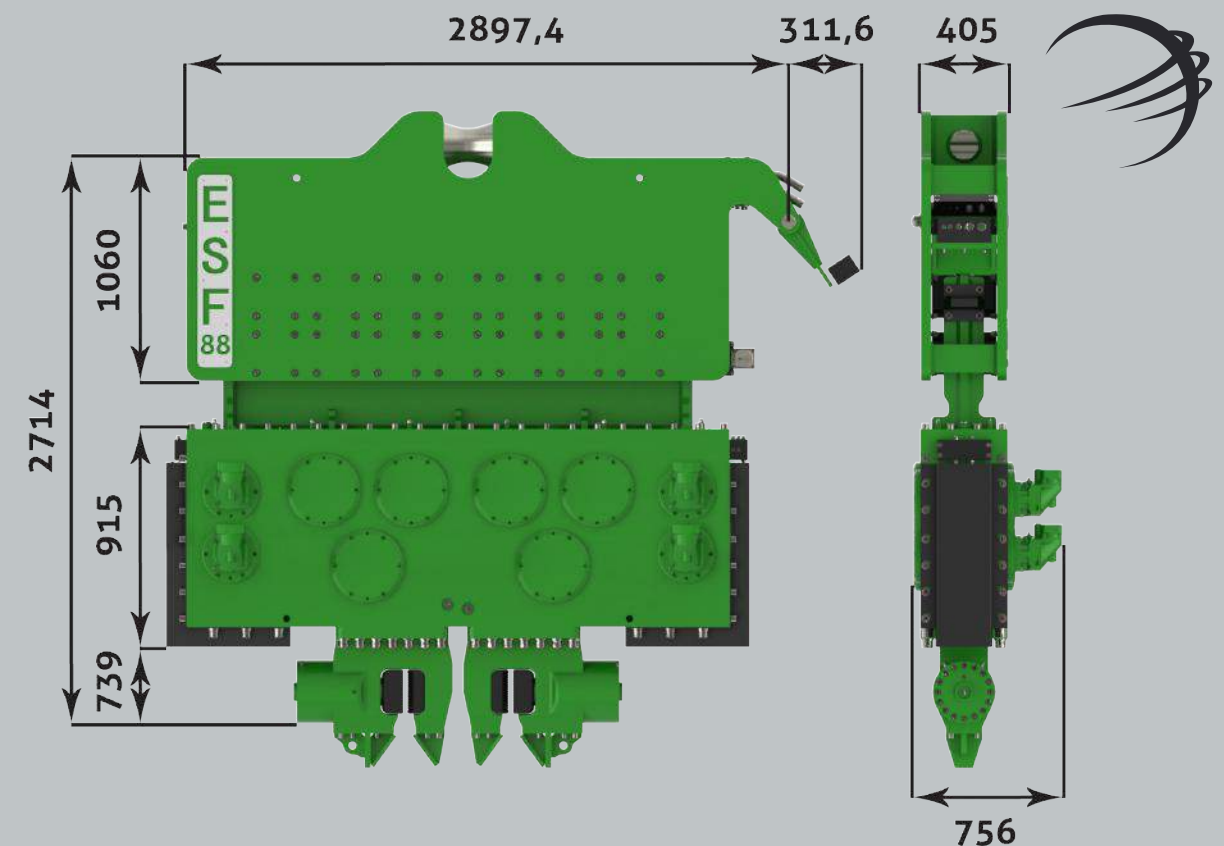
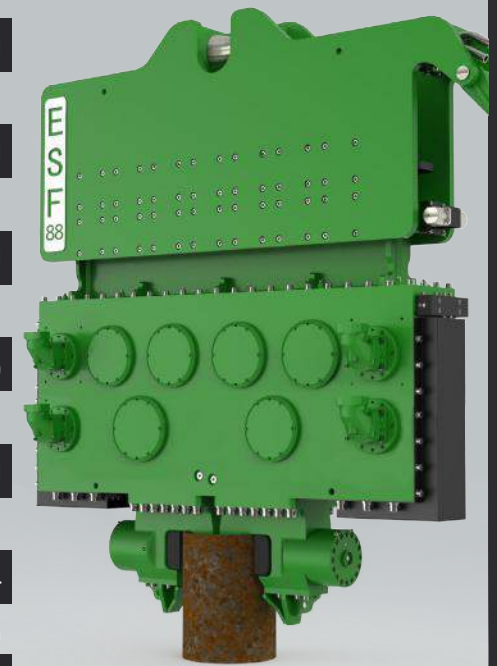
## Crane Mounted Hydraulic Vibratory Hammer

ESF 88 is Normal Frequency vibratory hammer with gear box cooling system as standard. As it is Normal Frequency it is operated by P5800 power pack. The FCM200 sheet pile clamp and 2xPCM120 pipe clamp can be mounted. This model is preferred to drive long sheet piles or steel tubes in seaport or bridge const. projects.



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Centrifugal Force	kN	2190
Eccentric Moment	kgm	88
Speed	rpm	1600
Pulling Force	kN	2780
Total Weight (excl.Clamp)	kg	7850
Dynamic Weight (excl.Clamp)	kg	5028
Amplitude	mm	35
Power	kW	510
Displacement	liter/min	800
Working Pressure	bar	340
Height	mm	2714
Width	mm	756
Length	mm	2897,4



# ESF 110

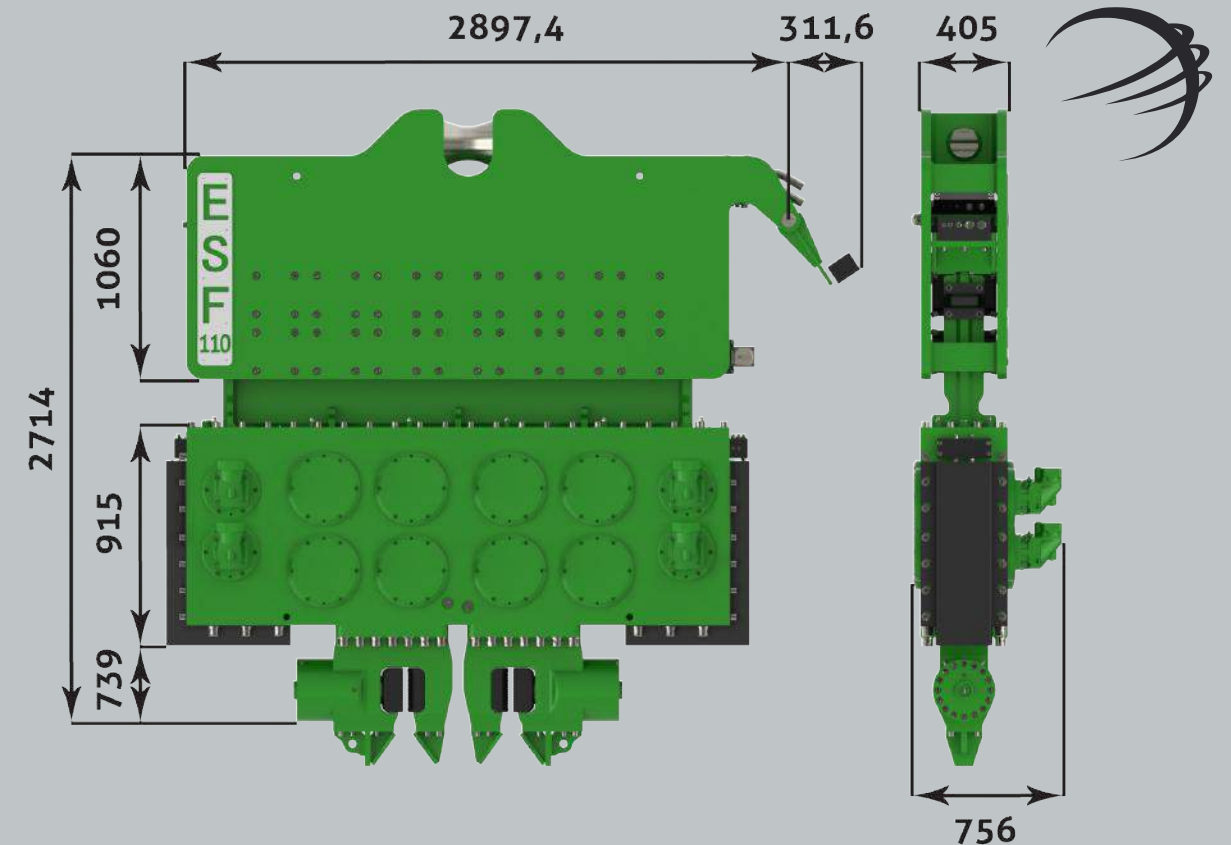
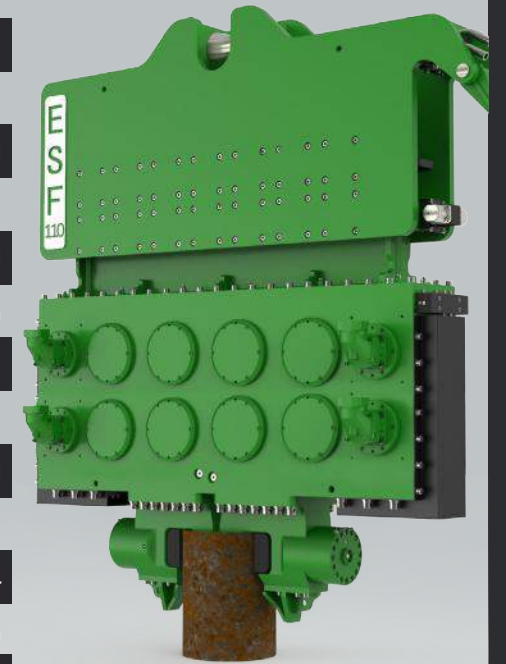
## Crane Mounted Hydraulic Vibratory Hammer

ESF 110 is Normal Frequency vibratory hammer with gear box cooling system as standard. As it is Normal Frequency it is operated by PS1000 power pack. The FCM250 sheet pile clamp and 2xPCM150 pipe clamp can be mounted. This model is preferred to drive long sheet piles or steel tubes in seaport or bridge const. projects.



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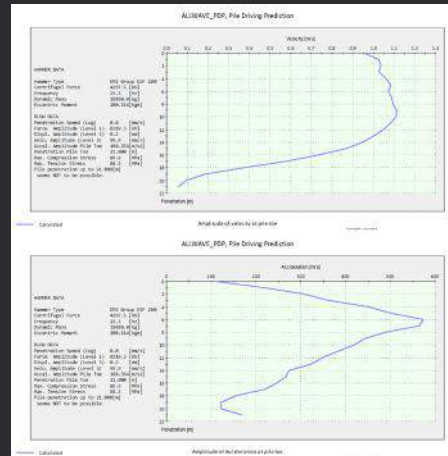
Centrifugal Force	kN	3088
Eccentric Moment	kgm	110
Speed	rpm	1600
Pulling Force	kN	3000
Total Weight (excl.Clamp)	kg	9200
Dynamic Weight (excl.Clamp)	kg	5365
Amplitude	mm	41
Power	kW	550
Displacement	liter/min	1000
Working Pressure	bar	350
Height	mm	2714
Width	mm	756
Length	mm	2897,4



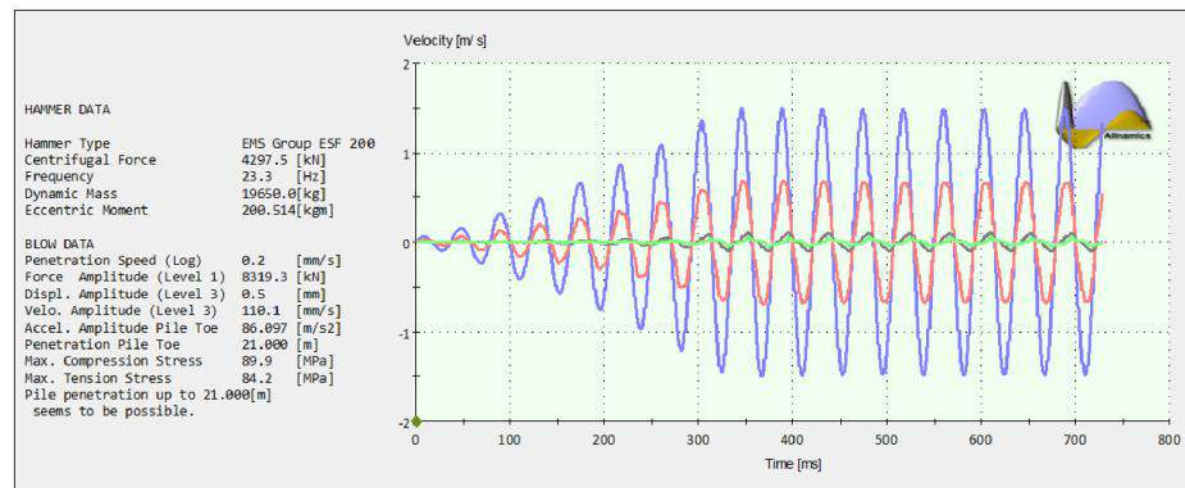
# ESF 200C

## Crane Mounted Hydraulic Vibratory Hammer

ESF 200C is Normal Frequency vibratory hammer with gear box cooling system as standard. As it is Normal Frequency it is operated by PS1600 power pack. 4xPCM150 pipe clamp to be mounted. This model is preferred to drive long steel tubes in seaport or bridge const. projects. The special design and power of this model especially for Off-Shore Projects. This model can drive steel tubes with OD up to 2000mm in hard ground formations.



ALLWAVE\_PDP, Pile Driving Prediction at 21 m Penetration



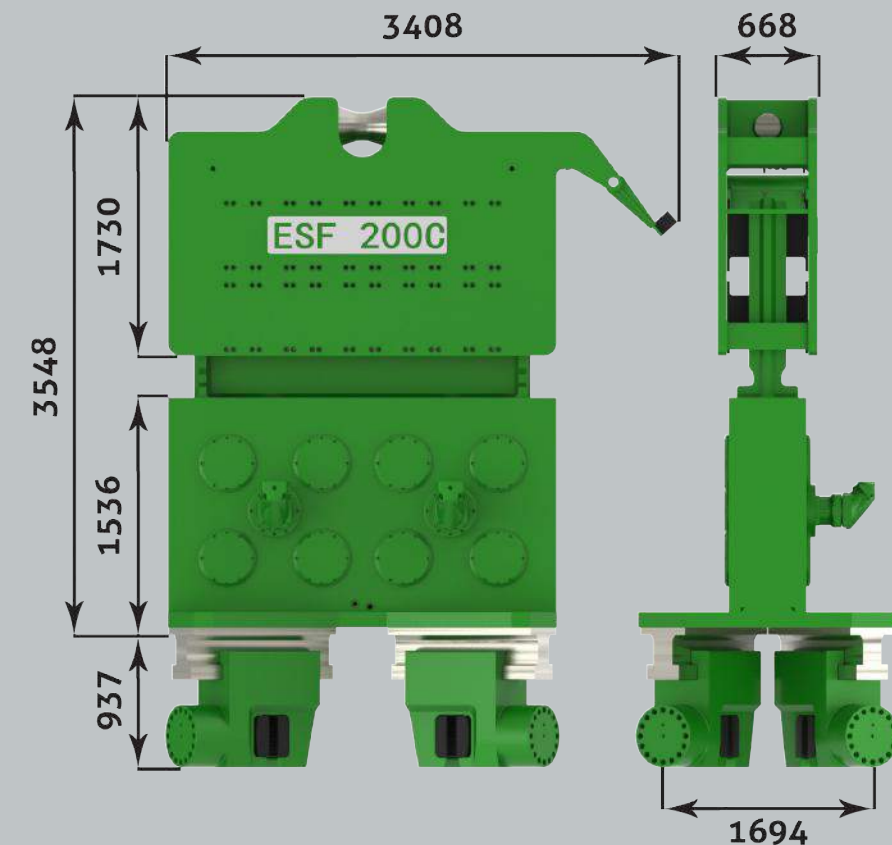
Level = 0.000  
Level = 15.000  
Level = 30.000  
Level = 38.000

Velocity as function of Time at level = 38.000 [m]

ADSP-1400-11 by vntama

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Centrifugal Force	kN	4540
Eccentric Moment	kgm	200
Speed	rpm	1400
Pulling Force	kN	6000
Total Weight (excl.Clamp)	kg	19700
Dynamic Weight (excl.Clamp)	kg	12900
Amplitude	mm	31
Power	kW	1100
Displacement	liter/min	1550
Working Pressure	bar	380
Height	mm	3548
Width	mm	668
Length	mm	3408



# PS Series

## Hydraulic Power Packs

Our PS Series Power Packs not only for vibratory hammers but also for many different industrial applications like vessels and dam projects. Our engineering team always design our PS Series power packs according to the transport dimensions internationally recognised.



We manufacture hydraulic PS series power packs. The advantage of our our hydraulic power packs is that we install open - circuit lines inside the cabin. The open - circuit line is always better to make quick repair and reducing the cost of repairs when compared with close - circuit systems.

We apply special isolation walls inside the cabins to prevent hot or cold weather conditions bad effects.



We always use top-brand quality pumps and diesel engines in our power pack systems like Rexroth and Volvo Penta diesel engines. We have also options to install economic Ford diesel engines and Kawasaki pumps.



PS 120	kW	73
PS 300	kW	220
PS 350	kW	260
PS 400	kW	280
PS 600	kW	400
PS 800	kW	560
PS 1000	kW	2x540

The main cabin body is very strong to make transport many times in construction sites.



The standard PS series Power Packs have cable-remote control systems as standard 15 mt. We offer also wireless remote control systems as optional. Each units have operator emergency stop buttons to help operator when needed.

All of the PS series Power Packs has cooling systems both for hydraulic oil and gear box cooling. The user friendly control panel in all PS Series Power Packs helps operator to understand and check all system status clearly.



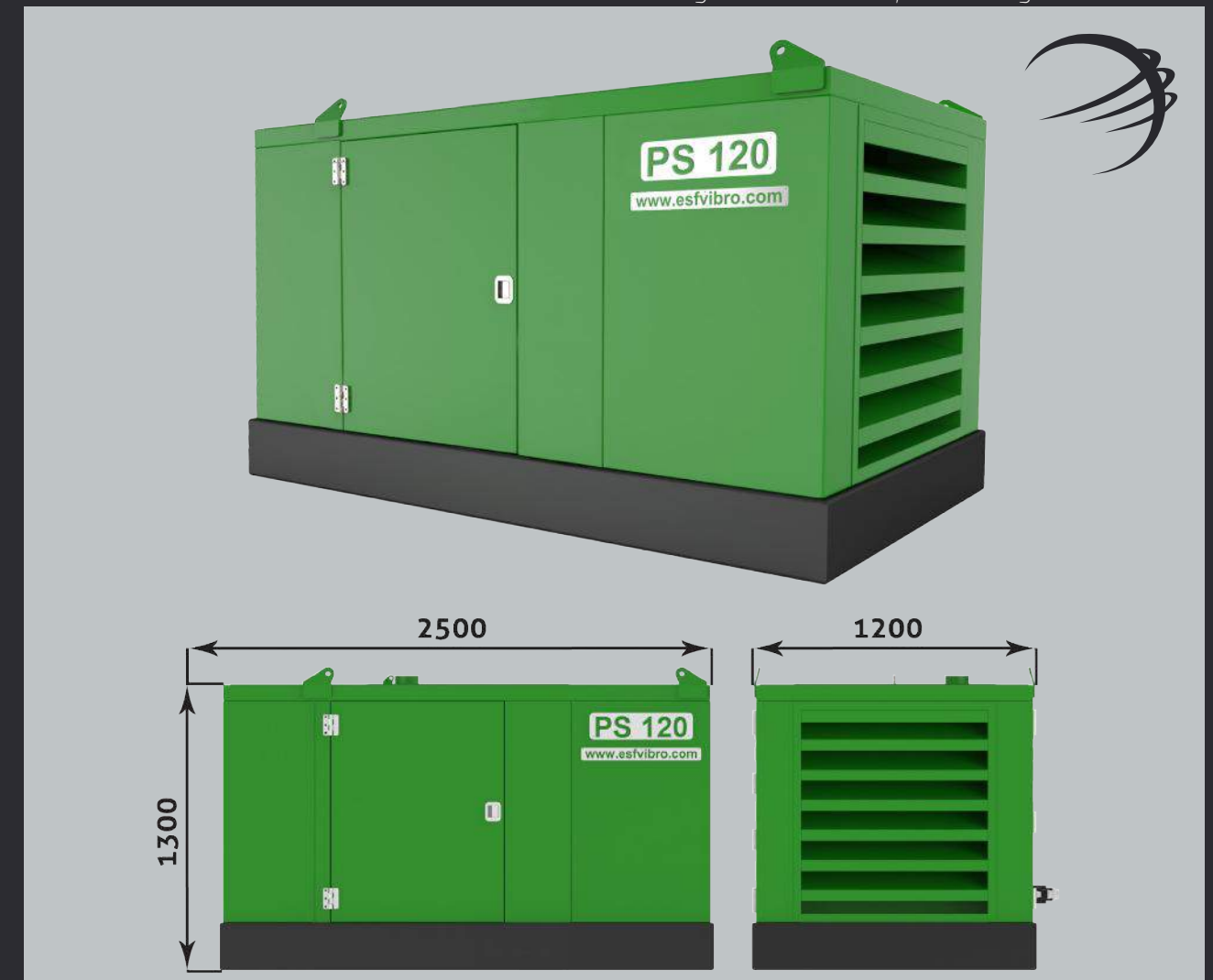
# PS 120

## Power Pack

PS120 is specially designed to operate small size vibratory hammers like ESF1-2-3-4 to drive vinyl PVC sheet piles or small posts. By means of this small size power pack, the need for excavator is eliminated.



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Power Pack ( For Vibro Hammer )		ESF 1-2-3-4
Diesel Engine		Optional
Max. Working Pressure	bar	300
Max. Flow	l/min	120
Pump		Optional
Fueltank	lt	200
Hydraulic Tank	lt	300
Weight	kg	1400
Length	mm	2500
Width	mm	1200
Height	mm	1300

# PS 300

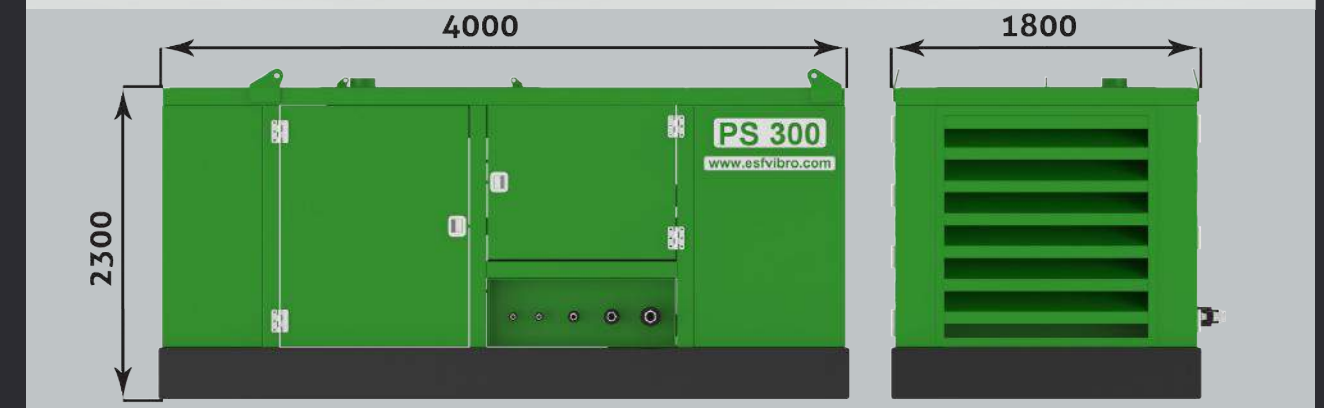


## Power Pack

PS300 Power Pack is designed and manufactured to operate crane hanging ESF 12-20-23 kgm vibratory hammers which are normal frequency.



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Power Pack ( For Vibro Hammer )

ESF 12-20-23

Diesel Engine		Optional
Max. Working Pressure	bar	350
Max. Flow	l/min	300
Pump		Optional
Fueltank	lt	600
Hydraulic Tank	lt	800
Weight	kg	4200
Length	mm	4000
Width	mm	1800
Height	mm	2300

# PS 350

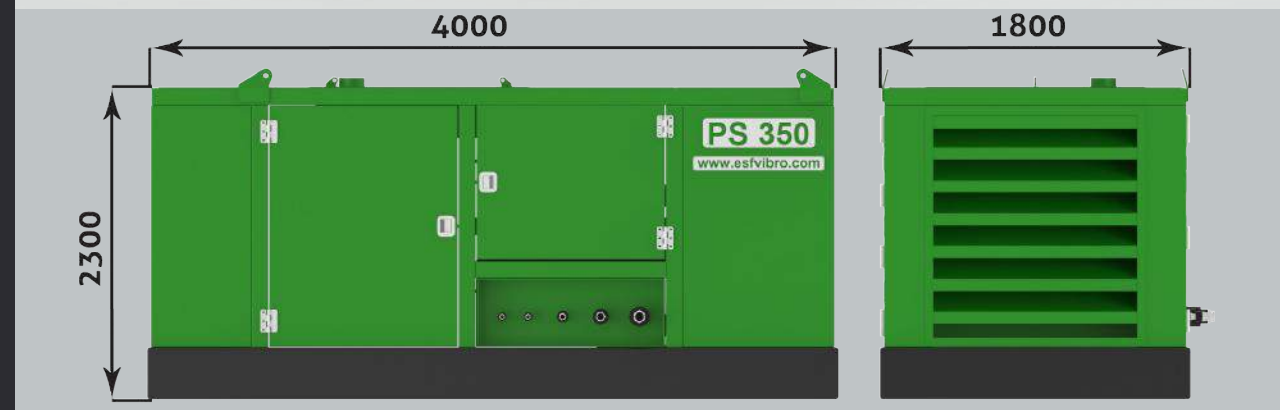


## Power Pack

PS350 is designed and manufactured for high-frequency ESF vibratory hammers.



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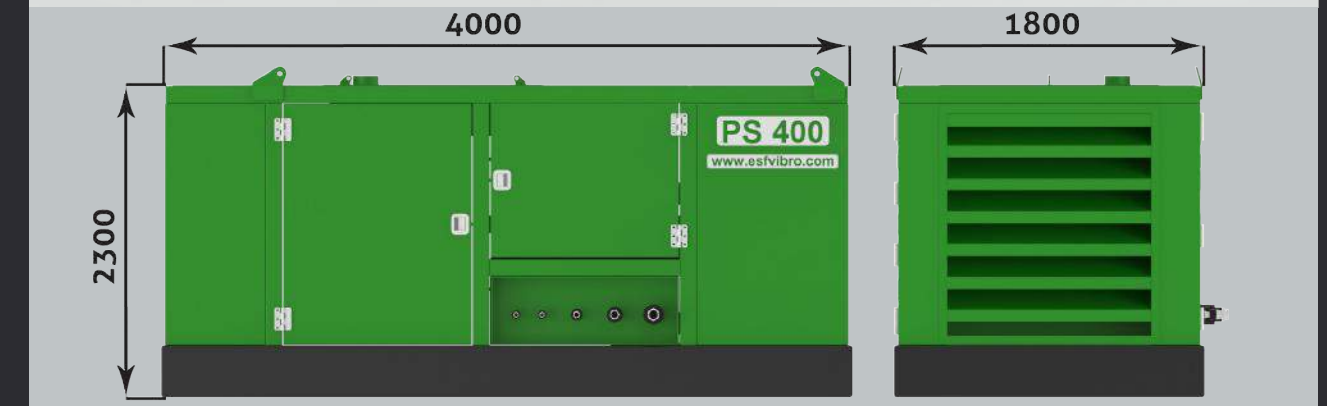


Power Pack ( For Vibro Hammer )		ESF 14-20-23
Diesel Engine		Optional
Max. Working Pressure	bar	350
Max. Flow	l/min	350
Pump		Optional
Fueltank	lt	600
Hydraulic Tank	lt	800
Weight	kg	4200
Length	mm	4000
Width	mm	1800
Height	mm	2300

# PS 400

## Power Pack

PS 400 is designed and manufactured to operate ESF 30 size Normal Frequency Vibratory Hammer. This size power pack is optimum size.



Power Pack ( For Vibro Hammer )

ESF 30-33

Diesel Engine		Optional
Max. Working Pressure	bar	350
Max. Flow	l/min	400
Pump		Optional
Fueltank	lt	660
Hydraulic Tank	lt	950
Weight	kg	5600
Length	mm	4000
Width	mm	1800
Height	mm	2300



# PS 600

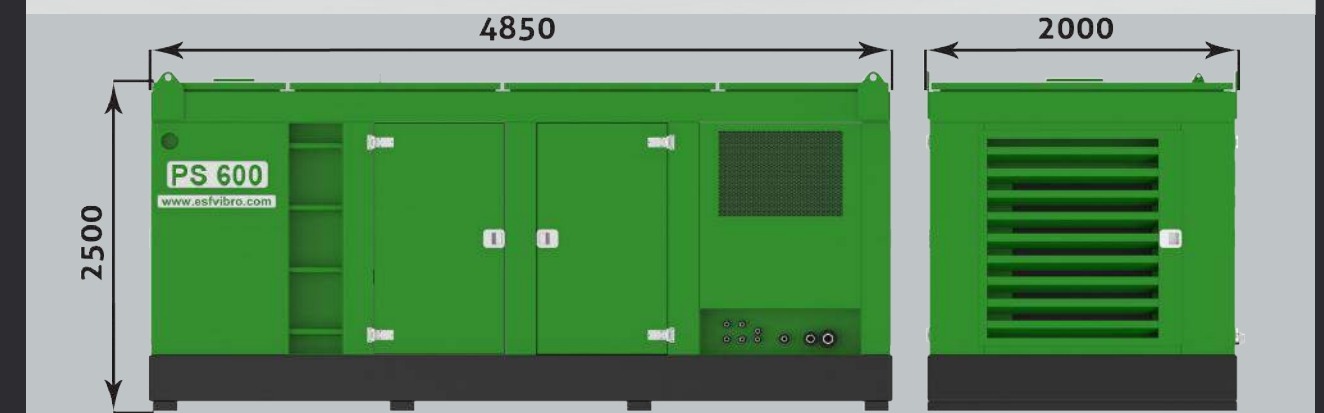


## Power Pack

PS 600 is designed and manufactured to operate ESF 55 size vibratory hammer. This power pack is capable to supply 600lt /min . oil flow @ 300 bar pressure.



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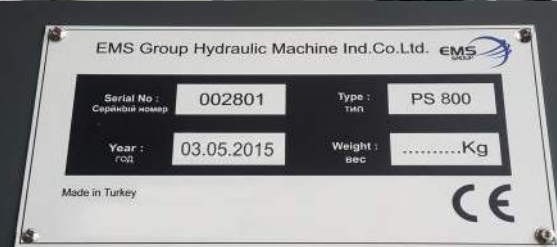


Power Pack ( For Vibro Hammer )		ESF 55
Diesel Engine		Optional
Max. Working Pressure	bar	350
Max. Flow	l/min	600
Pump		Optional
Fueltank	lt	660
Hydraulic Tank	lt	1400
Weight	kg	7790
Length	mm	4850
Width	mm	2000
Height	mm	2500

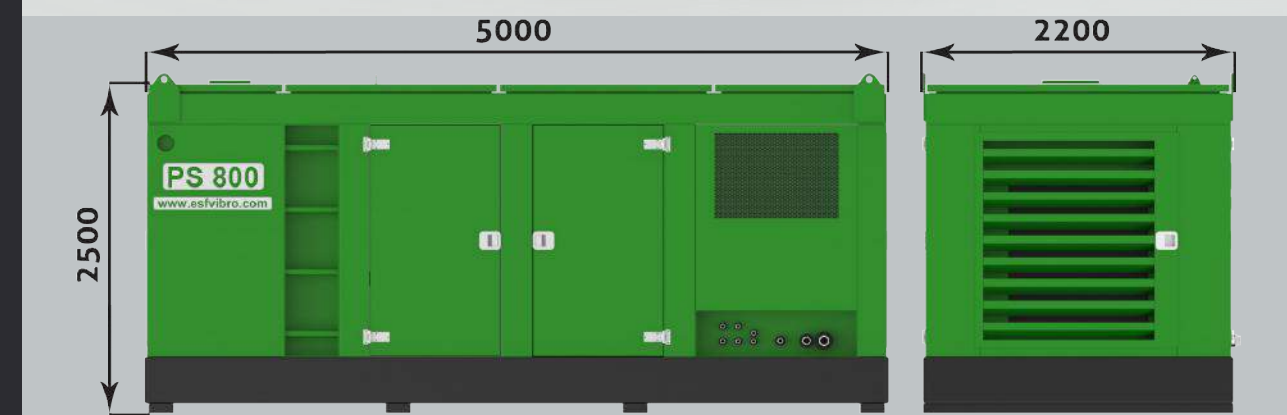
# PS 800

## Power Pack

PS 800 is designed and manufactured to operate ESF 88 vibratory hammer. This power pack is capable to supply 800 lt/min.oil flow @ 350 bar pressure.



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Power Pack ( For Vibro Hammer )		ESF 88
Diesel Engine		Optional
Max. Working Pressure	bar	350
Max. Flow	l/min	800
Pump		Optional
Fueltank	lt	1200
Hydraulic Tank	lt	2450
Weight	kg	10400
Length	mm	5000
Width	mm	2200
Height	mm	2500

# PS 1000



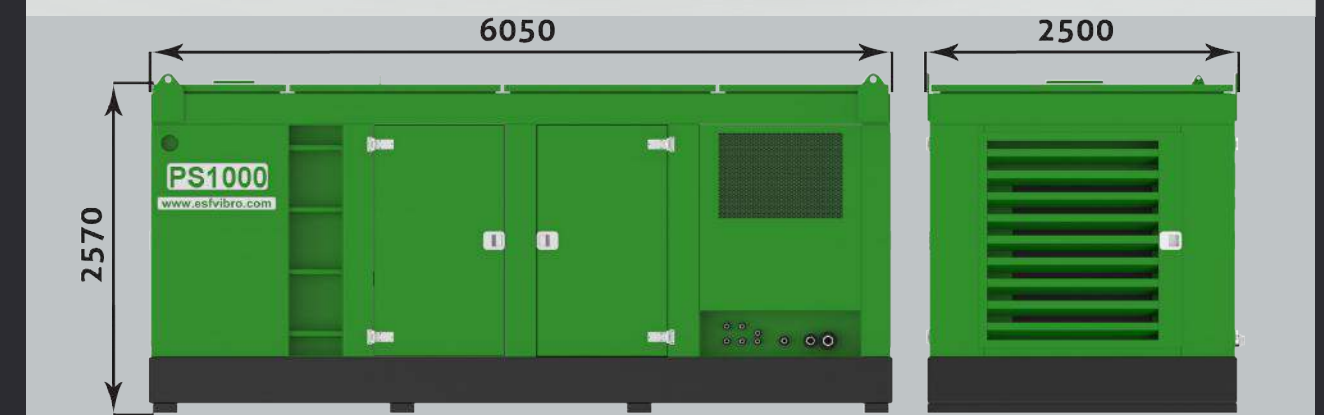
## Power Pack

PS1000 is designed and manufactured to operate ESF110 vibratory hammer. This power pack is capable to supply 1000 lt/min.oil flow @ 350 bar pressure.

To operate ESF200 size Vibratory Hammer 2xPS1000 is used.



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Power Pack ( For Vibro Hammer )		ESF 110
Diesel Engine		Optional
Max. Working Pressure	bar	350
Max. Flow	l/min	1000
Pump		Optional
Fueltank	lt	1300
Hydraulic Tank	lt	2600
Weight	kg	1200
Length	mm	6050
Width	mm	2500
Height	mm	2570

# CLAMPS

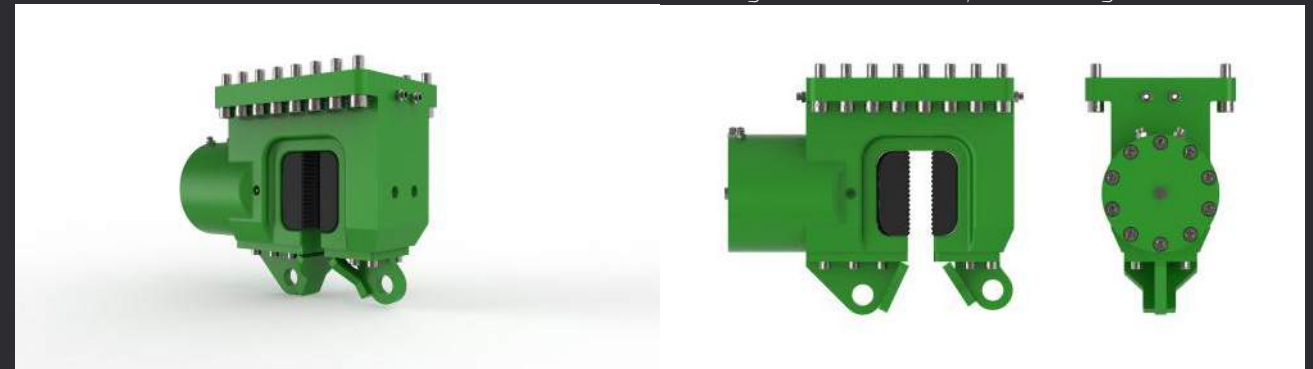


## FCM & PCM Series Clamps

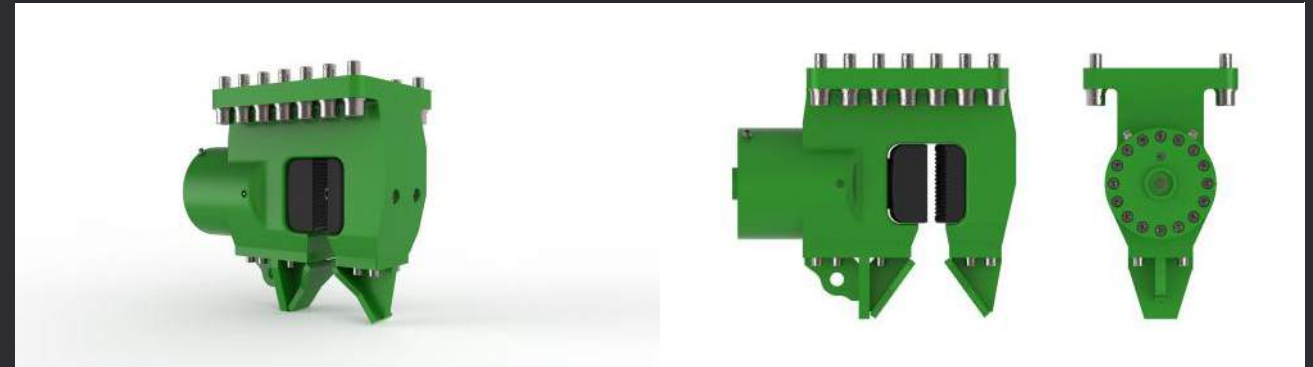
We manufacture the clamps out of solid steels not to let happen any crack during application. FCM and PCM series clamps are specially designed for ESF Series Vibratory Hammers. On the other hand, we can also manufacture clamps for any other brand vibratory hammers.



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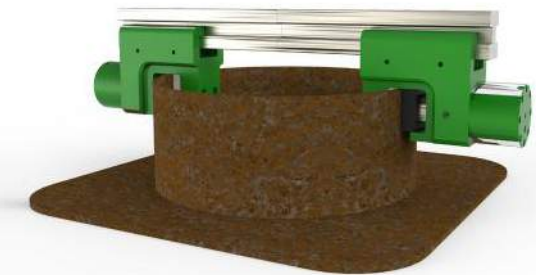
FCM 5	5 tons clamp	18 mm Mouth	Suitable for ESF 03
FCM 15	15 tons clamp	20 mm Mouth	Suitable for ESF 1
FCM 30	30 tons clamp	28 mm Mouth	Suitable for ESF 2-3-4
FCM 60	60 tons clamp	40 mm Mouth	Suitable for ESF 6
FCM 75	75 tons clamp	40 mm Mouth	Suitable for ESF 7
FCM 90	90 tons clamp	55 mm Mouth	Suitable for ESF 8-12-14
FCM 100	100 tons clamp	45 mm Mouth	Suitable for ESF 20-23



PCM 40	40 tons clamp	With Radius Clamp Shoes	Suitable for ESF 20-23
PCM 80	80 tons clamp	With Radius Clamp Shoes	Suitable for ESF 20-23
PCM 100	100 tons clamp	With Radius Clamp Shoes	Suitable for ESF 55

## Tension Bar

From Ø 600 mm to 3000 mm  
Suitable for ESF 20-23-55-88-110



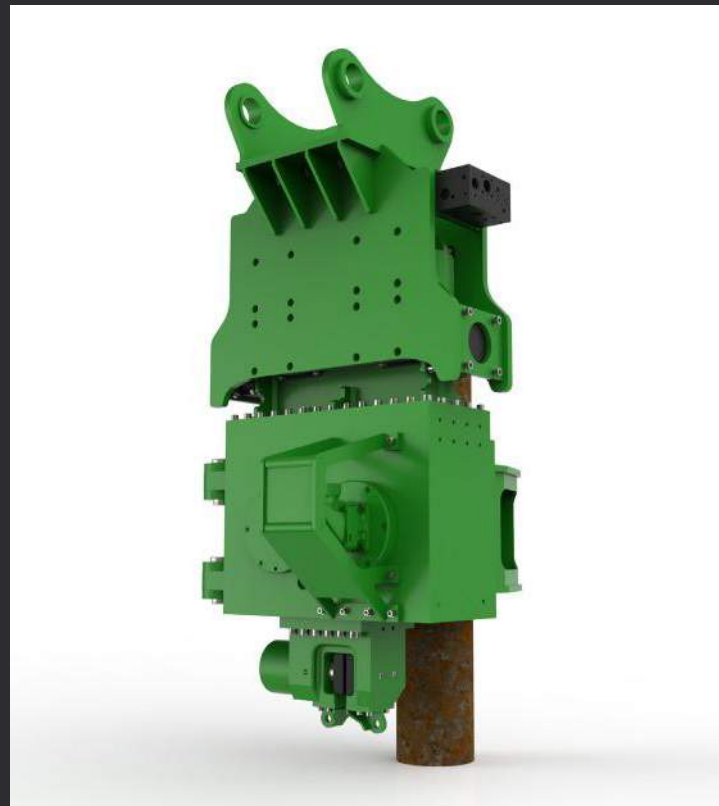
# ROBOT 8



## EMS Group R&D Team

Robot 8 is specially designed to reduce the time and cost of sheet pile or steel tubes driving projects.

The system is operated by remote control inside the excavator cabin which is enabling the operator to take the sheet pile or steel tube without any extra personnel to hold the material. Robot 8 is capable to take up the sheet pile or steel tube by its hands and start driving in a very short time. Cost - Effective & Time - Effective Robot 8 excavator mounted vibratory hammer.



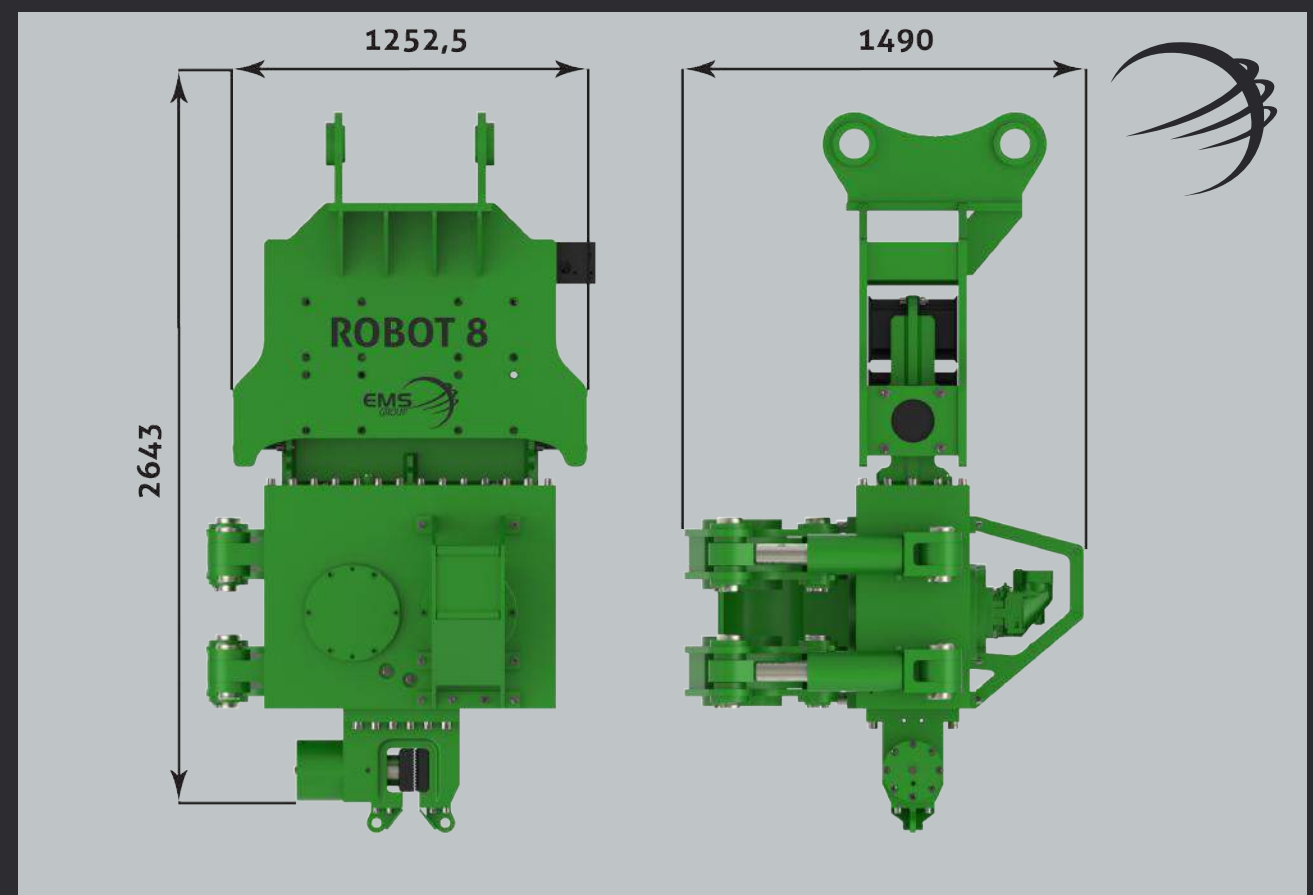
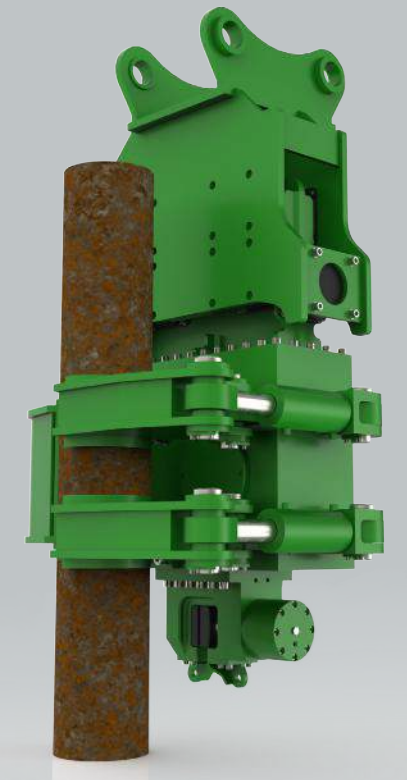
EMS Group has shared its %30 budget to R&D department.

We do believe that we must invest on new designs and new effective systems in our products.

Our engineering team supporting our R&D department for effective results.

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Centrifugal Force	kN	808
Eccentric Moment	kgm	9,4
Speed	rpm	2800
Pulling Force	kN	150
Total Weight (excl.Clamp)	kg	3300
Dynamic Weight (excl.Clamp)	kg	1370
Amplitude	mm	13
Power	kW	135
Displacement	liter/min	230
Working Pressure	bar	300
Height	mm	2643
Width	mm	1490
Length	mm	1252,5



# FACTORY

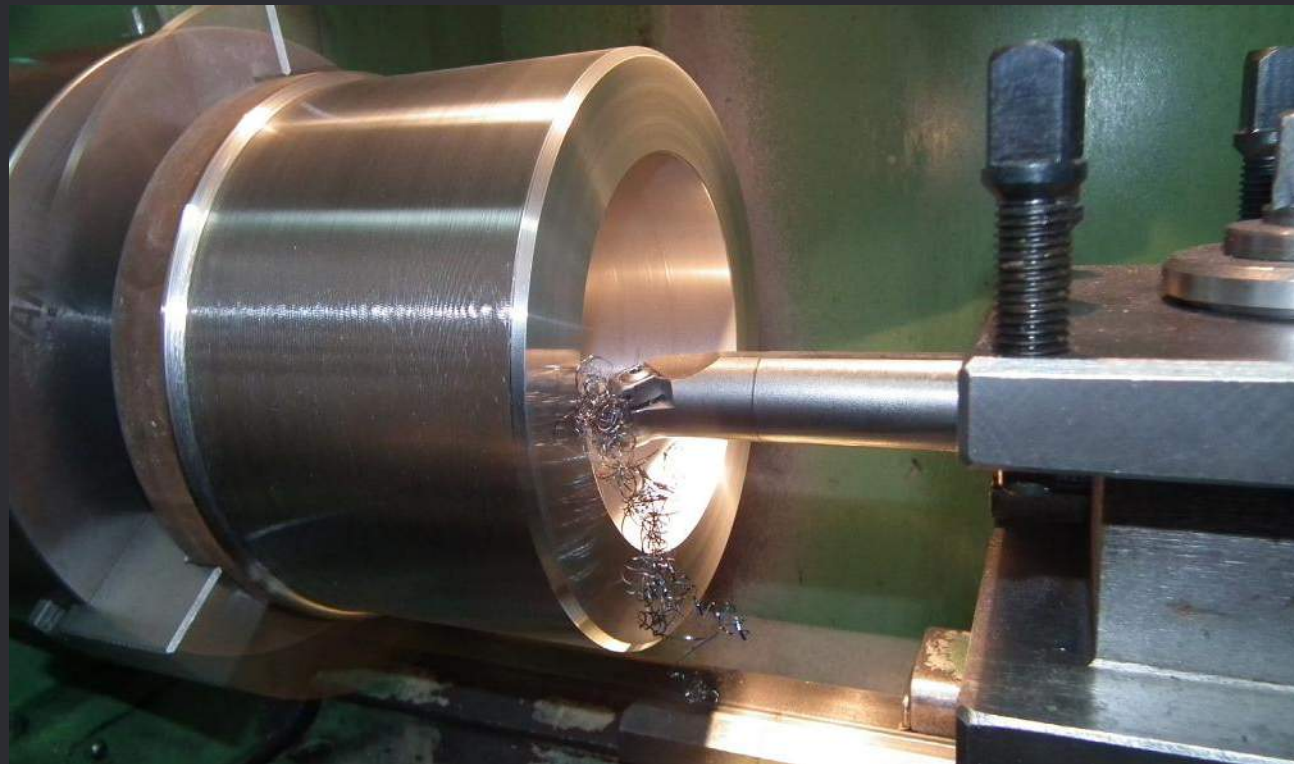
EMS  
GROUP

## EMS Group Team Work

We never compromise on quality of our products. The most up-to-date technologies are used to manufacture each part of our vibratory hammers.

The quality cross check control systems always results with high quality products. All of our personnel are well educated and aware of the points and parts must result with correct and best quality standards.

Our factory is located in the center of the biggest industrial zone in Ankara which is enabling us to organise and manufacture any size of vibratory hammers and power packs.



# SERVICE



## EMS Group Service

Incase of any service demand, our team is ready to move to any customer not only in Turkey but also worldwide.

We do have the best sources and procurement channels to make quick delivery. We always keep the spare parts stock level fresh to help our customers to get spare parts in a very short time.



**Worldwide  
Technical Service**

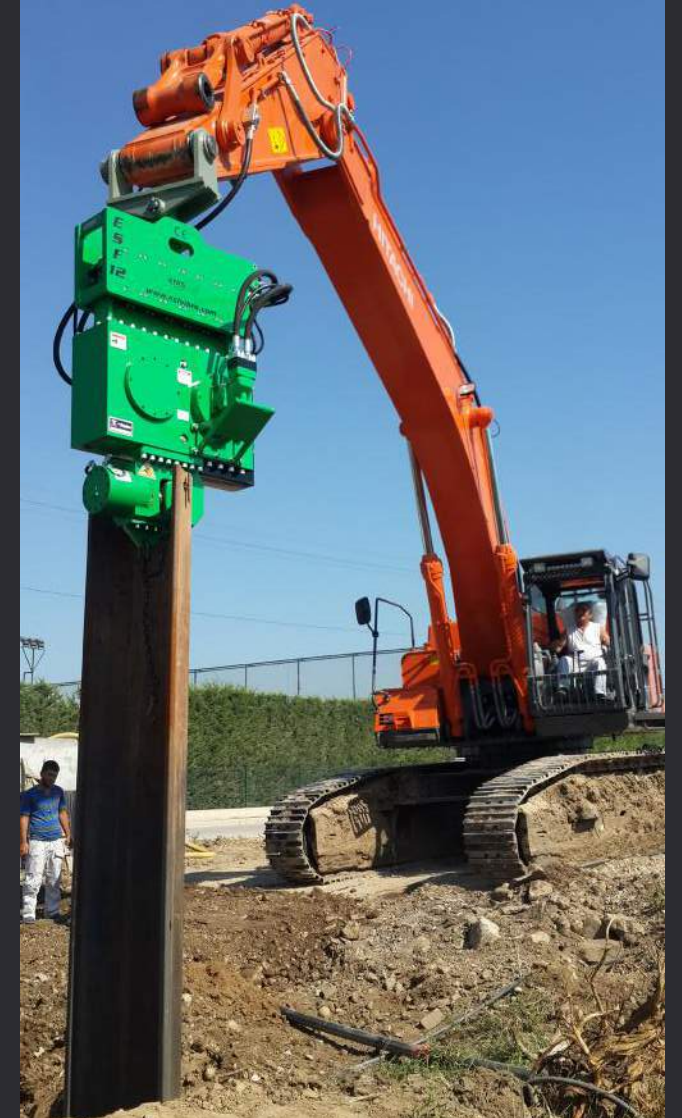


All of our products has CE Certificate and User Manual with Warranty Letters and worldwide under warranty. Our quality is assured and has service points all around the world by authorized Distributor&Services.



# EMS GROUP GALLERY

EMS Group in the World.







# WORLD

## EMS Group in the World

**By means of the exclusive distributor network, you can give purchase order and require service quickly in your region.**

**Diligence :** We use due diligent practices and efficiency in our manufacturing processes. We improve our group continuously and we will secure the growth of our group in the long term.

**Technology :** We secure our technological capacity by high product quality, constant innovations of products as well as manufacturing processes. We devote ourselves to manufacture high quality products , ensuring the longevity.

**People :** We have valuable , honest and team-oriented shop floor with transparent management. The opinions and experience of our employees are very important to make decision about the process. We are doing our best for stable partnership with our customers.

**Our Goal :** We are determined to reach our goal by the quality management of the EMS group. Our policy is to supply our customers with high-quality products meeting all technological standards and requirements.

**Market :** We are fully aware of that we must maintain and improve our competitive position by always increasing the quality of our services. The quality is determined by the material used, labor costs and financial power i.e. Our quality management is in charge of executing quality control at all levels. Each employee of the EMS group has to be integrated by management in all execution. Each employee of our company takes the responsibility for the quality of his work. Our quality is assured by the close communication between our teams.



**Our commitment to our customers is assured by our exclusive distributors in the World.**

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