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www.esfvibro.com
www.emsgroup.com.tr



EMS GROUP



We manufacture
ESF Series Vibratory Hammers

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

WELCOME TO THE EMS GROUP



MACWORKS
DRILLING AND MACHINE ATTACHMENTS

New Zealand Agent for EMS Group



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.



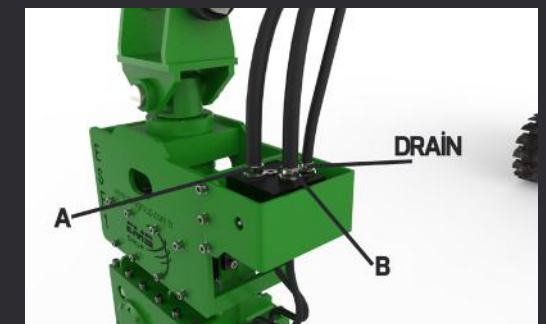
B Type

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.



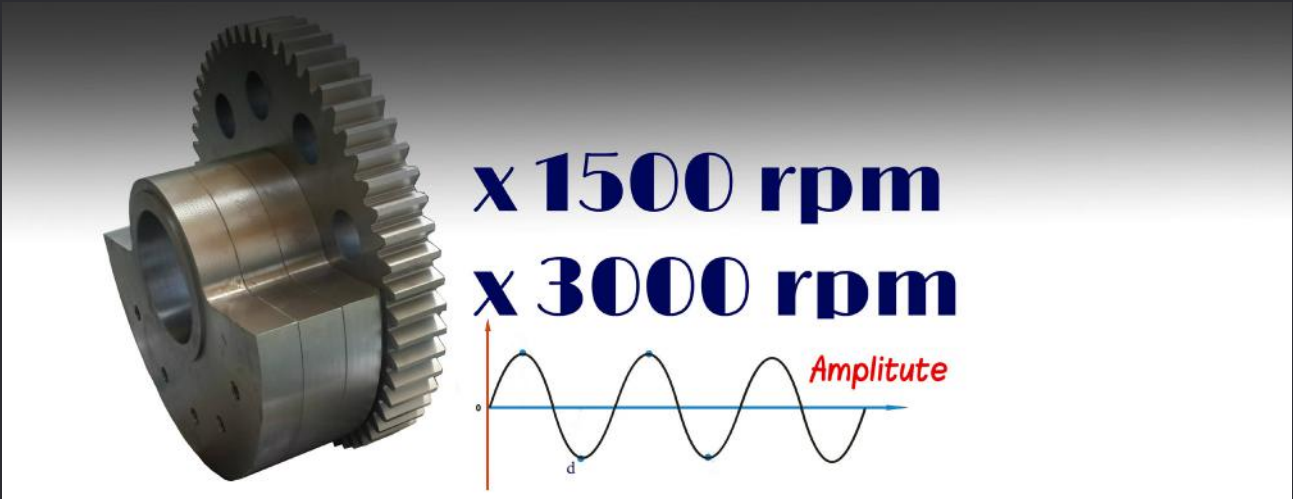
OPTION : A line + Electric Line to open clamp
 The clamp can be opened by remote control in excavator cabin.

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.



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

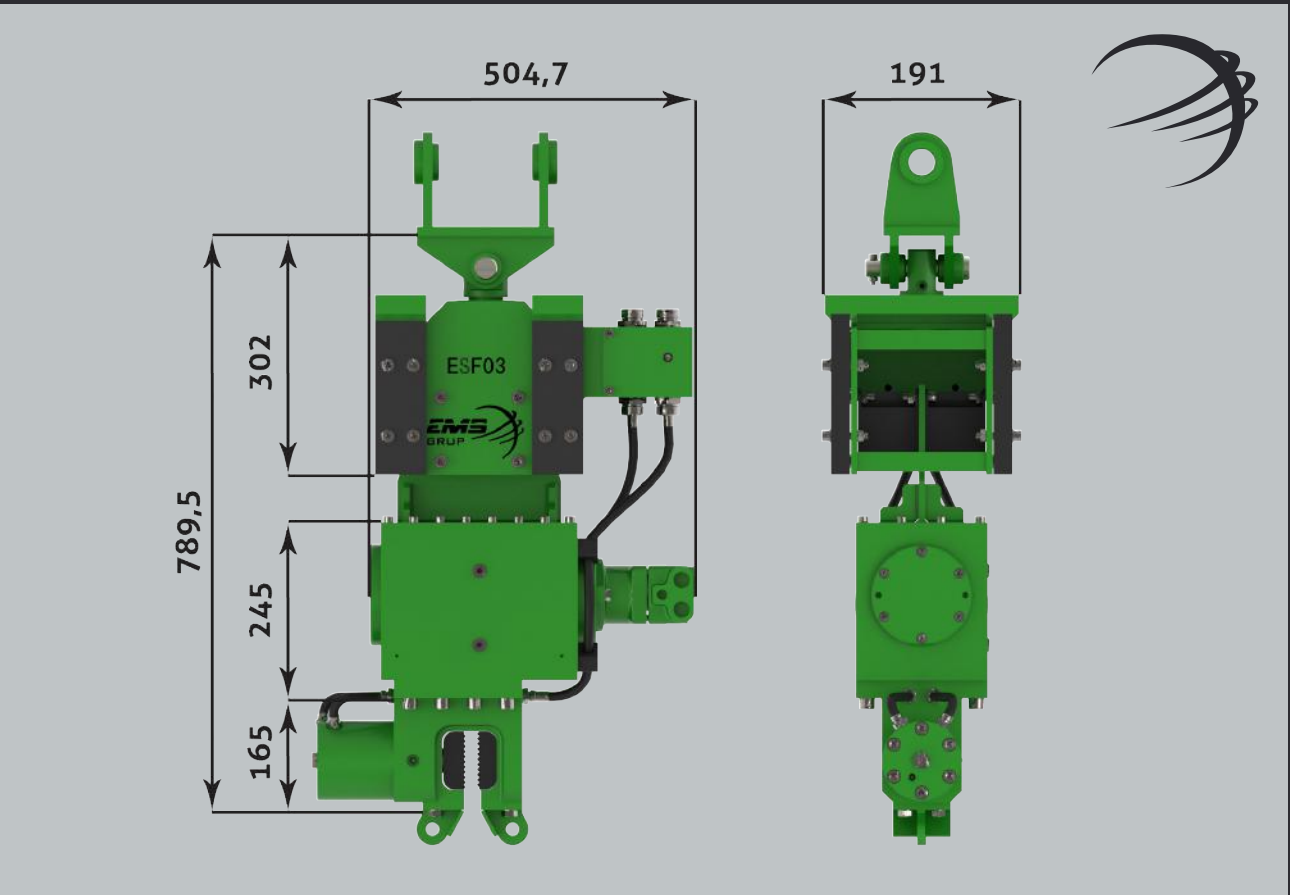
Excavator Mounted Hydraulic Vibratory Hammer

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 mount- ed 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

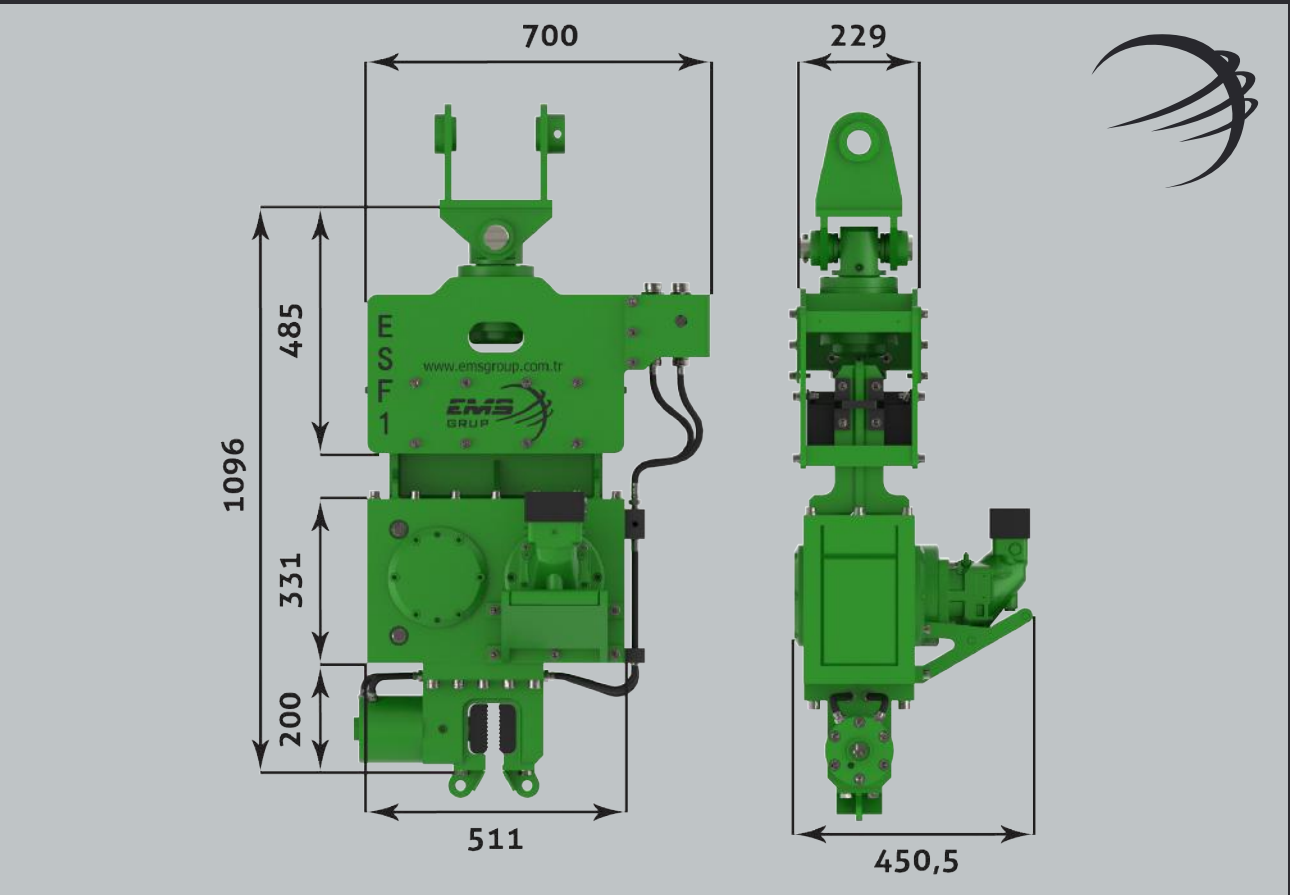
Excavator Mounted Hydraulic Vibratory Hammer

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

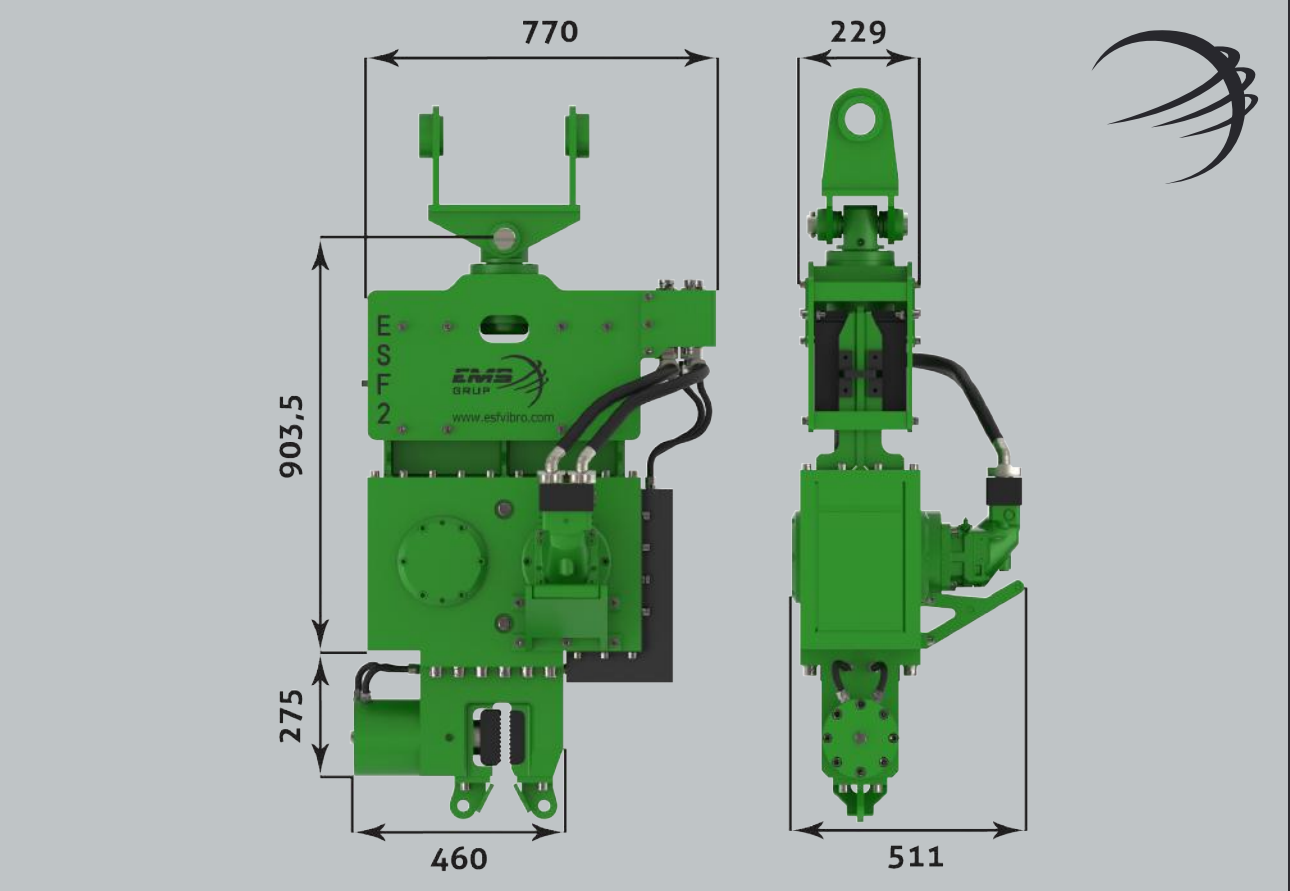
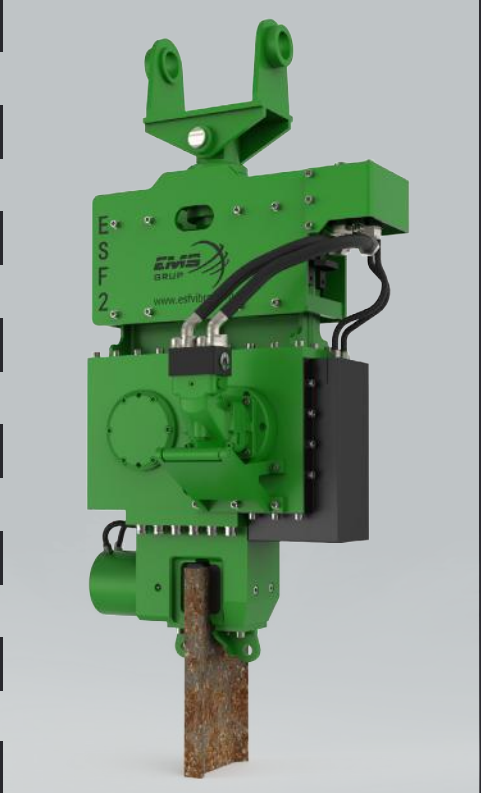
Excavator Mounted Hydraulic Vibratory Hammer

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

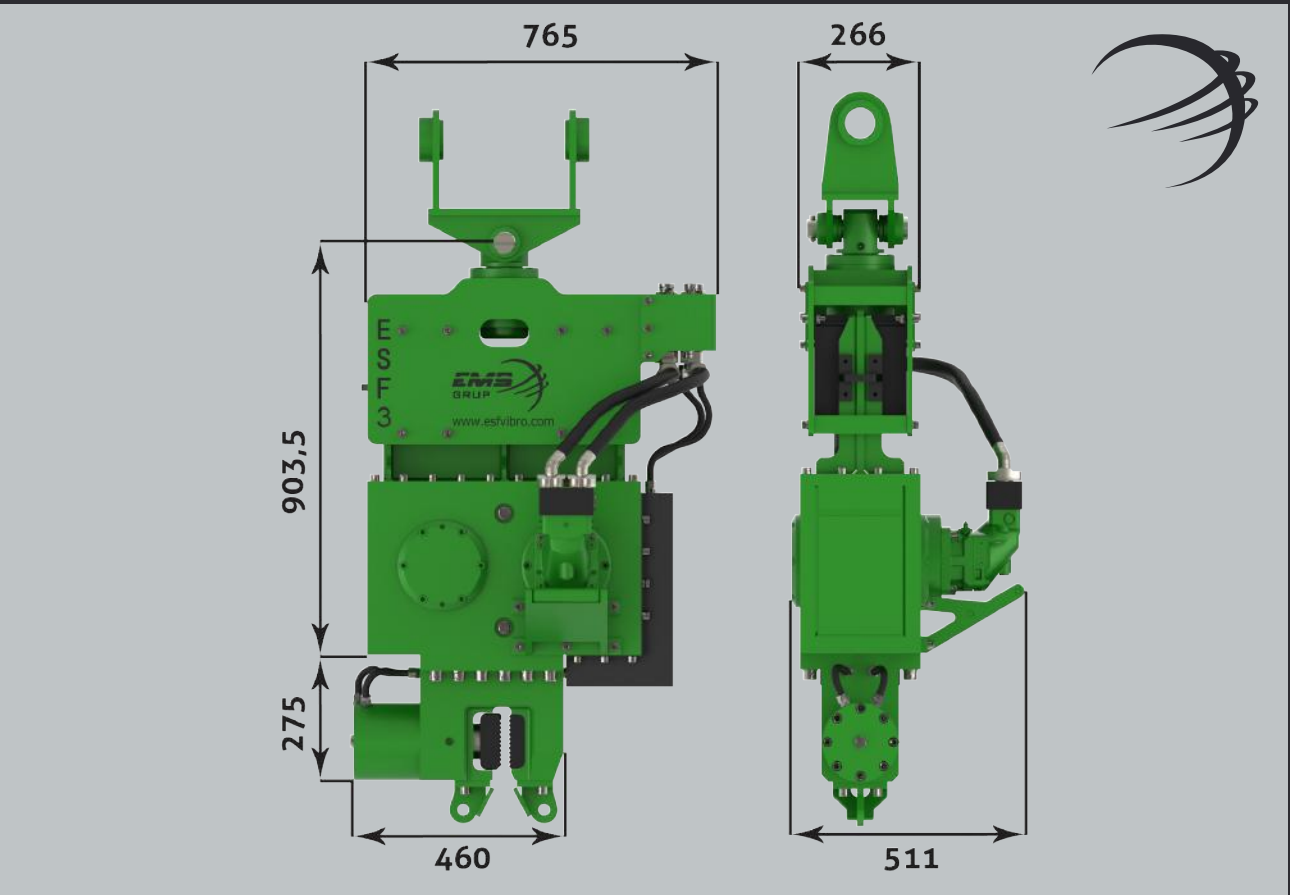
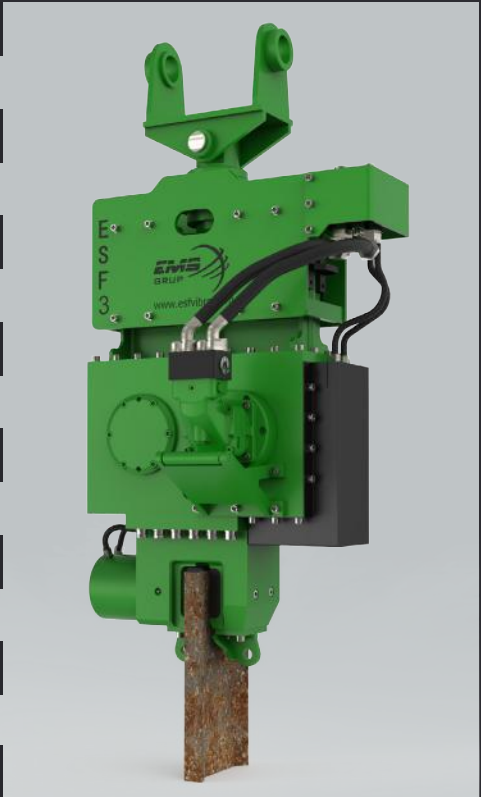
Excavator Mounted Hydraulic Vibratory Hammer

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

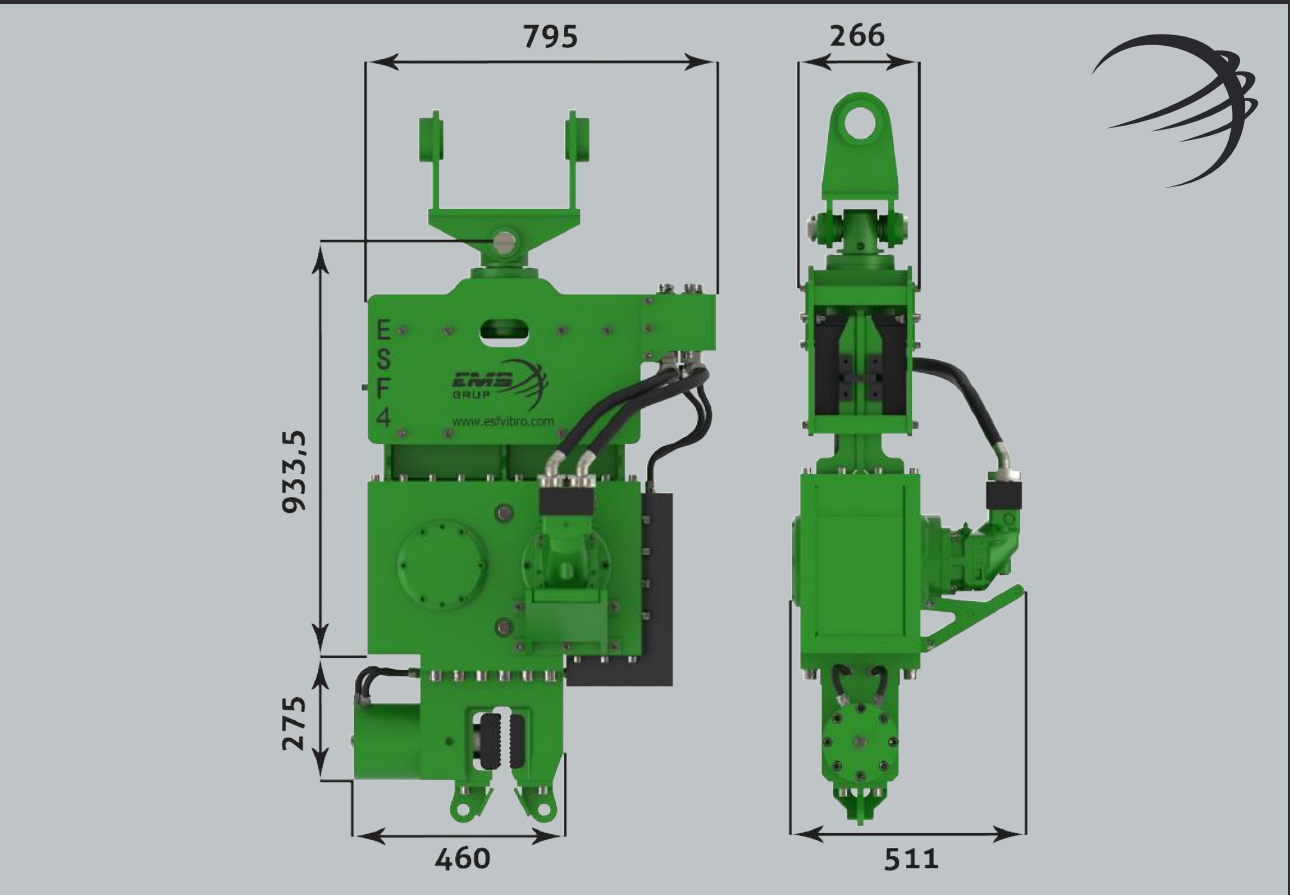
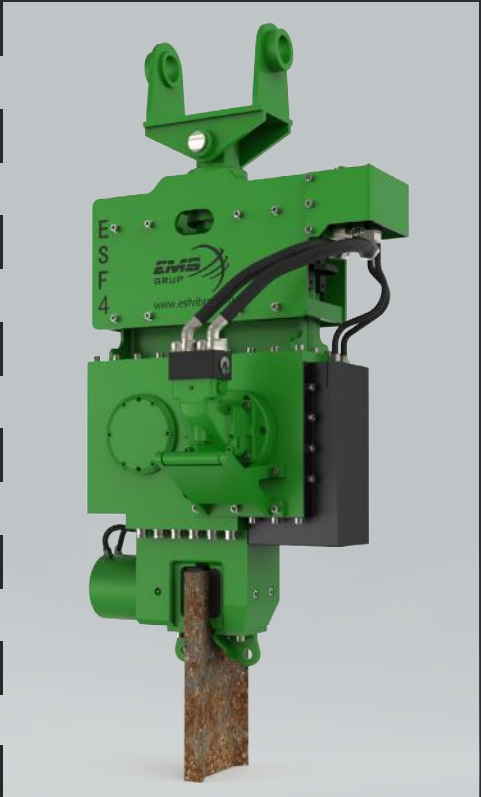
Excavator Mounted Hydraulic Vibratory Hammer

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

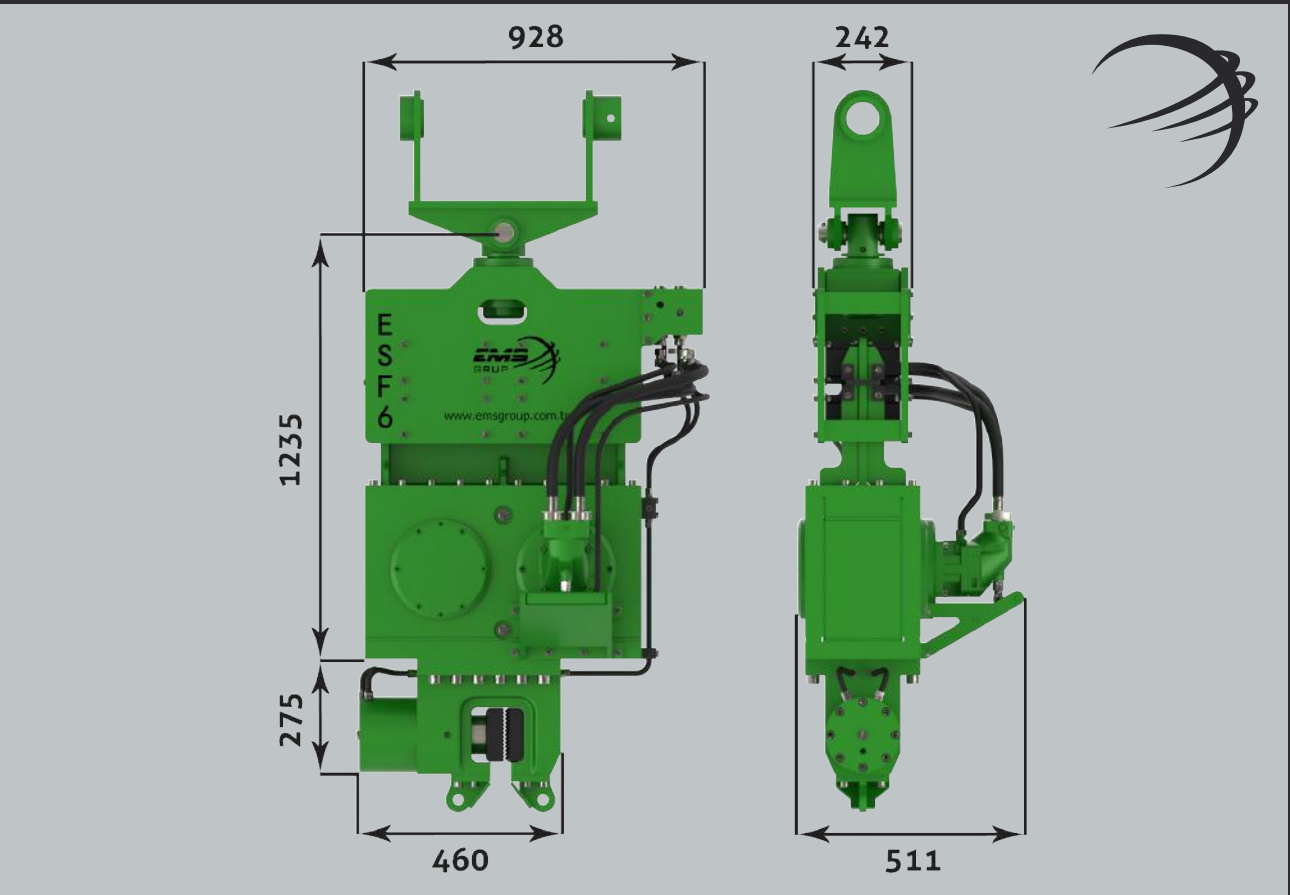
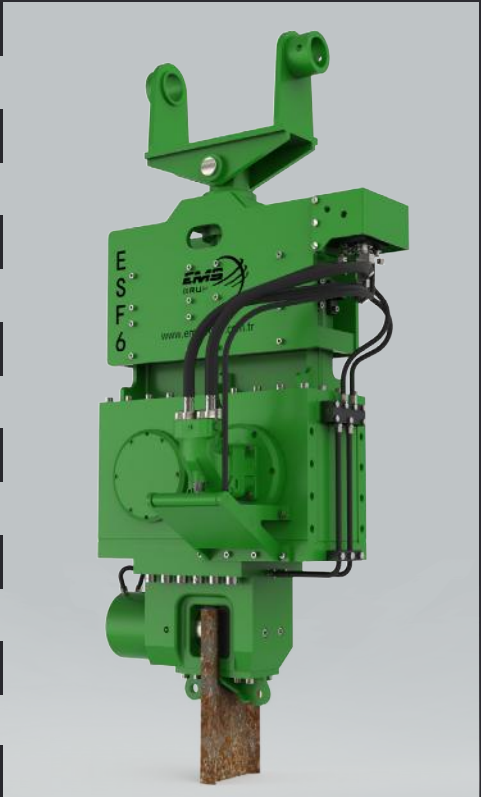
Excavator Mounted Hydraulic Vibratory Hammer

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

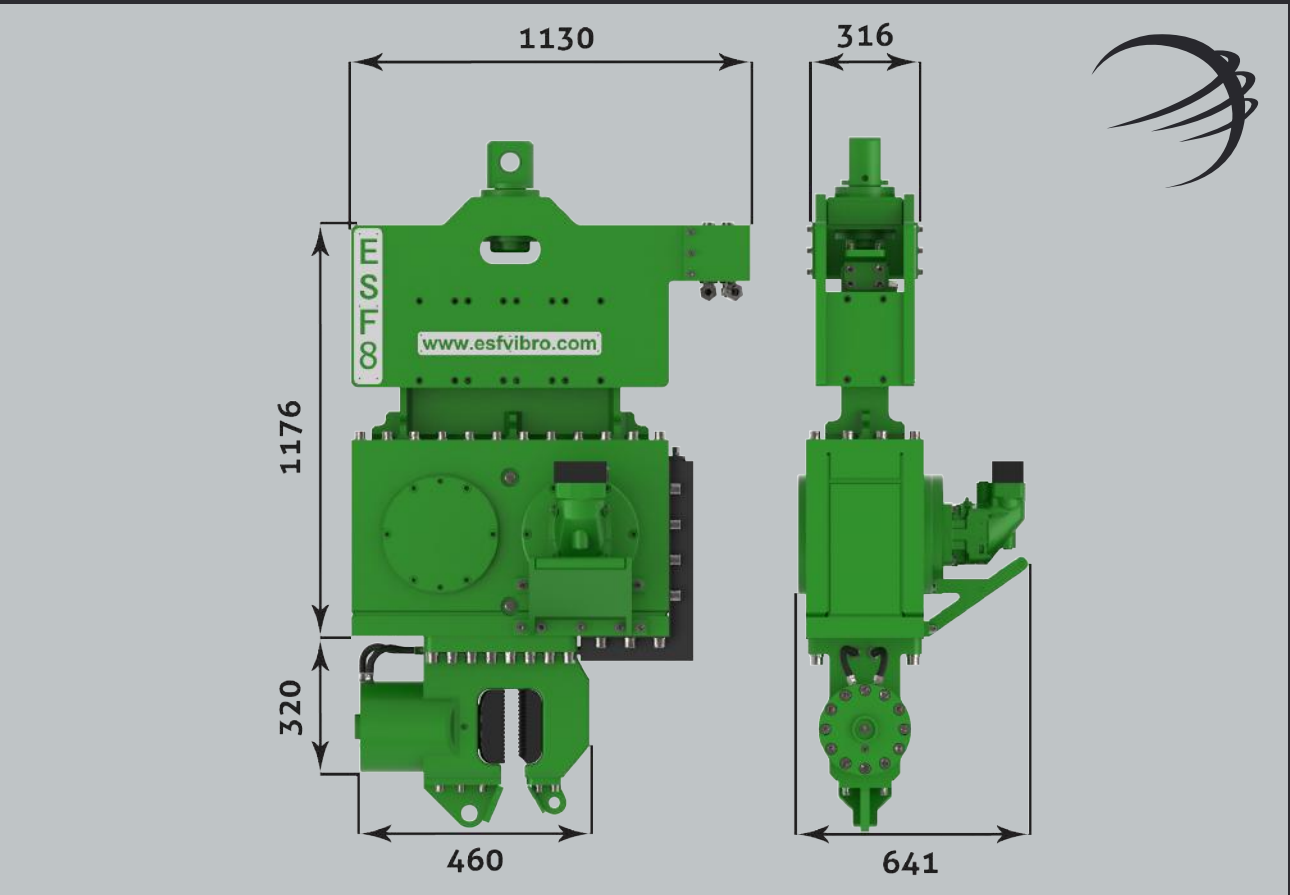
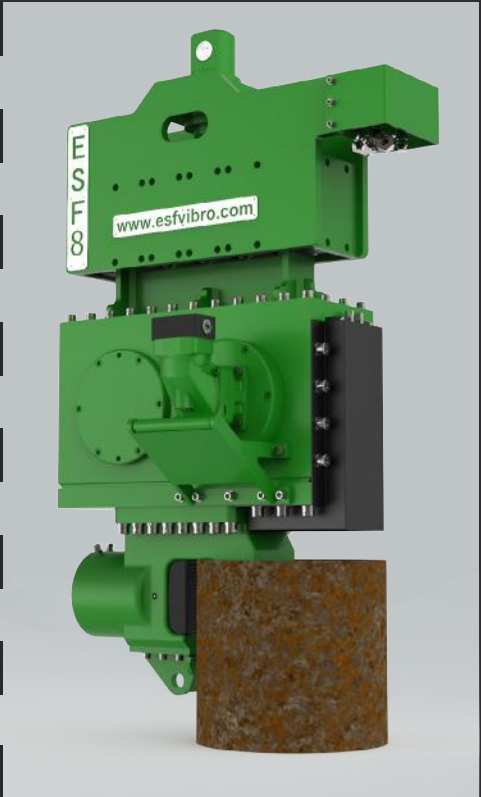
Excavator Mounted Hydraulic Vibratory Hammer

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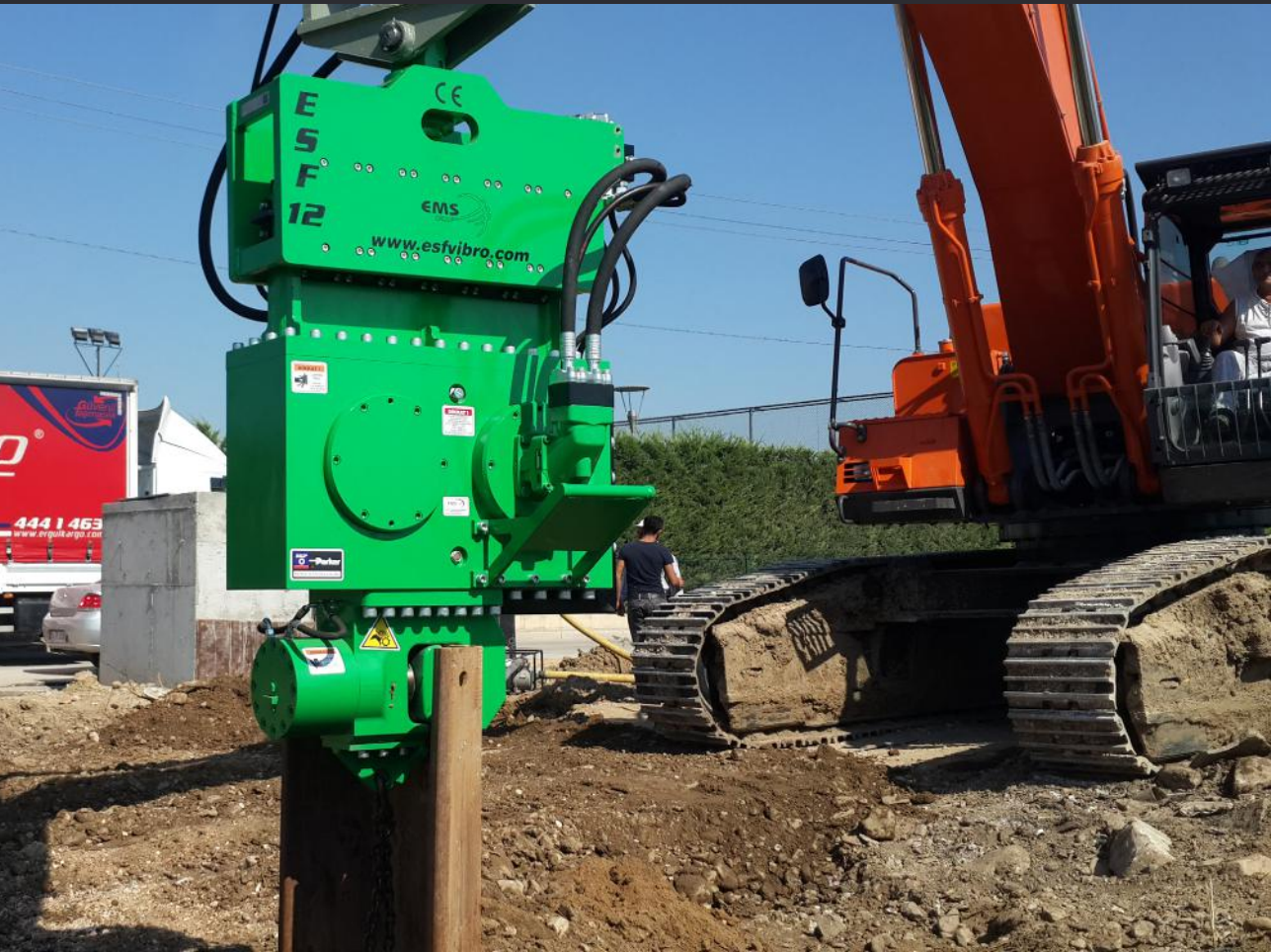
Excavator Class	tons	38-40
Centrifugal Force	kN	464
Eccentric Moment	kgm	8
Speed	rpm	2300
Pulling Force	kN	150
Push Down	kN	90
Total Weight (incl.Clamp)	kg	1610
Dynamic Weight (incl.Clamp)	kg	1290
Amplitude	mm	13
Power	kW	148
Displacement	liter/min	253
Working Pressure	bar	350
Height	mm	1750
Width	mm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



ESF 12B

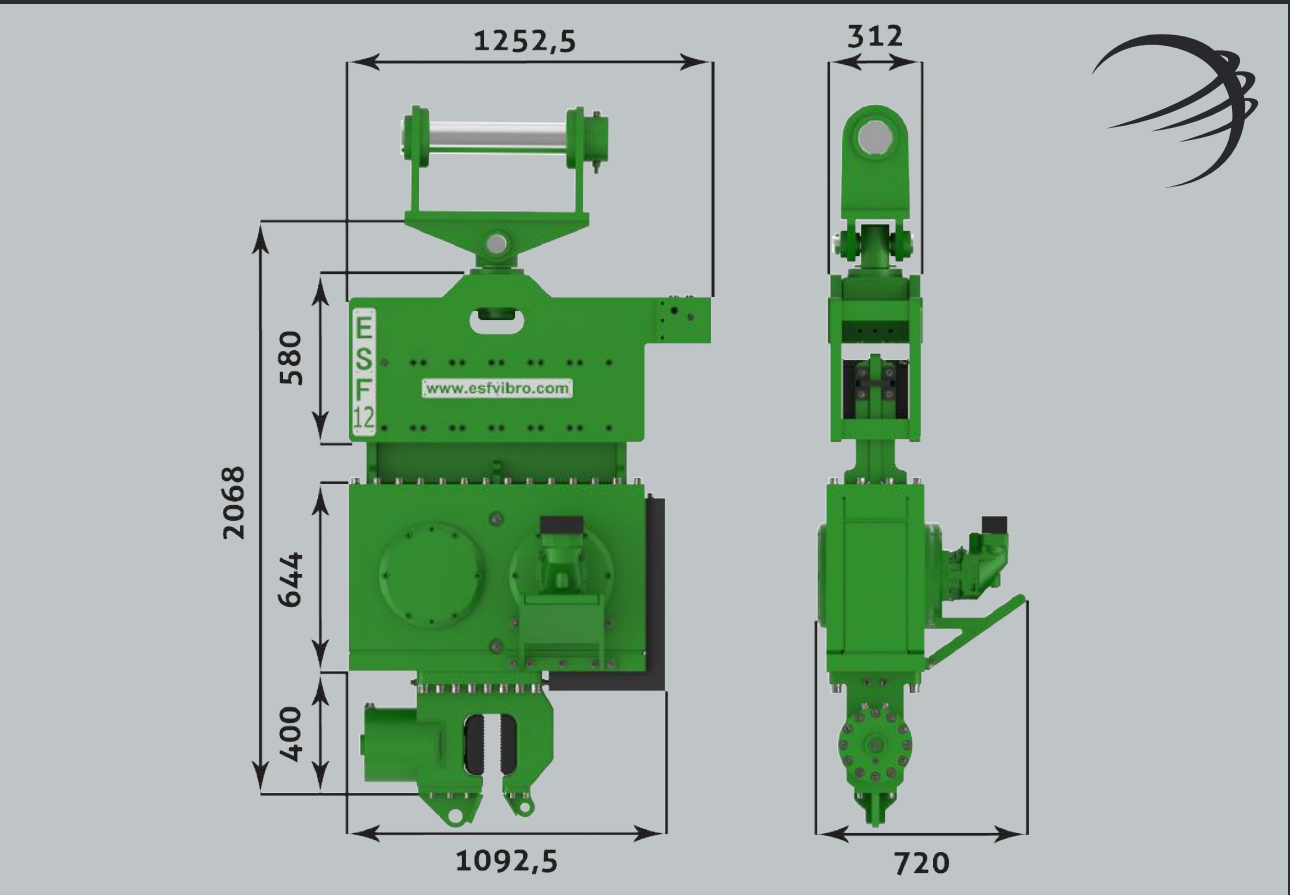
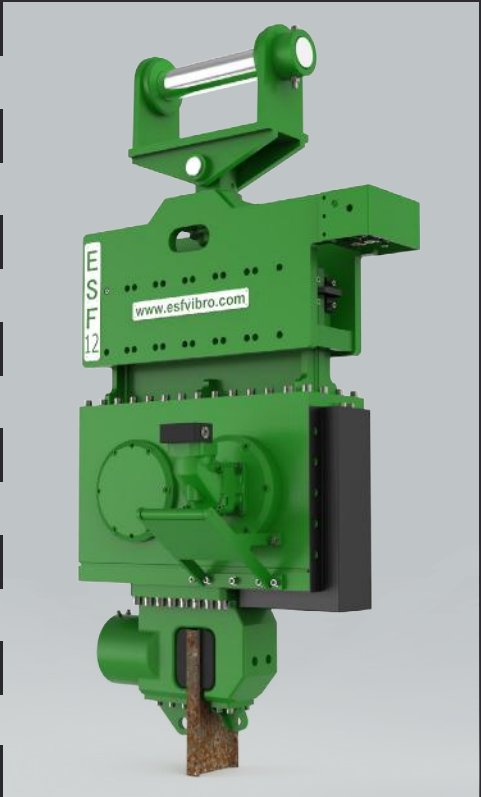
Excavator Mounted Hydraulic Vibratory Hammer

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





***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

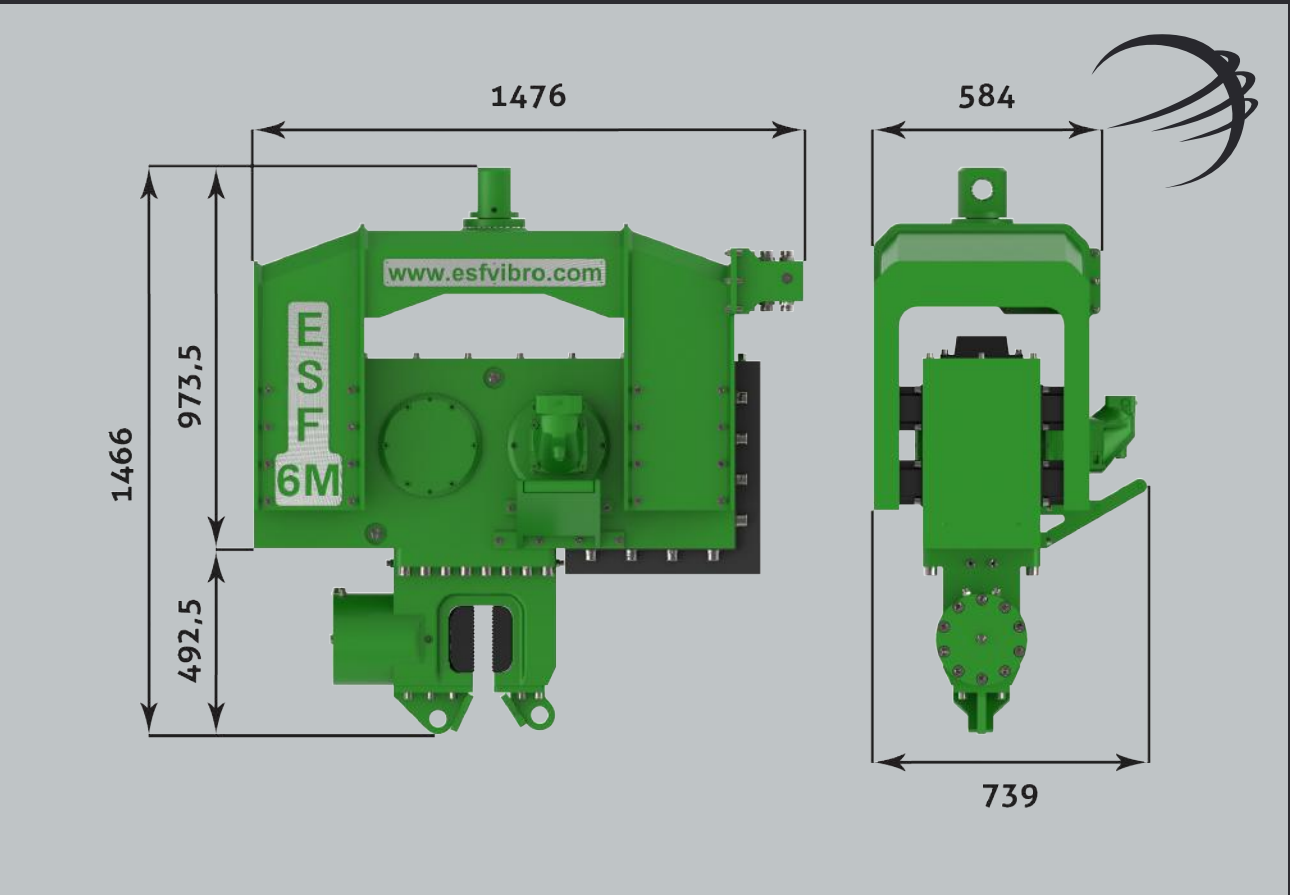
Excavator Mounted Hydraulic Vibratory Hammer

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

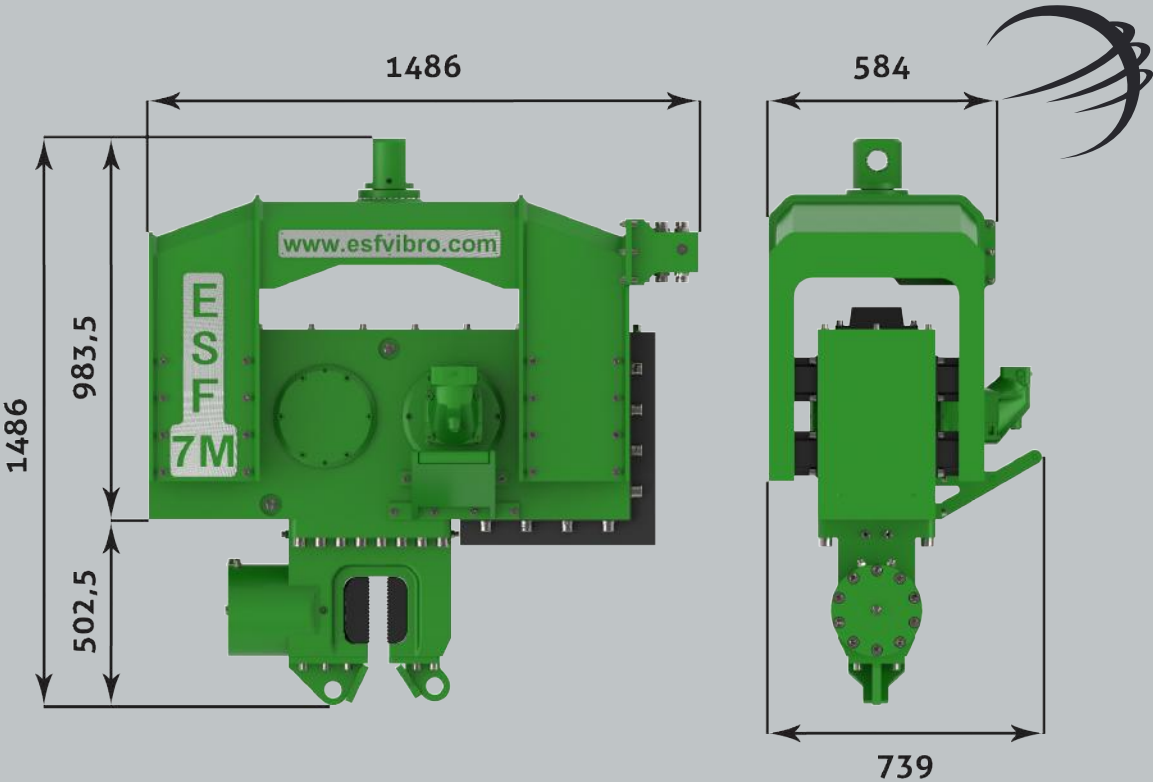
Excavator Mounted Hydraulic Vibratory Hammer

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

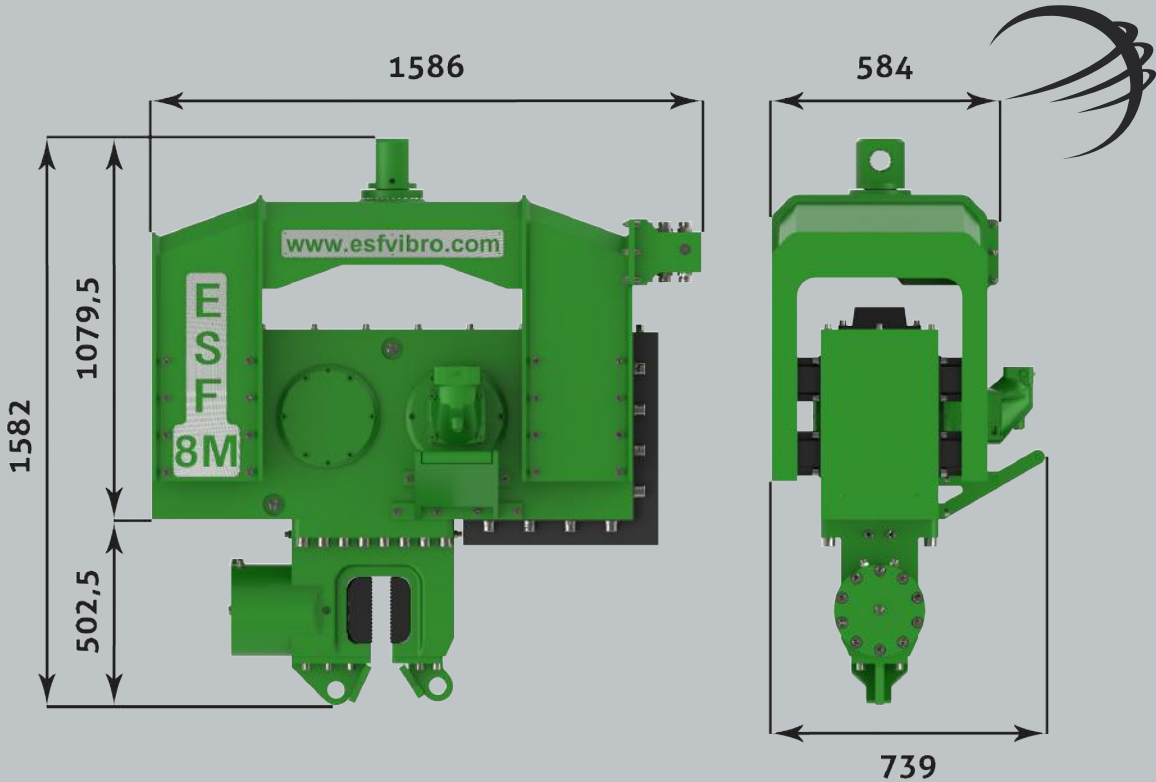
Excavator Mounted Hydraulic Vibratory Hammer

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

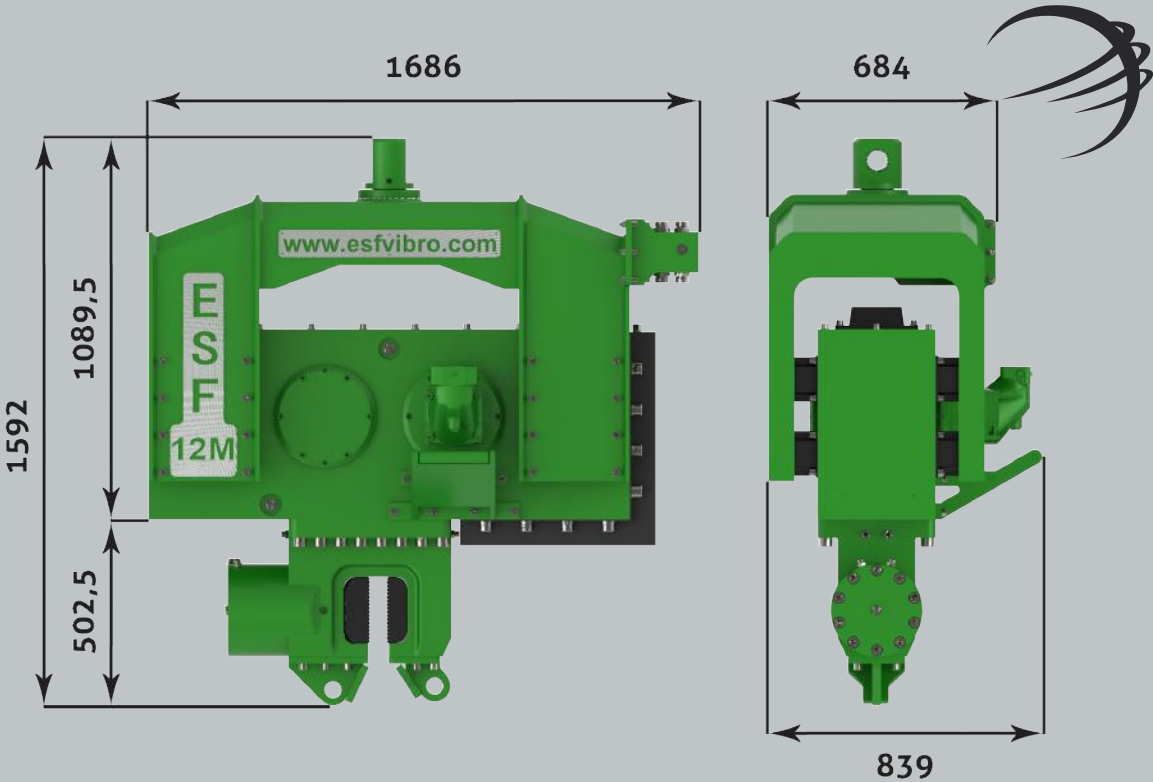
Excavator Mounted Hydraulic Vibratory Hammer

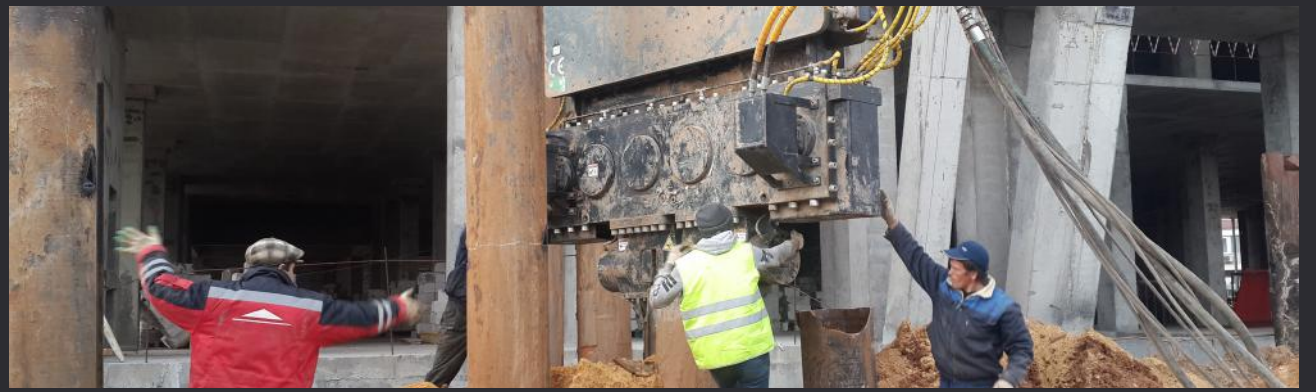
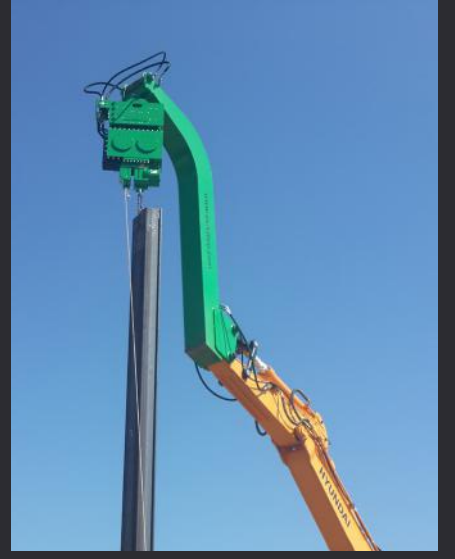
ESF 12M is attached to 45-50 tons class excavators and capable to drive steel sheet piles and steel tubes in hard - clay ground formations.



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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







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WORLD

EMS GROUP



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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