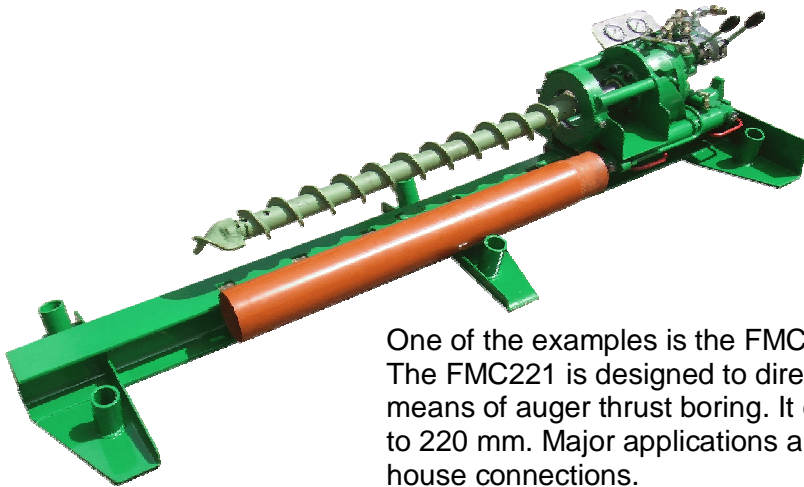


FMC 221 Auger drilling machine



Machines should be designed to improve existing methods and productivity. Therefore it is very important to reflect changing jobsite circumstances directly in the design of new machines. Boretech Holland has contributed to that the last decades.

One of the examples is the FMC 221, a small auger drilling machine. The FMC221 is designed to directly install PVC duct or sewer pipes by means of auger thrust boring. It can handle a diameter range from 110 up to 220 mm. Major applications are road and railway crossings as well as house connections.

The machine does what it is designed to and is kept simple to ensure a high level of reliability. Further it has a few advantages that make it a very practical machine to use. The modular construction makes it very easy to assemble and disassemble in an excavated driving pit. The individual parts of the machine have been designed to meet a high strength to weight ratio, which makes it easy to take the machine to any jobsite. The machine consists of 3 main parts: Rotation support with thrust cylinders (108kg), base frame (38kg) and extension frame (36kg). These parts can be transported with ease as separate units to difficult accessible working areas.

The machine excels in power dimension/weight ratio. In this kind of work it is very common that cable or pipe routes are crossing the driving pit, limiting the options for installation. With a total height of 40 cm many of these obstacles can be taken without any problems. Optionally the Rotation unit with thrust cylinders can be taken from the thrust frame vertically by releasing the quick connect guide shoes. This makes it very easy to use the machine in congested working areas.



Top quality materials and components are used for the auger rotary and thrust unit. By using a radial plunger motor for the rotary a constant output is guaranteed. In addition to this the auger drive is very compact. Besides the dimensions and the high drilling performance, the FMC221 is probably one of the most efficient small auger drilling machine in the market. The robust quick connect frame does not allow stress pivoting at the joint. It will remain straight under all load conditions, which benefits the quality of the work.

A simple switchable lock pawl defines the thrust direction. Adjustable support rollers ensure the pipe alignment and the spacious opening behind the thrust flange ensures proper discharge of the cuttings. As Boretech is the distributor of "Perforator" auger drilling machines, this machine can be equipped with standard 32mm hexagon "Perforator" augers.

The 14 kW silent power pack with a 3 cylinder Lombardini engine is the power source of the drilling machine. Also this unit is designed to supply a high power weight ratio, which means that the transport weight is limited compared to the supplied power.



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Technical data

Dimensions:

Total width of thrust frame	600 mm
Length press unit withdrawn	600 mm
Centerline level product pipe (above frame)	155 mm
Minimal work height needed (underpasses)	400 mm
Interval stroke length	250 mm
Stroke press cylinder	325 mm
Opening for transport of loose ground at side of thrust flange, window W x H	165 mm x 116 mm
Maximum pipe diameter	220 mm
Length of guided frame part	1,050 mm
Free total stroke length within frame	1,500 mm

Machine specifications:

Press force	105 kN
Max. Torque rotation unit	1250 Nm
Rotation speed	50-85 rpm
Adjustable support cylinder at end of drilling frame	optional
Separate hydraulics thrust /drilling	optional
Liquid permeable augers for lubrication	optional
Auger connection	hexagon 32 mm
Auger drive	Radial plunger motor
Mechanical output efficiency auger drive	95%

Transport weight:

Base frame	38 kg
Extension frame	36 kg
Rotary complete with valves	108 kg
Diesel power pack incl. Hoses	295 kg

Power pack:

Diesel engine	Lombardini 3 cylinder LDW1003
Noise level	85 db
Drive capacity	14 kW
Coolant	Water
Start	Electric
Number of hydraulic pumps	1
Fuel tank	approx. 20 Liter
Hydraulic tank	approx. 60 Liter

(Technical specs are subject to change without notice)