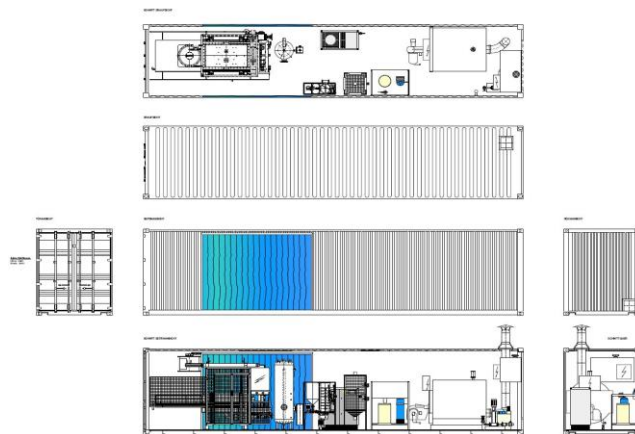
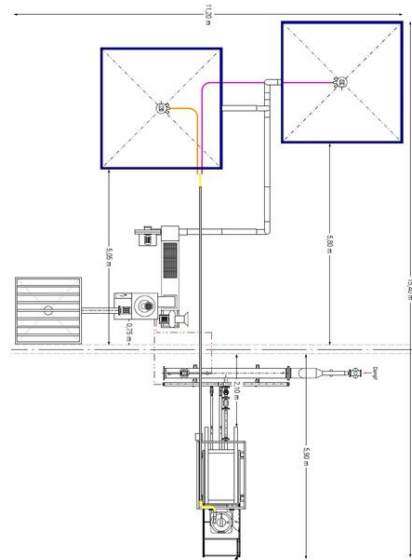


Documentation and facts in addition to a stationary or mobile EPS plant for the manufacturing of our MIB-panel-system



A) ESTIMATION: Stationary or mobile Plant capacity with **MIB - Panel System** and assumed working hours per year:

Working hours per year:

We assume 250 working days with a 2 (16 hrs) shift operation:

250 working days * 16 working hours/day = **4,000 working hours / year / machine**

For a 3 MIB-molding machine scenario

4000 working hours / year / machine * 3 machines = **12,000 working hours / year**

Output of Panels/year:

Total working hours for 3 machines **12,000 working hours / year**

Calculation for **Mercado Panel**

Assumption:

All molds to be operated with an estimated cycle time of 180 sec = **20 cycles / hour**

Assumption, 6 cavity mold (**MIB-Panel-System**)

20 cycles / hour * 6 Panels / cycle = 120 panels / hour = **60 Stones / hour**

3 machines can manufacture 360 panels/ hour= **180 Stones / hour**

Total yearly output based on the assumption:

Total output: 1,440,000 panels / year with 3 machines and 2 shift operation

These are: **518,545 sqm wall area.**

(over 2500 houses with 200 sqm wall area)



Documentation and facts in addition to a stationary or mobile EPS plant for the manufacturing of our MIB-panel-system

ESTIMATION: Throughput of EPS:

The throughput of EPS is based on the maximum usage which is consumed by the 6 cavity **MIB** straight mold EPS building Panelstone assumed weight:

Assumed 0,45 kg per panel = 0,9kg per Panelstone (**MIB** - straight panel)

60 stones / hr * 0,9 kg = 54,0 kg / hr / machine

The assumed consumption of 3 machines is

54 kg / hr / machine * 3 machines = 162,0 kg / hr

- Item 1) Erection supervision, Start up and Training**
by MIB GmbH technical staff including:
- Set up of manufacturing unit
 - Set up of Pre-expander
 - Set up of the machines
 - Set up of utility containers and connecting pipes modules
 - Start up of energy modules
 - Start up of machines and pre-expander
 - Training on Pre-expander
 - Training on machines
 - Training on MIB-Mold handling
 - Training 3 days
- Item 2) Operating assistance for 3 months after start up**
MIB GmbH technical staff
via Interment or if required on site visits,
two days for troubleshooting and optimization.
- Item 3) Down Time Critical MIB components**
for 1 year operation of Pre-expander and the machines
- Item 4) MIB-Maintenance Contract 3 years**
for:
Pre-expander
MIB-Machines
1 annual visit by MIB application engineer for service,
training and possible upgrade of machines according
- Item 5) MIB-System Mold**
For the production of EPS **MIB-Staight-Panel-System** (**MIB**)
1 x Part: **MIB straight Panel** mold
for molding machine
6 cavities straight panel (1200 x 300 x 55 mm)
Ore mixed 3 cavities straight panel (1200 x 300 x 100)
1 cavity 90 (105) mm, insert, cavity can be locked
1 cavity 140 (155) mm, insert, cavity can be locked
1 cavity 190 (205) mm, insert, cavity can be locked
insert parts for 100 mm, 150 mm and 200 mm concrete thickness.

Documentation and facts in addition to a stationary or mobile EPS plant for the manufacturing of our MIB-panel-system

molds ready to use.

Costs round about 1.100.000 EUR.

(amortization, see our ROI calculation sheet)

B) CONSUMPTION DATAS FOR SATELLITE PLANT:

Water:

20m³ circulation water for cooling system of shape molding machines, water consumption/ h app. 1,5 m³ for producing of steam for Pre-expander unit and shape molding machines. Water consumption in l = 1500/ hour.

Electrical energy:

240kW connected load, 200 KW/h operating load for production Plant

Oil Steam Boiler:

100 l/h operating hour

D) TRANSPORTCAPACITY

For transport of the Plants you would need

- 2x20 container
- 2x40-HQ container

E) Exclusions

Not included in the offer are:

- Transport + Insurance from work to site
- Buildings for hall, storage, personal etc.
- Heavy tools, lifting cranes, fork lifts, scaffolds etc. for erection
- Travelling expenses for MIB-technicians and MIB supporters for monitoring the contruction companys as:
flight tickets, food, hotel, car.
- Foundation for hall, the customer arranges for the production of the foundation parts according to predicate drawing, consisting of all elements.

F) Terms and Conditions

Price basis is FCA (Incoterms 2000)

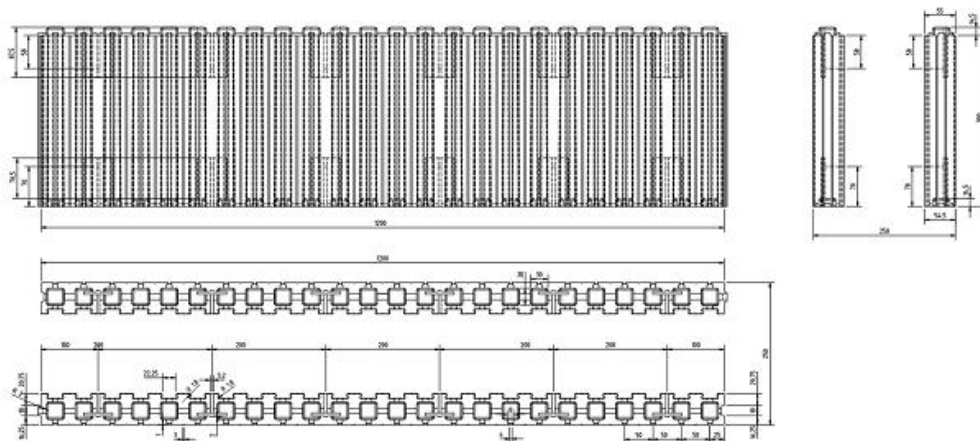
Payment 50% by order, 50% at time befor shipping.

Delivery time: appr. 5-6 months from date of order and receipt of downpayment.

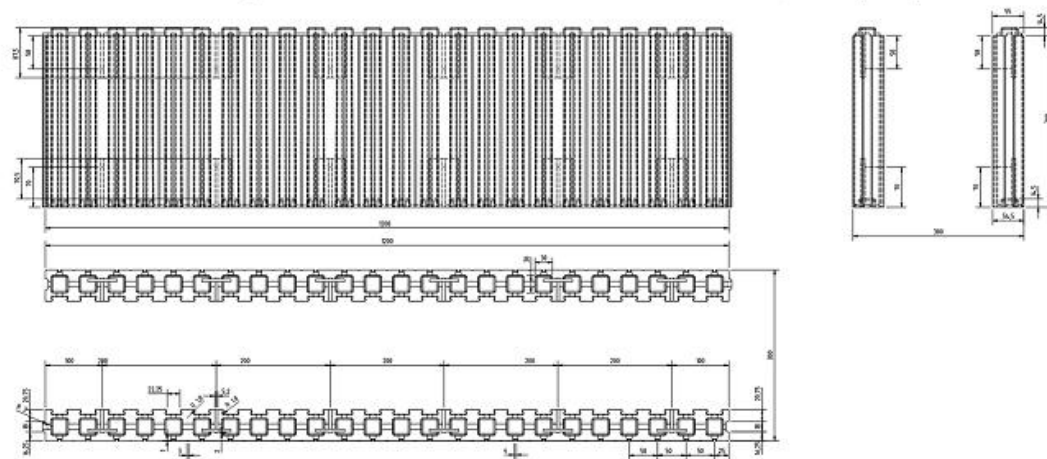
Documentation and facts in addition to a stationary or mobile EPS plant for the manufacturing of our MIB-panel-system



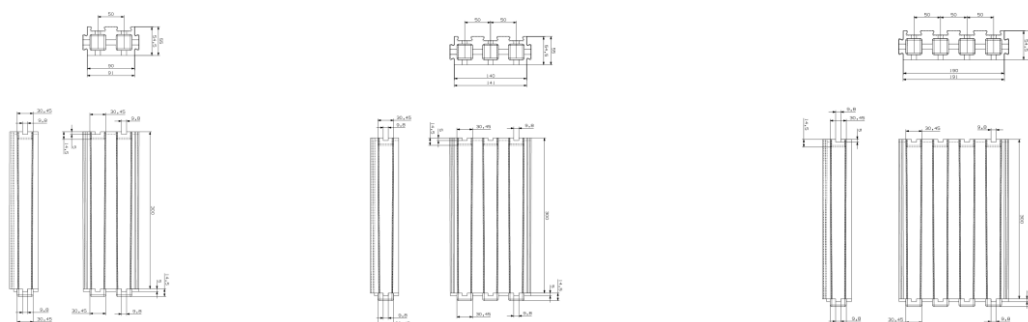
Mercado House - straight Panel with 15 cm concrete core and Plastic ties/webs (POM)



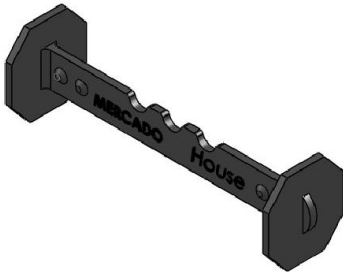
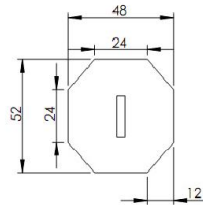
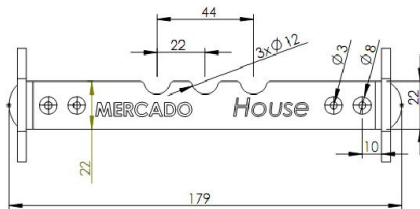
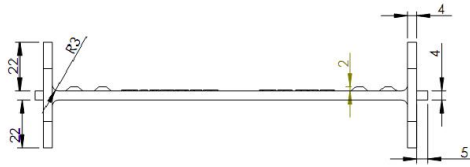
Mercado House - straight Panel with 20 cm concrete core and Plastic ties/webs (POM)



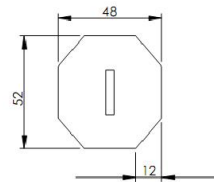
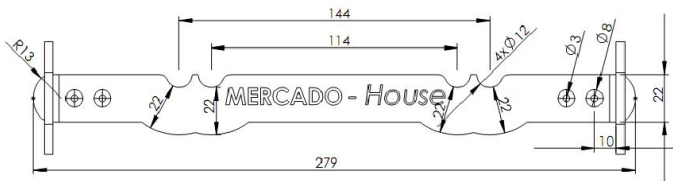
Insert parts for 100 mm, 150 mm and 200 mm concrete thickness



Documentation and facts in addition to a stationary or mobile EPS plant for the manufacturing of our MIB-panel-system



Example: MIB - plastic tie (POM) for 20 cm elements with 10 cm thickness concrete core. 32/sqm.



Example: MIB - plastic tie (POM) for 30 cm elements with 20 cm thickness concrete core. 32/sqm.



Production costs - single draw up / 2 panels = 1 stone

Energy costs : 2 panels = 1 stone

0,29 USD

stone volume

3,0556 m³

stone weight

1,0450 kg

gas consumption

0,094 m³ gas/kg steam

costs steam production

0,06 USD/kg

steam consumption / kg EPS

3,50 kg

steam costs / kg EPS

0,175 USD/kg

steam costs / stone

0,175 USD

energy costs

0,05 USD/KWH

consumption / kg EPS

0,45 kWh/kg

energy costs / kg EPS

0,241 USD/kg

energy costs / stone

0,041 USD

compressed air costs

0,03 USD/cbm

compressed air consumption / kg EPS

0,03 m³/kg

compressed air costs / kg EPS

0,036 USD/kg

compressed air costs / stone

0,036 USD

water costs

2,39 USD/cbm

water consumption / kg EPS

0,014 m³/kg

water costs / kg EPS

0,03 USD/kg

water costs / Stone

0,030 USD

Material / stone

4,994 USD

raw material

2,095 USD

webs (15 concrete core)

1,960 USD

Working costs / stone

16,18 USD

working costs / h (3 worker x 5,00 USD/h)

15,00 USD/h

production (2 panels) = 1 Stone

100 units/h

working costs / stone

0,15 USD

drawer elements

0,01 USD

Production costs / stone (0,36 sqm)

4,494 USD/stone (0,36 sqm)

Production costs / sqm (Factor 2,777)

12,48 USD/sqm

raw material price based 06-2012

2,000,00 USD/ton

Sales price to building company

17,50 USD / sqm

Basic: 2 shift production

day work

8 unit

work days / year

300 d

production HS 1450

2 unit

production time / year / shift

4.800 h

straight parts

100%

drawer parts

100%

cycle time

180 s

panel per cycle (10 units)

96.000,00 unit

drawer elements per cycle (1 unit)

96.000,00 unit

Wall area per cycle

1,80 sqm

drawer element per cycle

1,00 unit

Wall area / year (2 shift / 2 machine)

345.600,00 sqm

production / day

1.052,00 unit

production / hour

148,80 unit

Drawer elements / year

192.000,00 unit

drawer elements / day

640 unit

drawer elements / hour

80 unit

ROI (Return of Invest) calculation

Productivity

Working days / year

300

Shifts / day

2

Hours / day

8,00 h

People / shift

3

Cycle time

180 s

Straight 30' panel / cycle

10 unit

Drawer Elem. / cycle

1 unit

Labour costs

5,00 USD/h

Material

Density

29 kg/m³

Raw material

2,000 USD/ kg

Costs per web

0,17 unit

Quantity of webs per stone

12

Quantity of webs per sqm

32

Energy

Gas

0,18 USD / m³

Water

0,28 USD / m³

Panel-Stone

Sales price per 1200 x 300 straight panel stone

6,30 USD/ unit

Sales price drawer element

0,43 USD/ unit

Investment in € (This is only an example, just in case, if a mobile plant is not already existing)

Mobile Plant (ex works) / offer

1.655.000,00 €

Please follow exchange rate

Transport / installation / support 6 mth.

inkl.

Please follow exchange rate

MH-Licence and support 12 mth.

inkl.

Please follow exchange rate

Investment

1.655.000,00 €

Please follow exchange rate

Depreciation / Amortization "10 Years"

210.000,00 USD/year

Company additional costs / profit

possibly

300.000,00 USD/year

Production costs

4.313.088,00 USD/year

Manufacturing price

4.823.888,00 USD/year

Sales income

6.048.000,00 USD/year

Net: 210.000 USD depreciation / amort.

Gross profit

1.224.912,00 USD/year

If we now consider the proportion, related to the 3 figures (manufacturing price, sales income and gross profit), by assembling another MH-panel-Idol for the other HS 1450 machine mold, we will reduce these 3 figures again by your favour. Attention: This calculation is based on a cycle time of 180 seconds, but we should regard this as an advantage for a better profit at the end of your manufacturing process, because you should be able to reduce as well increase then your cycle time for about nearly 60 seconds, which also would raise and increase your profit over 30 percent at the same time.

MERCADOHouse

Technical support

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Please note:

"MERCADO House" does not grant for the correctness of calculations.

Basics: "MERCADO House GmbH & Hirsch Group" - MH-panel system & machinery.

"1 based on current exchange rate from EUR to USD = 1,25 (June 2012)

