# E-Catalogue June 2015



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# Formech

# Vacuum Forming Machinery

### Formech Compac Mini

### Desktop Vacuum Forming Machine

Easy to operate and experiment with, Formech's plug n' play single zone compac mini is the perfect solution for hobbyists and first time users. Incredibly compact and efficient with the latest quartz heaters, yet hugely capable and robust enough for professional use.

Formech's interlocking feature prevents the table from being raised whilst the heater is in the forward position ensuring safe operation for inexperienced operators. A digital timer with audible warning helps achieve consistent cycle times.



### > Watch the video

### **Key Features**

- Quartz Heaters
- Safety Interlock
- Vacuum & Release
- Vacuum Gauge
- Digital Timer

### **Options**

- Reducing Windows
- Trolley
- Spare Parts Kit

### **Technical Specifications**

Forming area (mm / inches)	Sheet Size (mm / inches)			Heating Zones	Heater type
230 x 280mm / 9 x 11"	250 x 300mm / 10 x 12"	130mm / 5"	4mm / 0.15"	1	Quartz

Width	Height	Depth	_		Europe – 3 Phase Power Requirements			Air Requirements
490mm / 19"	440mm / 17"	820mm / 32"	33kg	208-240V / 13A	n/a	n/a	0.75kW	n/a

### Formech Compac Mini customers include:

- Clear Step (Medical UK)
- Anahuac (Education Mexico)
- Ecole de Technologie Superieure (Education Canada)
- Cacao Prieto (Artisan Chocolatier USA)
- Cocoa Atelier (Artisan Chocolatier Ireland)
- Claremont Secondary School (Education Canada)
- Coining of America (Preforms USA)
- Motorola (R&D USA)
- Hallmark Cards (Prototyping USA)

- Chicago School of Mold Making (Education USA)
- Lutron Electronics (Electronics USA)
- Inserm (Education France)
- Laney College (Education USA)
- Cr8 Packaging GmbH (Packaging Germany)
- NAFENA Industries sp. z o.o. (Construction Poland)
- Chocolate Tree (Chocolate & Confectionery UK)
- Rick Jordan Chocolatier (Chocolate & Confectionery USA)

### Desktop Vacuum Forming Machine

Formech's 300XQ is the world's leading vacuum forming machine for education and product design. Four heating zones and quartz heaters provide rapid heat response with a greater range of control to

form challenging shapes and materials. Easy to use and highly versatile the 300XQ can adapt to a wide range of applications with class-leading power and efficiency.

### > Watch the video



### **Key Features**

- Quartz Heaters with variable standby
- 4 independently controllable heating zones
- Safety Interlock
- Vacuum & Release
- Vacuum Gauge
- Digital Timer

### **Options**

- Reducing windows
- Dedicated trolley
- Reel Feed
- Spare parts kit

### **Technical Specifications**

Forming area (mm / inches)	Sheet Size (mm / inches)		Max Material Thickness	Heating Zones	Heater type
430 x 280mm / 17 x 11"	450 x 300mm / 18 x 12"	160mm / 7"	*6mm / 0.25"	4	Quartz

Width	Height	Depth			Europe – 3 Phase Power Requirements			Air Requirements
650mm / 25"	530mm / 20"	970mm / 38"	75kg / 132lbs	208-240V / 13A	n/a	n/a	2.3kW	n/a

\*certain materials over 4mm thick may require turning the sheet mid-cycle

### Formech 300XQ customers include:

- Louisiana Tech University (Education USA)
- University of Arkansas (Education USA)
- University of Western Ontario (Education Canada)
- Bezinksregierung Arnsberg (Education Germany)
- Lancaster University (Education UK)
- Roundhill Academy (Education UK)
- Watford Boys Grammar School (Education UK)
- Deltion College (Education Netherlands)
- Nestle R&D Center Inc (Chocolate & Confectionery USA
- Chocolaterie du Haut Giffre (Chocolate & Confectionery France) University of Kentucky (Education USA)

- Creation Chocolat (Chocolate & Confectionery France)
- Trestle Theatre (Film & Theatre UK)
- English National Opera (Film & Theatre UK)
- Daktari Diagnostics Inc (Medical USA)
- New Jersey Institute of Technology (R&D USA)
- Clarks (Textiles & Apparel UK)
- Lush Manufacturing BC (Cosmetics Canada)
- The Peninsula Paris (Chocolate & Confectionery France)
- Ultradent Products, Inc. (Medical USA)

### Formech 508DT

Featuring PLC touch screen control, Formech's plug and play 508DT is a user friendly desktop machine with the power and capability to form demanding shapes and materials. Rapid, energy efficient quartz heaters with variable standby means the 508DT is ready to form in

less than 5 minutes. 12 programme memory to recall heater profile and timing settings for each project. A dedicated trolley option provides a minimal footprint with the convenience of portability and optimum working height.



### > Watch the video

### **Key Features**

- PLC control with 4" mono touch screen
- 12 Programme Memory
- Quartz heaters with variable standby
- 4 independently controllable heating zones
- Safety Interlock
- Vacuum & Release
- Vacuum Gauge

### **Options**

- Reducing windows
- Dedicated trolley
- Reel Feed
- Spare parts kit

### **Technical Specifications**

Forming area (mm / inches)	Sheet Size (mm / inches)		Max Material Thickness	Heating Zones	Heater type
482 x 432mm / 19 x 17"	508 x 457mm / 20 x 18"	185mm / 7.3"	*6mm / 0.25"	4	Quartz

Width	Height	Depth	_	Single Phase Power Requirements	Europe – 3 Phase Power Requirements		Power Consumption	Air Requirements
730mm /	540mm /	1400mm /	100kg /	208-240V / 13A	n/α	n/a	3.2kW	n/a
28.7"	21.3"	55.1"	200lbs					

\*certain materials over 4mm thick may require turning the sheet mid-cycle

#### Formech 508DT customers include:

- Central St. Martins (Education UK)
- Yale University of Architecture (Education and Model Making – USA)
- Decathlon (Sports apparel R&D France)
- Nike (Sports apparel R&D USA)
- Reebok (Sports apparel R&D USA)
- Under Armour (Sports apparel R&D USA)
- Hershey Chocolate (Chocolatier USA)
- Aardman Animation (Film design UK)

- Siemens (Prototyping/R&D Italy)
- L'Oréal (Cosmetics France)
- LaserTag GmbH (Toy Makers Germany)
- Baumann Dental GmbH (Medical Germany)
- Fa. Edelmann (Tool makers Germany)
- Espada Almacenes (Packaging Spain)
- BDN Packaging Ltd (Packaging UK)
- Techniks Bvba (Chocolate & Confectionery Belgium)
- SAS Dupont (R&D France)

### Floor Standing Vacuum Forming Machine

Formech's 508FS (Floor-Standing) machine offers significant advantages over the desktop series with pre-stretch, auto-level and a much more powerful flow rate for demanding applications. Pre-Stretch allows the user to blow a bubble of air into the heated material, which avoids thinning of material when forming deep shapes. Auto-Level pumps short bursts of air under the heated plastic to maintain an even

distance between the heater and sheet, whilst providing the user an audible indication that the material is ready to form. Intuitive, graphically driven touch-screen control with memory function makes the 508FS very easy to use, whilst powerful forming capabilities provide extensive project versatility. Higher Wattage Quartz heaters (vs. 508DT) further enhance the 508FS capability.



### **Key Features**

- PLC control with 4" mono touch screen
- 12 Programme Memory
- Pre-Stretch
- Auto-level
- Quartz heaters with variable standby
- 4 independently controllable heating zones
- Vacuum & Release
- Vacuum Gauge
- Dry rotary vane pump 10m3/HR

### **Options**

- Reducing windows
- · Cooling fan system
- Reel Feed
- Spare parts kit

### **Technical Specifications**

Forming area (mm / inches)	Sheet Size (mm / inches)	Max Depth of Draw	Max Material Thickness	Heating Zones	Heater type
482 x 432mm / 19 x 17"	508 x 457mm / 20 x 18"	290mm / 11.5"	*6mm / 0.25"	4	Quartz

Width	Height	Depth		Single Phase Power Requirements	Europe – 3 Phase Power Requirements	USA – 3 Phase Power Requirements		Air Requirements
730mm /	1200mm /	1400mm /	125kg /	208-240V / 20A	n/a	n/a	3.5kW	80 PSI / 5 bar
28.7"	47.25"	55.1"	264lbs					

 $^{\star}\text{certain}$  materials over 4mm thick may require turning the sheet mid-cycle

### Formech 508FS customers include:

- University of Rochester (Education USA)
- ETH Zurich (Education Switzerland)
- KTH (Education Sweden)
- University of the Arts London (Education UK)
- University of Teeside (Education UK)
- Universzita Tomase Bati ve Zline (Education Czech Republic)
- Universidade do Minho (Education Portugal)
- Tourbillon Patisserie (Chocolatier France)
- Sodebo (Chocolatier France)

- Harmac Medical Products (Medical USA)
- Serco (Defence R&D UK)
- Apple Inc (Prototyping/R&D USA)
- Cyberdroid (Prototyping / R&D / Robotics France)
- University of Nottingham (Education UK)
- PT Kawan Lama Sejahtera (Education Indonesia)
- Blackhawk Industrial (R&D USA)
- Airborn (Packaging USA)
- Ligier Group (Automotive France)

### Floor Standing Vacuum Forming Machine

Featuring a power table, Formech's 686 makes light work of the most demanding applications. Pre-stretch provides a more uniform material thickness for deep moulds whilst auto-level signals to the user the material is ready to form. Rapid response quartz heaters

with 6 independently controllable zones provides accurate heat control for consistent, high definition results. Intuitive colour touch screen interface and 20 nameable presets provide ultimate user convenience and ease of use.



### **Key Features**

- PLC control with 5" colour touch screen control
- 20 Programme Memory
- Quartz heaters with variable standby
- 6 independently controllable heating zones
- Power Table
- Pre-Stretch
- Auto-level
- Vacuum Gauge
- Dry rotary vane pump 16m3/HR

### **Options**

- Reducing windows
- Pyrometer
- Cooling fan system
- Cooling Bolster
- Reel Feed
- Spare parts kit

### **Technical Specifications**

Forming area (mm / inches)		Max Depth of Draw	Max Material Thickness		Heater type
646 x 620mm / 25.5 x 24.5"	686 x 660mm / 27 x 26"	325mm / 12.8"	Sheet: *6mm / 0.25" Reel: 1.8mm/0.07"	6	Quartz

Width	Height	Depth	_	Single Phase Power Requirements	Europe – 3 Phase Power Requirements	USA – 3 Phase Power Requirements		Air Requirements
960mm /	1170mm /	1800mm /	260kg /	208-240V / 40A	380-415V / 32A	208-220V /40A	8.0kW	80 PSI / 5 bar
37.8"	46.1"	70.9"	573lbs					

\*certain materials over 4mm thick may require turning the sheet mid-cycle

### Formech 686 customers include:

- Brunel University (Education UK)
- Domus Academy (Education/Design Italy)
- Lockheed Martin (Aerospace USA)
- RAF (Royal Air Force UK)
- Skoda (Automotive Czech Republic)
- Mechachrome (Automotive France)
- Raytheon (Defence R&D UK)
- Revision Military (Defence R&D USA)
- Xerox (R&D USA)

- Jim Marshall Speakers (Prototyping USA)
- Neurospin (Neuroimaging research France)
- Microsoft (Electronics USA)
- Google (Electronics USA)
- Milan Cerny Sklotex Plasty (Trade Former Czech Republic)
- Polyfoam Kautschuk GmbH (Trade former Germany)
- Kaleidoscope (Prototype Packaging USA)
- Biofire Defense (Hospital & Medical USA)
- Chuck Steel Ltd (Film & Video UK)

### Large Format Vacuum Forming Machine

A popular choice for film and theatre set designers, universities, automotive and aerospace R&D departments the 1372 offers a powerful combination of large forming area and wide forming capabilities at a very attractive price.

An extensive range of options including automation, heating, cooling, control and vacuum reservoir marks the 1372 as a highly versatile and adaptable machine. A heating zone and control upgrade facilitate precise heating profiles suited to advanced engineering plastics.



### **Key Features**

- PLC control with 6" colour touch screen control
- 20 Programme Memory
- Quartz heaters with variable standby
- 15 independently controllable heating zones
- Power Table
- Table Height Adjust
- Pre-Stretch
- Auto-level
- Vacuum and pressure gauges
- Dry rotary vane pump 25m3/HR

### **Options**

- SA Semi-Auto Package (Electric heater drive & pneumatic clamps)
- HP High Performance Package (55 heating zones with heating pyro, upgraded control system and high res 7" touch-screen)
- VT Vacuum Tank Package (Vacuum receiver tank, upgrade to oil vane pump and control system)
- Heavy Duty Clamping System
- Twin Cooling Fan System
- **Cooling Bolster**
- Reel Feed
- **Reducing Windows**
- Spare Parts Kit

-			
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Forming area (mm / inches)	Sheet Size (mm / inches)			_	Heater type
1330 x 620mm / 52.4 x 24.5"	1372 x 660mm / 54 x 26"	420mm /16.9"	*6mm / 0.25"	15	Quartz

Width	Height	Depth	_	Single Phase Power Requirements	Europe – 3 Phase Power Requirements	USA – 3 Phase Power Requirements		Air Requirements
2000mm /	1320mm /	2140mm	600kg /	n/a	380-415V / 40A	208-220V /63A	17.0kW	80 PSI / 5 bar
78.7"	52"	/ 84.2"	1300 lbs					

\*certain materials over 4mm thick may require turning the sheet mid-cycle

### Formech 1372 customers include:

- Bristol University (Education UK)
- Ecole Superior Aveiro Norte (Education Portugal)
- Orange Coast College (Education USA)
- EPFL (Education Switzerland)
- Expressway Graphic Corp (Sign maker Puerto Rico)
- Disney (Set/Prop design France)
- Science Museum (Set/Prop Design UK)

- Helsinki Royal Opera House (Set/Prop Design Finland)
- VW Group (Automotive Germany)
- Ford Motor Company (Automotive R&D USA)
- Tesla Motors (Automotive R&D USA)
- Hindustan Aeronautics (Aerospace R&D India)
- Walt Disney (Theatre & Drama USA)

### Formech 1250/1500

### Semi-Automatic, Large Format Vacuum Forming Machines

Featuring the intuitive 'FCV' (Formech Cycle View) user interface with a 7" touch-screen, the large sheet format 1250/1500 series is particularly well suited to automotive and aerospace R&D, sign and display applications and film & theatre set design. Electric heater drive, pneumatic table and clamping provides effortless operation, whilst the vacuum tank system

fitted as standard facilitates ultra-fast response for demanding applications and fast cycle times. Designed to utilise sheet sizes of  $1220 \times 1220 \text{mm}$  or  $1250 \times 1250 \text{mm}$  (1250) /  $1500 \times 1000 \text{mm}$  (1500), Formech's 1250/1500 series affords the operator a hands on approach versus more costly and fully guarded automatic machines.

### > Watch the video



### **Key Features**

- PLC control with 7" hi-res touch screen
- Formech Cycle View with 40 Programme Memory
- Quartz heaters with variable standby
- 25 (1250) / 18 (1500) independently controllable heating zones
- Electric Heater Drive
- Pneumatic Trigger Clamps
- Power Table
- Table Height Adjust
- Pre-Stretch
- Auto-level
- Vacuum Receiver Tank
- Vacuum Gauge
- Twin Cooling Fans
- Oil filled rotary vane pump 21m3/HR

### **Options**

- · Cooling Bolster
- Vacuum Flow Regulator
- Reducing Windows
- Pyrometer
- Spare Parts Kit

### Formech 1250/1500 customers include:

- KKTM Technical College (Education Malaysia)
- Big Apple Visual Group (Sign making / Displays USA)
- US Candy Network (Netherlands)
- Adornos (Sign making / Displays Spain)
- Jurgen Ahrberg (Sign Making / Displays Germany)
- Bolshoi Ballet Moscow (Theatre Set Design Russia)
- Helsinki Theatre (Theatre Set Design Finland)
- Carnival Arts (Set Design UK)

- Toyota Europe (Automotive R&D France)
- Strongs Plastic Products (Automotive R&D UK)
- BE Aerospace (Aerospace R&D / Production Ireland)
- JCB Aero (Aerospace Interiors France)
- FirstBuild (Home Appliances USA)
- Wybone Ltd (Building & Construction UK)
- Embraer (Aerospace USA)

> See reverse for Technical Specifications.

### Formech 1250/1500





### **Technical Specifications 1250**

Forming area (mm / inches)	Sheet Size (mm / inches)	Max Depth of Draw		Heating Zones	Heater type
1180 x 1180mm/ 46.5 x 46.5"	1220 x 1220mm / 48 x 48" 1250 x 1250mm / 49 x 49"	600mm / 23.5"	*6mm / 0.25"	25	Quartz

Width	Height	Depth	_	Single Phase Power Requirements	Europe – 3 Phase Power Requirements		Power Consumption	Air Requirements
1740mm /	2200mm /	3020mm /119"	1050kg /	n/a	380-415V /63A	208-220V /80A	30.0kW	80 PSI / 5 bar

 $<sup>^{\</sup>star}\text{certain}$  materials over 4mm thick may require turning the sheet mid-cycle

### **Technical Specifications 1500**

Forming area (mm / inches)			Max Material Thickness	Heating Zones	Heater type
1460 x 960mm/ 57.5 x 37.8"	1500 x 1000mm / 57.5 x 37.8"	600mm / 23.5"	*6mm / 0.25"	18	Quartz

Width	Height	Depth	_	Single Phase Power Requirements	Europe – 3 Phase Power Requirements		Power Consumption	Air Requirements
2000mm / 79"	2200mm / 86.5"	2600mm /102"	950kg / 2094 lbs	n/a	380-415V / 63A	208-220V /80A	29.0kW	80 PSI / 5 bar

 $<sup>^{\</sup>star}\text{certain}$  materials over 4mm thick may require turning the sheet mid-cycle

First introduced in 2002, Formech's HD range established a new price-performance ratio for automatic production class machines. Efficient heat management, ease of use, compact footprint and accessible price are instrumental to the internationally successful HD range as trusted by many world-class companies. Series 2 advancements include 'FCV' (Formech Cycle View) control interface with 10" high resolution touch-screen. Machine cycle status is clearly visible at a glance and all parameters can be adjusted in real time without interrupting the current cycle. By working closely with HD customers all over the world Formech

has developed an intuitive, graphically driven interface suitable for operators of all experience levels. Generous standard specification and an extensive range of options including twin heaters for the most demanding materials mark the HD Series 2 as a cost effective and highly adaptable machine range. Apple Inc., Nestle and Cambridge University are amongst the first customers to benefit from Formech's HD Series 2.

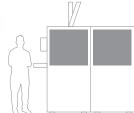


- PLC Control with 10" Hi-res
  Touch Screen
- Formech Cycle View with 40
   Programme Memory
- Quartz Heaters with Variable Standby
- 16 Independently controllable heating zones
- Pneumatic Heater Drive
- Pneumatically Powered Clamping Frame
- Pneumatic Table with Regulator
- Table Height Adjust
- Pre-Stretch
- Auto-level
- Vacuum Flow Regulator
- Vacuum Receiver Tank
- Vacuum and Pressure Gauges
- Safety Light Curtain
- Two Cooling Fans

### **Options**

- Plug Assist with Speed Regulator
- Heavy Duty Clamp Seal
- Ceramic Heaters
- Heating Pyrometer
- Cooling Pyrometer
- Cooling system upgrade
- Spray Mist
- Cooling Bolster
- Twin Heater Upgrade
- Bottom Heater Glass Protection
- Reel Feed
- Reducing Windows
- Spare Parts Kit
- Multi-level Operator access
- Remote access

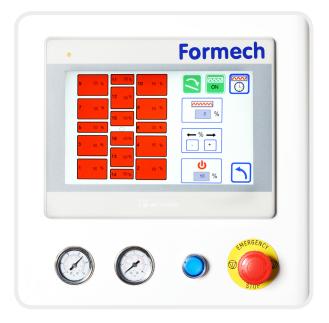




> See reverse for Technical Specifications and HD Series customers.

### Formech HD Series 2





### Technical Specifications HD686 Series 2

Forming area (mm / in	ches) Sheet Size	(mm / inches) Max of D				Heater Type	Width
647 x 622mm / 25.5 x	24.5" 686 x 660n	nm / 27 x 26" 350r	mm / 13.8" *	6mm / 0.25"	16	Quartz	1740mm / 68.5"

Height	Height with Plug Assist	Depth	_	Single Phase Power Requirements	Europe – 3 Phase Power Requirements	USA – 3 Phase Power Requirements	Power Consumption	Air Requirements
1980mm /	2735mm / 107.7"	2350mm / 92.5"	750kg / 1653lbs	n/a	380-415V / 32A	208-220V /40A	11.0kW	80 PSI / 5 bar

 $<sup>^{\</sup>star}$ certain materials over 4mm thick may require turning the sheet mid-cycle unless twin heaters are specified

### Technical Specifications HD750 Series 2

Forming area (mm / inches)	Sheet Size (mm / inches)		Max Material Thickness	Heating Zones	Heater type	Width
700 x 500mm / 27.5 x 19.7"	750 x 540mm / 29.5 x 21.2"	350mm / 13.8"	*6mm / 0.25"	16	Quartz	1740mm / 68.5"

Height	Height with Plug Assist	Depth	_	Single Phase Power Requirements	Europe – 3 Phase Power Requirements		Power Consumption	Air Requirements
1980mm / 78"	2735mm / 107.7"	2350mm / 92.5"	750kg / 1653lbs	n/a	380-415V / 32A	208-220V /40A	11.0kW	80 PSI / 5 bar

<sup>\*</sup>certain materials over 4mm thick may require turning the sheet mid-cycle unless twin heaters are specified

### Formech HD Series customers include:

- Cambridge University (Education UK)
- Bahrain University (Education Bahrain)
- INSA (Education France)
- Nestle France (Chocolate & Confectionary France)
- Nestle Switzerland (Chocolate & Confectionary)
- Comco Plastics (Sign Making / Displays USA)
- Interform (Trade Former / Tool Maker UK)
- DPS Designs (Tool Maker UK)
- Berry Plastics Corp (Design USA)
- Giannuzzi (Aerospace Italy)
- Apple Inc (R&D USA)
- Makita (Packaging UK)

Specifically designed for reel feed packaging and decorative film applications, Formech's TF series represents a cost effective and compact alternative to high speed in-line machines. Capable of processing reel materials up to 1.8mm and sheet materials up to 6mm, with plug assist as standard the TF is a highly versatile machine. From chocolate trays, inserts and clamp packs, Formech's TF series can adapt to a diverse number of applications. Series 2 advancements include 'FCV' (Formech Cycle View) control interface with 10" high resolution touch-screen. Machine cycle status is

clearly visible at a glance and all parameters can be adjusted in real time without interrupting the current cycle. By working closely with TF customers all over the world Formech has developed an intuitive, graphically driven interface suitable for operators at all experience levels.

### **Key Features**

- PLC Control with 10" Hi-res Touch Screen
- Formech Cycle View with 40
   Programme Memory
- Reel Feed
- Plug Assist with Speed Regulator
- Ceramic Heaters
- 16 Independently Controllable Heating Zones
- Pneumatic Heater Drive
- Pneumatically Powered Clamping Frame
- Pneumatic Table with Regulator
- Table Height Adjust
- Pre-Stretch
- Auto-level
- Vacuum Flow Regulator
- Vacuum Receiver Tank
- Vacuum and Pressure Gauges
- Safety Light Curtain
- Twin Cooling Fans

### **Options**

- Heavy Duty Clamp Seal
- Negative gate for female formings
- Heating Pyrometer
- Cooling Pyrometer
- Cooling System Upgrade
- · Quartz Heaters with Variable Standby
- Spray Mist
- Cooling Bolster
- Twin Heater Upgrade
- Bottom Heater Glass Protection
- Reducing Windows
- Spare Parts Kit
- Multi-level Operator access
- Remote access



> See reverse for Technical Specifications and TF Series customers.

### Formech TF Series 2





### Technical Specifications TF686 Series 2

Forming area (mm / inches)	Sheet Size (mm / inches)		Max Material Thickness		Heater type
647 x 622mm / 25.5 x 24.5"	686 x 660mm / 27 x 26"	200mm / 7.8"	*6mm / 0.25"	16	Ceramic

Width	Height	Depth	_	Single Phase Power Requirements	Europe – 3 Phase Power Requirements		Power Consumption	Air Requirements
3776mm / 148.6"	2735mm / 107.7"	2350mm / 92.5"	1150kg / 2534lbs	n/a	380-415V / 32A	208-220V /40A	11.0kW	80 PSI / 5 bar

\*certain materials over 4mm thick may require turning the sheet mid-cycle unless twin heaters are specified

### Technical Specifications TF750 Series 2

Forming area (mm / inches)			Max Material Thickness		Heater type
700 x 500mm / 27.5 x 19.7"	750 x 540mm / 29.5 x 21.2"	200mm / 7.8"	Sheet: *6mm / 0.25" Reel: 1.8mm / 0.07"	16	Ceramic

Width	Height	Depth	Weight	Single Phase Power Requirements	Europe – 3 Phase Power Requirements		Power Consumption	Air Requirements
3776mm /	2735mm /	2350mm	1150kg /	n/a	380-415V / 32A	208-220V /40A	11.0kW	80 PSI / 5 bar
148.6"	107.7"	/ 92.5"	2534lbs					

 $^{\star}\text{certain materials over 4mm thick may require turning the sheet mid-cycle unless twin heaters are specified}$ 

### Technical Specifications TF1000 – details to be confirmed.

### Formech TF Series customers include:

- Nestle (Chocolate & Confectionary Packaging Switzerland)
- Floreal (Chocolate & Confectionary Packaging Italy)
- Co-Packing (Contract Packaging Germany)
- Playmobil (Packaging Malta)
- Imperial Packaging (Contract Packaging—Malta)
- CGL Pack (Contract Packaging France)

- Interform (Trade Former UK)
- AVX Corporation (Electronics Packaging USA)
- Albea (Cosmetics Packaging Mexico)
- Dourdin (Automotive Production France)
- Durden (Automotive Production Turkey)

### Formech IMD508

### High Performance Vacuum Forming Machine

Film Insert Moulding (FIM) is a versatile and cost effective method for the decoration and manufacturing of durable plastic parts. It is also referred to as 'In Mould Decoration (IMD)' or 'In Mould Labelling (IML)'. The flat film is firstly reverse decorated (normally screen printed or digitally printed), then vacuum formed, cut and finally back injection moulded. It is used for cost effective manufacture of fascias, panels and casings for the automotive, telecommunication, advanced sign making, material testing and electronic sectors. The Formech FIM/IMD range combine extremely accurate repeat sheet registration with incredibly precise and advanced heat control during the forming

process of the pre-printed material.

Full temperature feedback with every element provides complete control during the heating of the sheet, minimizing the distortion of the printed sheets during the critical heating stage.

The machine also features a heating pyrometer to achieve consistent heating cycles. Formech produces IMD machines for both test and production using either ceramics or quartz, single or twin heaters and servo electric table for precise movements and registration. Ideal for forming the latest technically demanding materials that require precise control over every aspect.



### - FD

### **Key Features**

- PLC control with 10" Hi-res
  Touch Screen
- Formech Cycle View with 40 Programme Memory
- Ceramic Heaters with Full Temperature Feedback
- 49 Independently Controllable Heating Zones
- Pneumatic Heater Drive
- Pneumaticially Powered Clamping Frame
- Servo Powered Table with Height Adjust
- Pneumatic Plug Assist
- Pre-Stretch
- Auto-level
- Vacuum Receiver Tank
- Vacuum and Pressure Gauges
- Safety Light Curtain
- Heating Pyrometer

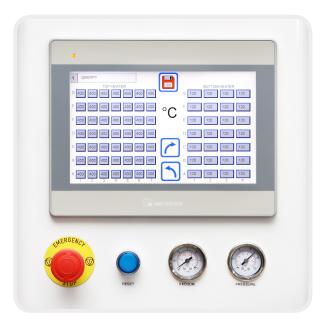
### **Options**

- Servo plug assist
- Cooling Pyrometer
- Cooling Bolster
- Double Heater
- Reducing Windows
- Spare Parts Kit

> See reverse for Technical Specifications and IMD customers.

### Formech IMD508





### Technical Specifications IMD508 (Single Heater Version)

Forming area (mm / inches)	Sheet Size (mm / inches)	Max Depth of Draw	Max Material Thickness	Heating Zones	Heater type
470 x 470mm / 18.5 x 18.5"	508 x 508mm / 20.0 x 20.0"	300mm / 11.8"	*6mm / 0.25"	49	Ceramic

Width	Height	Depth	_	Single Phase Power Requirements	Europe – 3 Phase Power Requirements		Power Consumption	Air Requirements
1200mm /	3080mm /	2050mm	900kg /	n/a	380-415V / 32A	208-220V /40A	11.3kW	80 PSI / 5 bar
47.25"	121.25"	/ 80.7"	1983lbs					

 $^{\star}\text{certain materials over 4mm thick may require turning the sheet mid-cycle unless twin heaters are specified}$ 

### Formech IMD508 customers include:

- Dupont (Innovation & Science UK)
- MacDermid (Chemicals UK)

### Formech FMDH660 Manual Twin Heater Vacuum Forming Machine

Occupying minimum floor space, Formech's FMDH provides a cost effective solution for extrusion manufactures to quality control sheet material up to 10mm thick. Twin multi-zone heaters provide powerful performance and consistent results with the most demanding materials.

With the forming capabilities of much larger industrial production machines, the FMDH is ideally suited to proofing design concepts, prototyping and pre-production runs across a wide range of materials and applications.



### **Key Features**

- PLC control with 5" colour touch screen control
- 20 Programme Memory
- Twin Heaters with Ceramic Elements
- 8 top and 6 bottom independently controllable heating zones
- Electric heater drive
- Pre-Stretch
- Auto-level
- Vacuum Flow Regulator
- Vacuum Gauge

### **Options**

- Quartz heaters with variable standby
- Pneumatic Trigger Clamps
- Cooling fan system
- **Cooling Bolster**
- Table Height Adjust
- Reel Feed
- Reducing windows
- Spare parts kit

### **Technical Specifications**

Forming area (mm / inches)	Sheet Size (mm / inches)	The state of the s	Max Material Thickness	Heating Zones	Heater type
620 x 620mm / 24.5 x 24.5"	660 x 660mm / 26 x 26"	250mm / 10.0"	10mm / 0.40"	8 + 6	Ceramic/Quartz

Width	Height	Depth		Single Phase Power Requirements	Europe – 3 Phase Power Requirements	USA – 3 Phase Power Requirements		Air Requirements
1200mm /	1500mm /	2100mm /	300kg /	n/a	380-415V / 32A	208-220V / 40A	8.0kW	80 PSI / 5 bar
47 25"	59.0"	82.6"	662lhs					

#### Formech FMDH660 customers include:

- Ferrero Rocher (Chocolate & Confectionary Italy)
- Universitat Des Saarlandes (Education Germany)
- Senoplast (Extruder Austria)
- Rochling Formaterm (Extruder Sweden)
- Rochling Formaterm (Extruder Finland)
- Rochling Formaterm (Extruder Czech Republic)
- Foamalite (Insulation Products Ireland)



# Formech

# **Ancillary Equipment**

### Formech BS Series

Formech's BS Series is designed to bond cardboard with vacuum formed clear plastic blister shapes typically made from PVC, PET or similar transparent materials. The Blister Sealing process is a cost effective way to produce attractive product packaging with high visual impact whilst providing excellent protection.

Typical applications include packaging for hardware, electrical items and toys. Easy to use and safe to operate, Formech's BS Series has been designed and manufactured in accordance with EU safety directives and conforms to accident prevention regulations to protect the operator.





### Technical Specifications BS430

Working Surface	Sealing Depth	Machine Width	Machine Depth	Machine Height
400x300mm / 15.7x12"	75mm	670mm / 26.5"	800mm / 31.5"	1370mm / 54"

Net Machine Weight	Electrical Specifications	Digital Timer	Max Absorbed Power	Compressed Air
200kg / 440lbs	208-240V / 13A - Single Phase	Yes	2.5kW	4-6 bar

### **Technical Specifications BS535**

Working Surface	Sealing Depth	Machine Width	Machine Depth	Machine Height
500x350mm / 19.7x13.8"	75mm	800mm / 31.5"	1000mm / 39.4"	1500mm / 59.1"

Net Machine Weight	Electrical Specifications	Digital Timer	Max Absorbed Power	Compressed Air
220kg / 484lbs	208-240V / 13A - Single Phase	Yes	3kW	4-6 bar

### Formech FLB Series

The FLB Series is a manually operated line-blending machine that is capable of producing high quality bends in plastic sheet from standard materials up to 500mm wide for the FLB500 and up to 1000mm wide for the FLB1000. Operating from a normal domestic electrical supply the FLB Series Line Bender is easy to use and devoid of any complicated controls. The machine is ideal for training applications where

students are tasked to produce items in a range of materials and thicknesses. It is robust enough to find uses in industry, particularly for display purposes e.g. menu holders, price holders and machine guards. Formech's FLB Series comes complete with a dedicated cooling jig designed to maintain the desired angle of the heat bent plastic whilst cooling.





### **Technical Specifications FLB500**

Heating Width	Heating Elements	Timer	Alarm	Material Clamp	Temperature Regulator
500mm / 19.7"	Incoloy	No	No	Yes	Yes

Width	Height	Depth	Weight	Electrical Specifications
680mm / 28"	175mm / 7"	330mm / 13"	8kg / 17lbs	208-240V / 250W / 13A - Single Phase

### **Technical Specifications FLB1000**

Heating Width	Heating Elements	Timer	Alarm	Material Clamp	Temperature Regulator
1000mm / 39"	Quartz	Yes	Yes	Yes	Yes

Width	Height	Depth	Weight	Electrical Specifications
1280mm / 52"	175mm / 7"	330mm / 13"	15kg / 33lbs	208-240V / 750W / 13A - Single Phase

### Formech FLB Series customers include:

- Design Academy Eindhoven (Education Belgium)
- Sheffield Hallam University Education UK)
- Performance Procurement (UAE)
- 3M UK (R&D UK)

- IDEO (R&D USA)
- Itouch Systems (Prototyping UK)
- Superb Building Products (Product Design USA)
- Chocolaterie Laruelle (Chocolatier Belgium)

### Formech RP680

The Roller Press Series has been designed and manufactured in accordance with EU safety directives and conforms to accident prevention regulations to protect the operator. Designed to die cut a range of

materials, it is the result of many years of experience in the field of packaging. The machine is extremely simple to use and does not require skilled labour. A considerable economic saving in cutting.



### **Technical Specifications RP680**

Working Width	Machine Width	Machine Height	Max Adjustable Height	Machine Depth
*680mm / 28"	1050mm / 41"	1400mm / 55"	177mm / 7"	2815mm / 110"

Net Machine Weight	Europe - 3 Phase Power Requirements	USA - 3 Phase Power Requirements	Max Absorbed Power
350kg / 770lbs	380V / 32A / 50-60Hz	208-220V / 40A	1kW

\*Larger widths are available

### Formech SP Series

Formech's SP (Skin Packer) is specifically developed for low cost consumer packaging applications.

The combination of heat and vacuum is applied to bond a thin Surlyn® plastic film to products mounted on perforated cardboard with an adhesive coating. The clear plastic coating allows full visualization of the product(s) and printed cardboard design, whilst providing excellent protection. Typical applications

include hardware, tools, electrical items, toys, gifts and many more. Suitable for use with environmentally friendly "Peel Away" skin pack board the SP provides a very simple packaging solution. Easy to use and safe to operate, Formech's SP Series has been designed and manufactured in accordance with EU safety directives and conforms to accident prevention regulations to protect the operator.



### **Technical Specifications SP535**

Working Surface	Board Size	Machine Height	Max Production Height	Machine Depth
500 x 350mm / 19.6 x 13.8"	495 x 295mm / 19.4 x 11.6"	1400mm / 55"	100mm / 3.93"	1685mm / 66"

Machine Width	Net Machine Weight	Electrical Specifications	Max Absorbed Power	Compressed Air
1200mm / 47"	200kg / 440lbs	220-240V / 50Hz / 13A - Single Phase	2.5kW	4-6 bar

### **Technical Specifications SP750**

Working Surface	Board Size	Machine Height	Max Production Height	Machine Depth
500 x 750mm / 19.6 x 29.5"	495 x 695mm / 19.4 x 27.3"	1500mm / 59"	100mm / 3.93"	1500mm / 59"

Machine Width	Net Machine Weight	Electrical Specifications	Max Absorbed Power	Compressed Air
1300mm / 51"	230kg / 506lbs	220-240V / 50Hz / 20A - Single Phase	5kW	4-6 bar

# Formech

# **Typical Applications**



### **Typical Applications**



Mask HIPS Compac mini

Motorcycle Parts Acrylic capped ABS - **686** 



Packaging HIPS - **300XQ** 



Medical mask PETG - **686** 



units ABS - 686







Luggage Acrylic capped ABS - 1372



TUBORG

POS Display HIPS/PETG - 1372



Guitar case ABS 1500



POS Display HIPS/PETG - **1372** 



Props Acrylic Capped ABS - **FMDH660** 





Marine pod Acrylic Capped ABS **HD Series** 



Blister PETG **TF Series** 



HIPS **TF Series** 



### Perfectly formed

#### FORMECH CUSTOMERS INCLUDE:

#### **AEROSPACE**

BE Aerospace (Aerospace R&D / Production – Ireland)
JCB Aero (Aerospace interiors – France)
Giannuzzi (Aerospace – Italy)
Lockheed Martin (Aerospace – USA)
Hindustan Aeronautics (Aerospace R&D – India)
Embraer (Aerospace – USA)

#### **ARCHITECTURAL DESIGN**

Kohn Pederson Fox (Architectural Design – UK) Foster & Partners (Architectural Design – UK) Heather Wick Studio (Architectural Design – UK) Wilkinson Eyre (Architectural Design – UK) RadLab (Architectural Design – USA)

#### **AUTOMOTIVE**

Mclaren Racing (Motorsport – UK)
Simpson Detour (Motorcycle accessories – UK)
Strongs Plastic Products (Automotive R&D – UK)
Dourdin (Automotive Production – France)
Mechachrome (Automotive – France)
Toyota Europe (Automotive R&D – France)
VW Group (Automotive – Germany)
Skoda (Automotive – Czech Republic)
Durden (Automotive Production – Turkey)
Honda R&D America's Inc (Automotive R&D – USA)
Ford Motor Company (Automotive R&D – USA)
Tesla Motors (Automotive R&D – USA)
Automotive Amiens (Automotive – France)
Doureca Produtos Plásticos (Automotive – Portugal)
Ligier Group (Automotive - France)

#### CONFECTIONERY

Cocoa Atelier (Chocolatier – Ireland)
Ladurée (Chocolatier – France)
Nestle France (Chocolatier – France)
Création Chocolat (Chocolatier – France)
Tourbillon Patisserie (Chocolatier – France)
Chocolaterie du Haut Giffre (Chocolatier – France)
Sodebo (Chocolatier – France)
Ferrero Rocher (Chocolatier – Italy)
Floreal (Chocolate & Confectionery Packaging – Italy)
Nestle Switzerland (Chocolatier – Switzerland)
Nestle R&D Center Inc (Chocolatier – USA)
Barry Callebaut (Chocolate Academy – USA)
Hershey Chocolate (Chocolatier USA)
Mandalay Bay Hotel, Vegas
(Chocolatier / Patisserie Chefs – USA)
Cacao Prieto (Chocolatier – USA)
Chocolate Tree (Chocolatier – USA)
Ben & Chocolat (Chocolatier – USA)
Ben & Chocolat (Chocolatier – USA)
Ben & Chocolat (Chocolatier – Belgium)
The Peninsula Paris (Confectionery – France)

### CONSTRUCTION

Foamalite (Insulation Products – Ireland) Vicoustic (Acoustic Panels – Portugal) Wybone Limited (Building & construction – UK) NAFENA Industries (Building & construction – Poland)

### **DEFENCE & SECURITY**

Serco (Defence R&D – UK)
RAF (Royal Air Force – UK)
Raytheon (Defence R&D – UK)
Metropolitan Police (UK)
Greater Manchester Police (UK)
G4S Secure Solutions (Security – UK)

Police Service Northern Ireland (UK) Revision Military (Defence R&D – USA)

#### **EDUCATION**

Cambridge University (Education – UK) Central St. Martins (Education – UK) Lancaster University (Education – UK) Roundhill Academy (Education – UK) London College of Fashion (Education – UK) University of the Arts London (Education – UK) Bristol University (Education – UK) Brunel University (Education – UK) University of Teeside (Education – UK) Watford Boys Grammar School (Education – UK) Universität des Saarlandes (Education – Germany) Bezirksregierung Arnsberg (Education – Germany) ETH Zürich (Education - Switzerland) INSA (Education – France) Universidade do Minho (Education – Portugal) Ecole Superior Aveiro Norte (Education – Portugal) EPFL (Education – Switzerland) Politecnico Di Milano – (Education – Italy) NABA Milano (Education – Italy) Domus Academy (Education/Design - Italy) Deltion College (Education – Netherlands) KTH (Education – Sweden) Louisiana Tech University (Education – USA) University of Arkansas (Education – USA) Yale University of Architecture (Education and Model Making – USA) University of Rochester (Education – USA) Orange Coast College (Education – USA) Ecole de Technologie Superieure (Education – Canada) Claremont Secondary School (Education – Canada) University of Western Ontario (Education – Canada) Anahuac (Education – Mexico) Bahrain University (Education – Bahrain) KKTM Technical College (Education – Malaysia) Bezalel Academy of Arts & Design (Education – Israel) Chicago School of Mold Making (Education – USA) Laney College (Education – USA) University of Nottingham (Education – UK) PT Kawan Lama Sejahtera (Education – Indonesia) University of Kentucky (Education – USA)

#### **ELECTRONICS**

Philips R&D (Prototyping / R&D – Netherlands)
Siemens (Prototyping/R&D – Italy)
Apple Inc (Prototyping/R&D – USA)
Jim Marshall Speakers – (Prototyping – USA)
Motorola (R&D – USA)
Xerox (R&D – USA)
Google (Electronics – USA)
Microsoft (Electronics – USA)
Lutron Electronics (Electronics – USA)

#### **EXTRUDERS**

Senoplast – (Extruder – Austria) Röchling Formaterm (Extruder – Czech Republic) Röchling Formaterm (Extruder – Sweden) Röchling Formaterm (Extruder – Finland)

### **FASHION / SPORTS**

Tubus Carrier Systems (Cycle Equipment – Germany)
Decathlon (Sports apparel R&D – France)
Scorpio (Sports Equipment – France)
Nike (Sports apparel R&D – USA)
Reebok (Sports apparel R&D – USA)
Under Armour (Sports apparel R&D – USA)
Clarks (Textiles & Apparel – UK)

#### **FILM & THEATRE SET DESIGN**

Aardman Animation (Animation - UK) Robert Allsopp (Doctor Who Props – UK) Fox UK Productions (20th Century Fox – UK) Eon Productions (James Bond Props – UK) Warner Brothers Productions (Film & Animation – UK) English National Opera (Film & Theatre – UK) Royal National Theatre (Scenery & Props – UK) Factory Tansmedia (Special Effects – UK) Trestle Theatre (Film & Theatre – UK) Science Museum (Set/Prop Design – UK) Carnival Arts (Set Design – UK) Disney (Set/Prop design – France) Helsinki Royal Opera House (Set/Prop Design – Finland) Helsinki Theatre (Theatre Set Design – Finland) Bolshoi Ballet Moscow (Theatre Set Design – Russia) Walt Disney World Company (Set/Prop Design – USA) Jim Henson's Creature Shop (Puppet/Prop design – USA) Chuck Steel Ltd - Special FX props (Film & Video – UK) Walt Disney (Theatre & Drama – USA)

#### **MEDICAL**

Clear Step (Medical – UK)
Trixell (X-Ray Equipment – France)
Neurospin (Neuroimaging research – France)
Harmac Medical Products (Medical – USA)
Daktari Diagnostics Inc (Medical – USA)
BioFire Defense (Hospital & Medical – USA)

#### **PACKAGING**

Makita (Packaging – UK)
CGL Pack (Contract Packaging – France)
Co-Packing (Contract Packaging – Germany)
Fraunhofer-Institut für Zuverlässigkeit und
Mirkointegration (Prototype Packaging – Germany)
Playmobil (Packaging – Malta)
Imperial Packaging (Contract Packaging – Malta)
AVX Corporation (Electronics Packaging - USA)
Coining of America (Preforms - USA)
Albea (Cosmetics Packaging – Mexico)
Kaleidoscope (Prototyping Packaging – USA)

#### **PROTOTYPING & R&D**

Cyberdroid (Prototyping / R&D / Robotics - France)
US Candy Network (Netherlands)
New Jersey Institute of Technology (R&D – USA)
Berry Plastics Corp (Design – USA)
Wild Blue Tech – (Design – USA)
Hallmark Cards (Prototyping - USA)
Blackhawk Industrial (R&D – USA)

### TRADE FORMERS & SIGN MAKERS

Interform (Trade Former – UK)
DPS Designs (Tool Maker – UK)
Ahrberg GmbH (Sign Making / Displays – Germany)
Adornos (Sign making / Displays – Spain)
Comco Plastics (Sign Making / Displays – USA)
Big Apple Visual Group (Sign making / Displays – USA)
Expressway Graphic Corp (Sign maker – Puerto Rico)
Interform (Trade Former – UK)
DPS Designs (Tool Maker – UK)
Ahrberg GmbH (Sign Making / Displays – Germany)
Adornos (Sign making / Displays – Spain)
Comco Plastics (Sign Making / Displays – USA)
Big Apple Visual Group (Sign making / Displays – USA)
Expressway Graphic Corp (Sign maker – Puerto Rico)
Milan Cerny - Sklotex Plasty (Trade Former – Czech
Republic)
Polyfoam Kautschuk GmbH (Trade Former – Germany)













