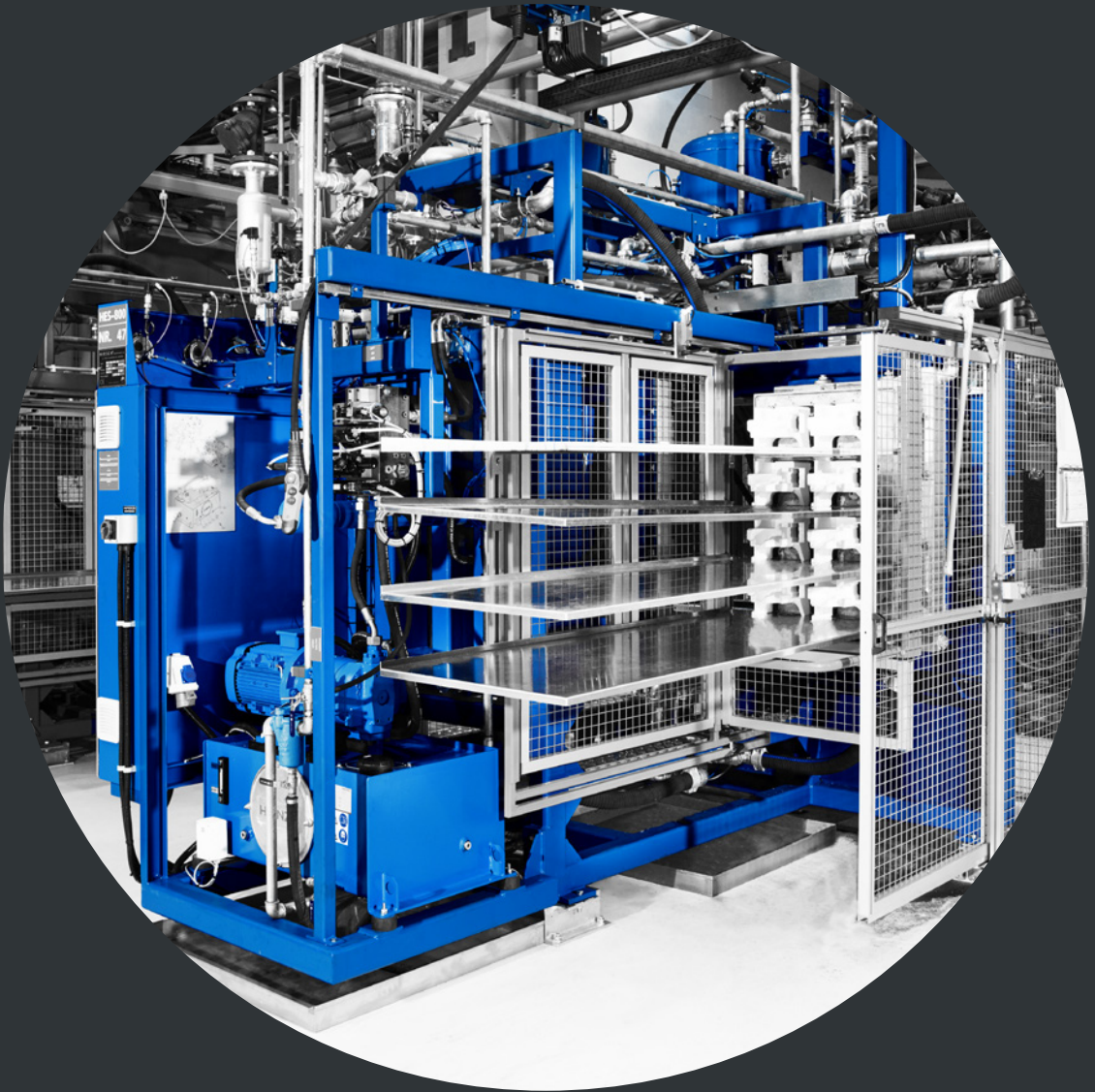


HIRSCH Technology



Shuttle Shape-Molding Machines

HS / HES Series

CONTENTS



Why HIRSCH Shuttle Shape-Molding Machines? _____	03
HS Shuttle Shape-Molding Machines _____	04
Benefits of HIRSCH Shuttle Machines _____	06
Special Applications _____	07
HS 700 _____	08
HS 900 _____	10
HS 1100 _____	12
HS 1300 _____	14
HS 1400 _____	16
HS 1450 _____	18
HS 1500 _____	20
HES Shuttle Shape-Molding Machines _____	22
HES 800 _____	24
HES 2200 _____	26

Why HIRSCH Shuttle Shape-Molding Machines?



We are the **undisputed leader** in the shuttle technology



Nearly 50 years in the EPS industry ensure the **most experienced employees** in machinery and application engineering



HIRSCH Shuttle machines have the **simplest, cleanest, automatic** and **cost free** stacking unit



Our machines are the **most operator friendly** on the market



We are the **market leader in ICF molding** technology

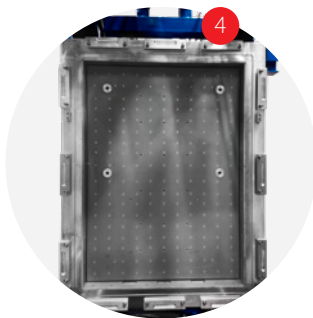
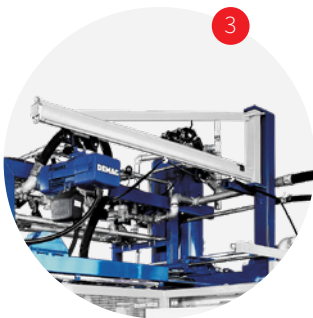
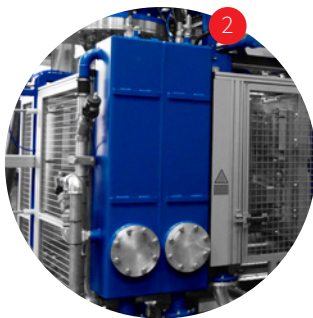
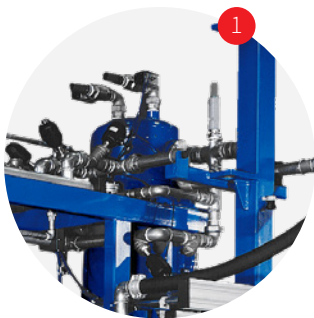
Ideal for	HS 700	HS 900	HS 1100	HS 1300	HS 1400	HS 1450	HS 1500	HES 800	HES 2200
EPS	•	•	•	•	•	•	•	•	•
EPP	•	•	•	•	•	•	•	–	–
DDU	•	•	•	•	•	•	•	•	•
Packaging parts	•	•	•	•	•	•	•	•	•
Insulation panels	•	•	•	•	•	•	•	•	•
Coolers & fish boxes	•	•	•	•	•	•	•	•	•
Molded parts with inserts	•	•	•	•	•	•	•	•	•
Helmets	•	•	•	•	•	•	•	–	–
Skin molding	•	•	•	•	•	•	•	–	–
Glazing	•	•	•	•	•	•	•	–	–
Max. part height 350 mm	•	•	•	•	•	•	•	•	•
Max. part height 620 mm	–	–	–	–	•	•	–	–	–

HS Shuttle Shape-Molding Machines

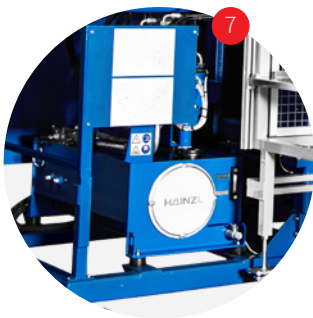
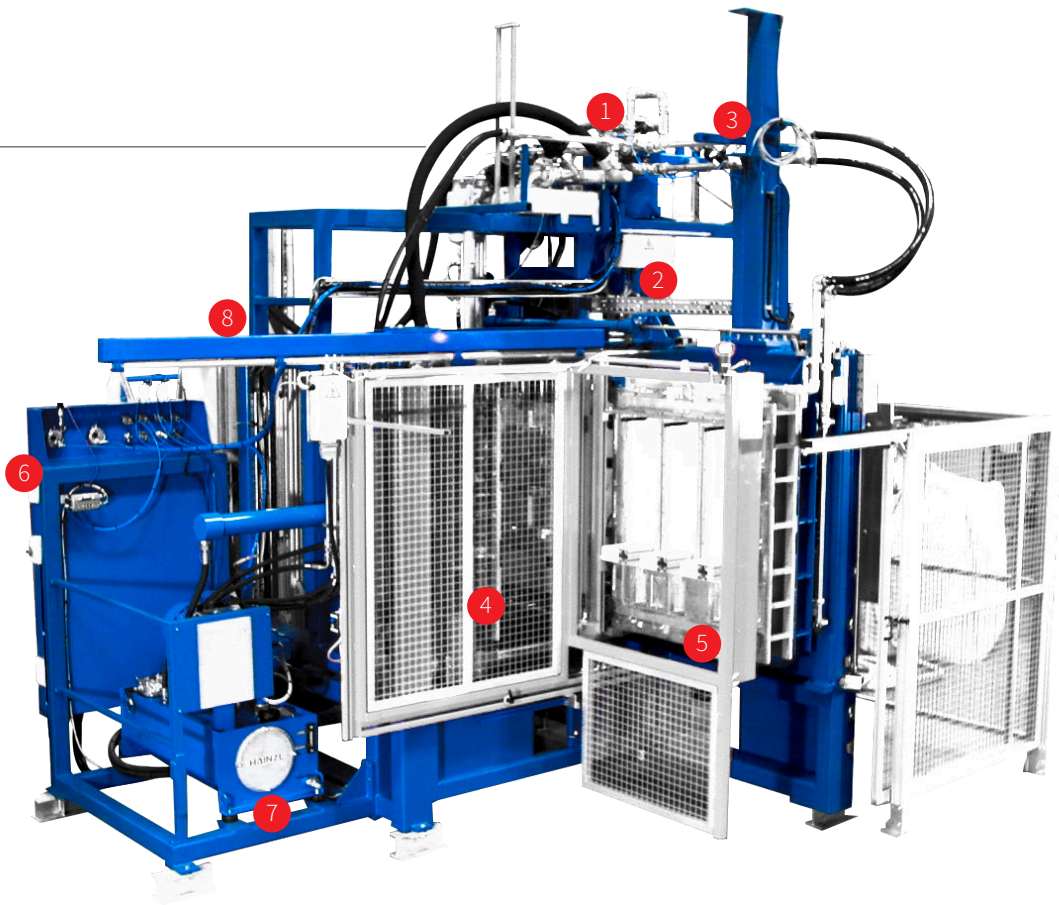
It is the long-standing experience with shuttle machines that has formed the basis for the HIRSCH vacutrans HS concept. The shuttle movement facilitates **very simple automatic stacking** and **free access for the mold change**. HIRSCH therefore is the **undisputed market leader** with a market share of more than 80 % **in applications such as ICF's** (Insulated Concrete Forms) and other kinds of insert molding, dual

density molding, surface conditioning (Glazing) and other industrial shape-molded parts.

Although designed for such complex applications, the molding machines of the vacutrans HS line are also suitable for the production of any kind of standard EPS molded parts.



HS SHUTTLE SHAPE-MOLDING MACHINES



- | | |
|--|---------------------------------|
| 1 Fill hopper (200/400 l) & filling gate | 5 Automatic stacking system |
| 2 Double tank condenser | 6 Touch panel & control cabinet |
| 3 Mold mounting crane | 7 Hydraulic unit |
| 4 Energy efficient steam chamber | 8 Optional insert device |

Benefits of HIRSCH Shuttle Machines



**Economic production
without scrap**

Parts are automatically stacked on the side, clean and dry, ready to be packed.



Saving labor cost

Due to the embedded HS stacking system there is typically one operator needed for every 4-5 HIRSCH shuttle machines.



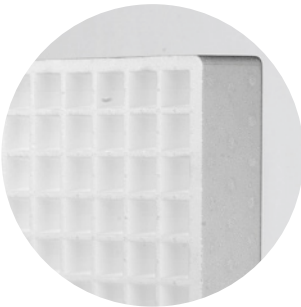
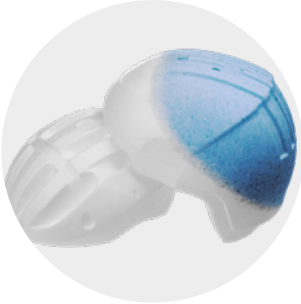
Safety comes first

All works are realized in operator height and outside the shape molding machine: placing the inserts, removing the stacked parts from the stacking tray, changing the mold and maintenance.



Energy efficiency

HIRSCH HS machines are equipped with an energy saving package to optimize steam, air, water and electrical consumption, thus reducing the production costs. Furthermore the machines have an insulated aluminum steam chamber for energy efficient production.



Special Applications

- Automatic insert molding unit

Thanks to the HIRSCH shuttle principle the molding cycle is not interrupted for inserting the parts, offering highest safety for operating personnel. All types of inserts (plastic, metal, foil, etc.) can be placed into the machine without loss of cycle time.

- Dual density unit

Optional extra for manufacturing parts consisting of two different materials or densities.

- Skin molding unit

The shuttle principle can also be used for inserting pre-cut polystyrene film for the production of skin molded parts.

- Glazing

Special surface conditioning with high steam pressure for e.g. seedling trays.

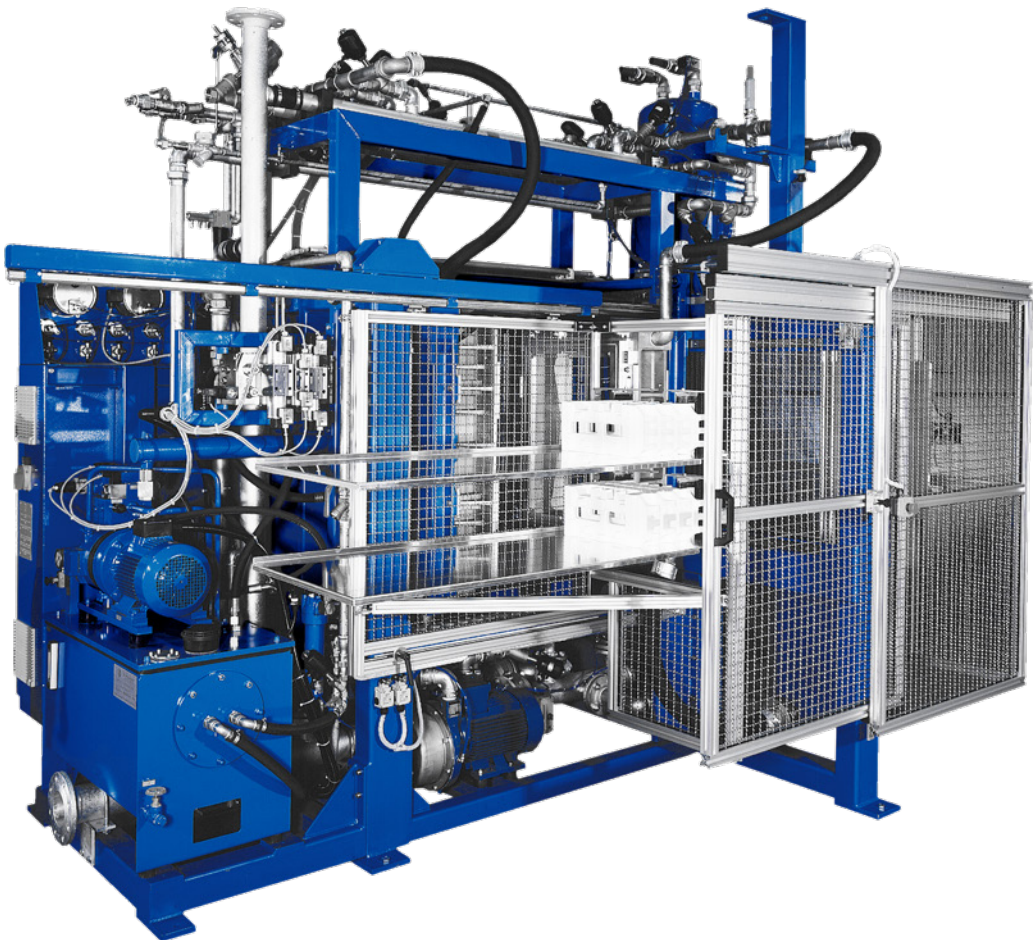
- Expandable polypropylene

The HIRSCH shuttle machines can be adapted to run EPP products.

HS 700

IDEAL FOR

- EPS
- EPP
- DDU
- Packaging parts
- Insulation panels
- Coolers & fish boxes
- Molded parts with inserts
- Helmets
- Skin molding
- Glazing
- Max. part height 350 mm



HS 700

Technische Daten

Werkzeugaufspannfläche	700 x 500 mm
Max. Formteilgröße	660 x 460 x 350 mm
Schließhub	640 mm
Größe der Maschine (L x B x H)	3800 x 2300 x 3200 mm
Gewicht der Maschine (netto)	2800 kg

Technical data

Mold mounting dimensions	28" x 20"
Max. part size	26" x 18" x 14"
Closing stroke	25"
Machine dimensions (l x w x h)	12'6" x 7'7" x 10'6"
Machine net weight	6180 lb

Données techniques

Surface d'ablocage des moules	700 x 500 mm
Taille max. des pièces	660 x 460 x 350 mm
Course de fermeture	640 mm
Dimensions de la machine (l x l x h)	3800 x 2300 x 3200 mm
Poids net de la machine	2800 kg

Dati tecnici

Dimensioni piastra porta-stampi	700 x 500 mm
Dimensioni mass. pezzo stampabile	660 x 460 x 350 mm
Corsa di chiusura	640 mm
Dimensioni macchina (lung. x larg. x alt.)	3800 x 2300 x 3200 mm
Peso netto macchina	2800 kg

Datos técnicos

Superficie de sujeción de moldes	700 x 500 mm
Medidas max. de piezas	660 x 460 x 350 mm
Recorrido de cierre	640 mm
Medidas de la máquina (largo x ancho x alto)	3800 x 2300 x 3200 mm
Peso neto de la máquina	2800 kg

技术参数

模具安装尺寸	700 x 500 mm
最大产品尺寸	660 x 460 x 350 mm
行程	640 mm
机器尺寸（长X宽X高）	3800 x 2300 x 3200 mm
机器净重	2800 kg

HS 900

Technische Daten	
Werkzeugaufspannfläche	900 x 700 mm
Max. Formteilgröße	860 x 660 x 350 mm
Schließhub	720 mm
Größe der Maschine (L x B x H)	4930 x 2380 x 3370 mm
Gewicht der Maschine (netto)	5100 kg

Technical data	
Mold mounting dimensions	35" x 28"
Max. part size	34" x 26" x 14"
Closing stroke	28"
Machine dimensions (l x w x h)	16'2" x 7'10" x 11'1"
Machine net weight	11250 lb

Données techniques	
Surface d'ablocage des moules	900 x 700 mm
Taille max. des pièces	860 x 660 x 350 mm
Course de fermeture	720 mm
Dimensions de la machine (l x l x h)	4930 x 2380 x 3370 mm
Poids net de la machine	5100 kg

Dati tecnici	
Dimensioni piastra porta-stampi	900 x 700 mm
Dimensioni mass. pezzo stampabile	860 x 660 x 350 mm
Corsa di chiusura	720 mm
Dimensioni macchina (lung. x larg. x alt.)	4930 x 2380 x 3370 mm
Peso netto macchina	5100 kg

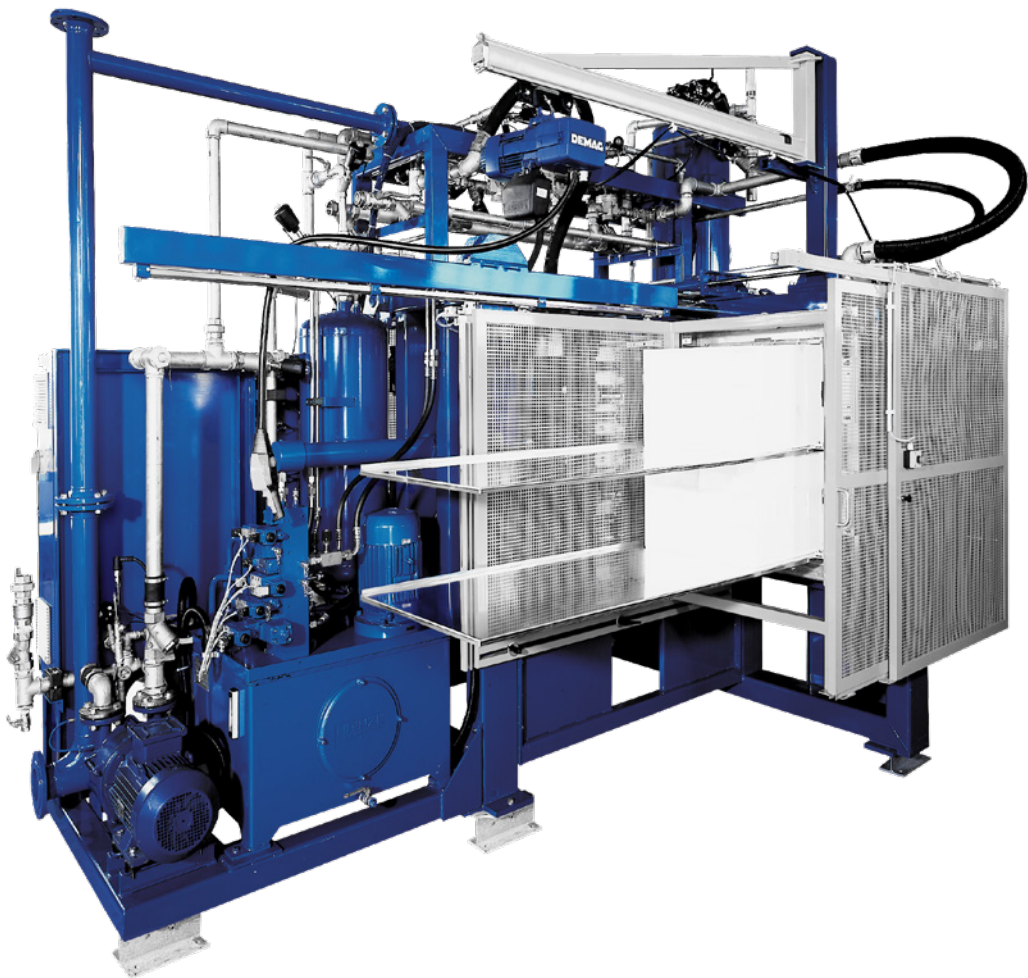
Datos técnicos	
Superficie de sujeción de moldes	900 x 700 mm
Medidas max. de piezas	860 x 660 x 350 mm
Recorrido de cierre	720 mm
Medidas de la máquina (largo x ancho x alto)	4930 x 2380 x 3370 mm
Peso neto de la máquina	5100 kg

技术参数	
模具安装尺寸	900 x 700 mm
最大产品尺寸	860 x 660 x 350 mm
行程	720 mm
机器尺寸（长X宽X高）	4930 x 2380 x 3370 mm
机器净重	5100 kg

HS 900

IDEAL FOR

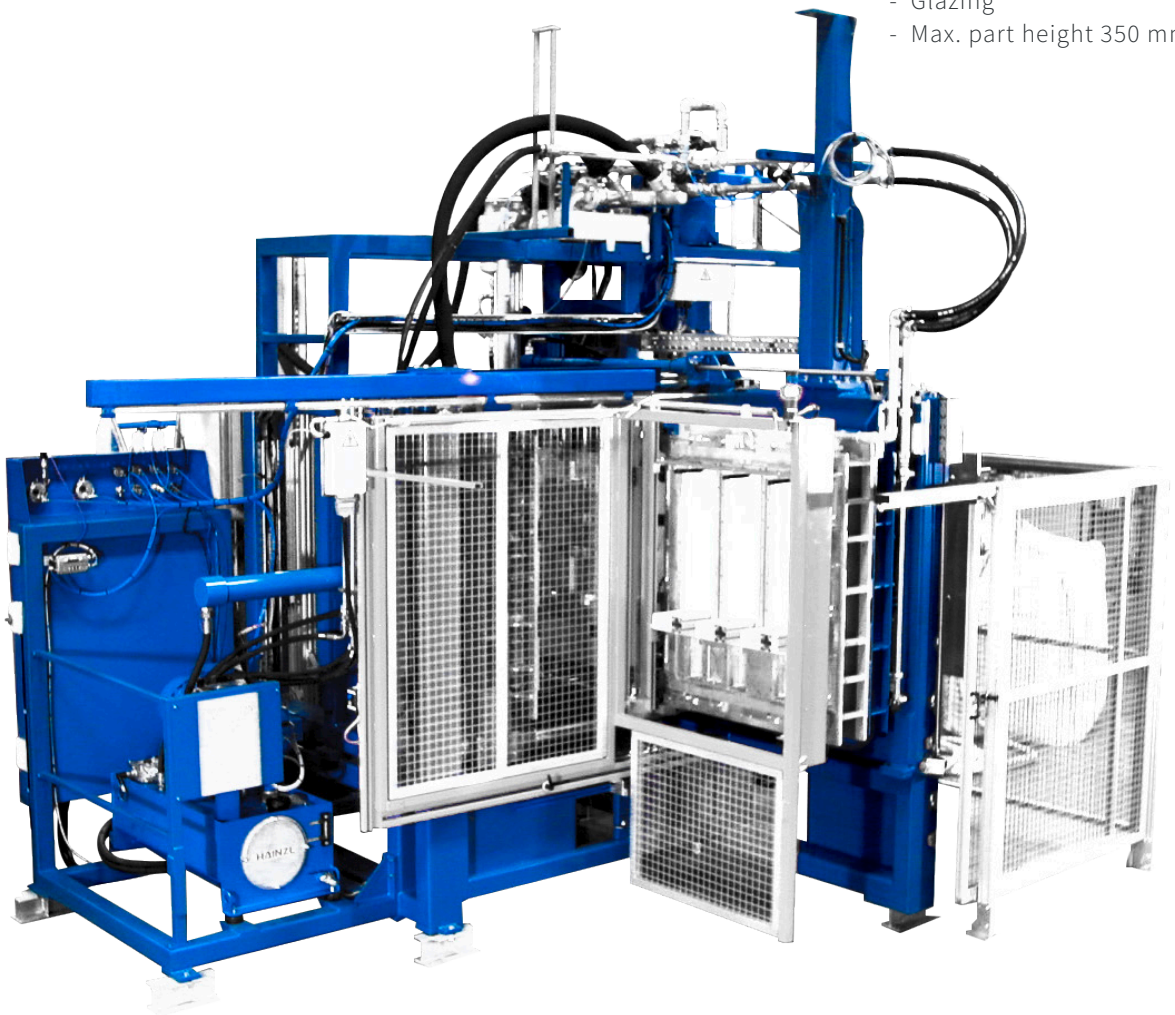
- EPS
- EPP
- DDU
- Packaging parts
- Insulation panels
- Coolers & fish boxes
- Molded parts with inserts
- Helmets
- Skin molding
- Glazing
- Max. part height 350 mm



HS 1100

IDEAL FOR

- EPS
- EPP
- DDU
- Packaging parts
- Insulation panels
- Coolers & fish boxes
- Molded parts with inserts
- Helmets
- Skin molding
- Glazing
- Max. part height 350 mm



HS 1100

Technische Daten	
Werkzeugaufspannfläche	1145 x 945 mm
Max. Formteilgröße	1105 x 905 x 350 mm
Schließhub	800 mm
Größe der Maschine (L x B x H)	5270 x 3860 x 4690 mm
Gewicht der Maschine (netto)	7200 kg

Technical data	
Mold mounting dimensions	45" x 37"
Max. part size	44" x 36" x 14"
Closing stroke	32"
Machine dimensions (l x w x h)	17'4" x 12'8" x 15'5"
Machine net weight	15880 lb

Données techniques	
Surface d'ablocage des moules	1145 x 945 mm
Taille max. des pièces	1105 x 905 x 350 mm
Course de fermeture	800 mm
Dimensions de la machine (l x l x h)	5270 x 3860 x 4690 mm
Poids net de la machine	7200 kg

Dati tecnici	
Dimensioni piastra porta-stampi	1145 x 945 mm
Dimensioni mass. pezzo stampabile	1105 x 905 x 350 mm
Corsa di chiusura	800 mm
Dimensioni macchina (lung. x larg. x alt.)	5270 x 3860 x 4690 mm
Peso netto macchina	7200 kg

Datos técnicos	
Superficie de sujeción de moldes	1145 x 945 mm
Medidas max. de piezas	1105 x 905 x 350 mm
Recorrido de cierre	800 mm
Medidas de la máquina (largo x ancho x alto)	5270 x 3860 x 4690 mm
Peso neto de la máquina	7200 kg

技术参数	
模具安装尺寸	1145 x 945 mm
最大产品尺寸	1105 x 905 x 350 mm
行程	800 mm
机器尺寸（长X宽X高）	5270 x 3860 x 4690 mm
机器净重	7200 kg

HS 1300

Technische Daten	
Werkzeugaufspannfläche	1300 x 800 mm
Max. Formteilgröße	1260 x 760 x 350 mm
Schließhub	800 mm
Größe der Maschine (L x B x H)	4770 x 3540 x 4670 mm
Gewicht der Maschine (netto)	8100 kg

Technical data	
Mold mounting dimensions	51" x 32"
Max. part size	50" x 30" x 14"
Closing stroke	32"
Machine dimensions (l x w x h)	15'8" x 11'7" x 15'4"
Machine net weight	17860 lb

Données techniques	
Surface d'ablocage des moules	1300 x 800 mm
Taille max. des pièces	1260 x 760 x 350 mm
Course de fermeture	800 mm
Dimensions de la machine (l x l x h)	4770 x 3540 x 4670 mm
Poids net de la machine	8100 kg

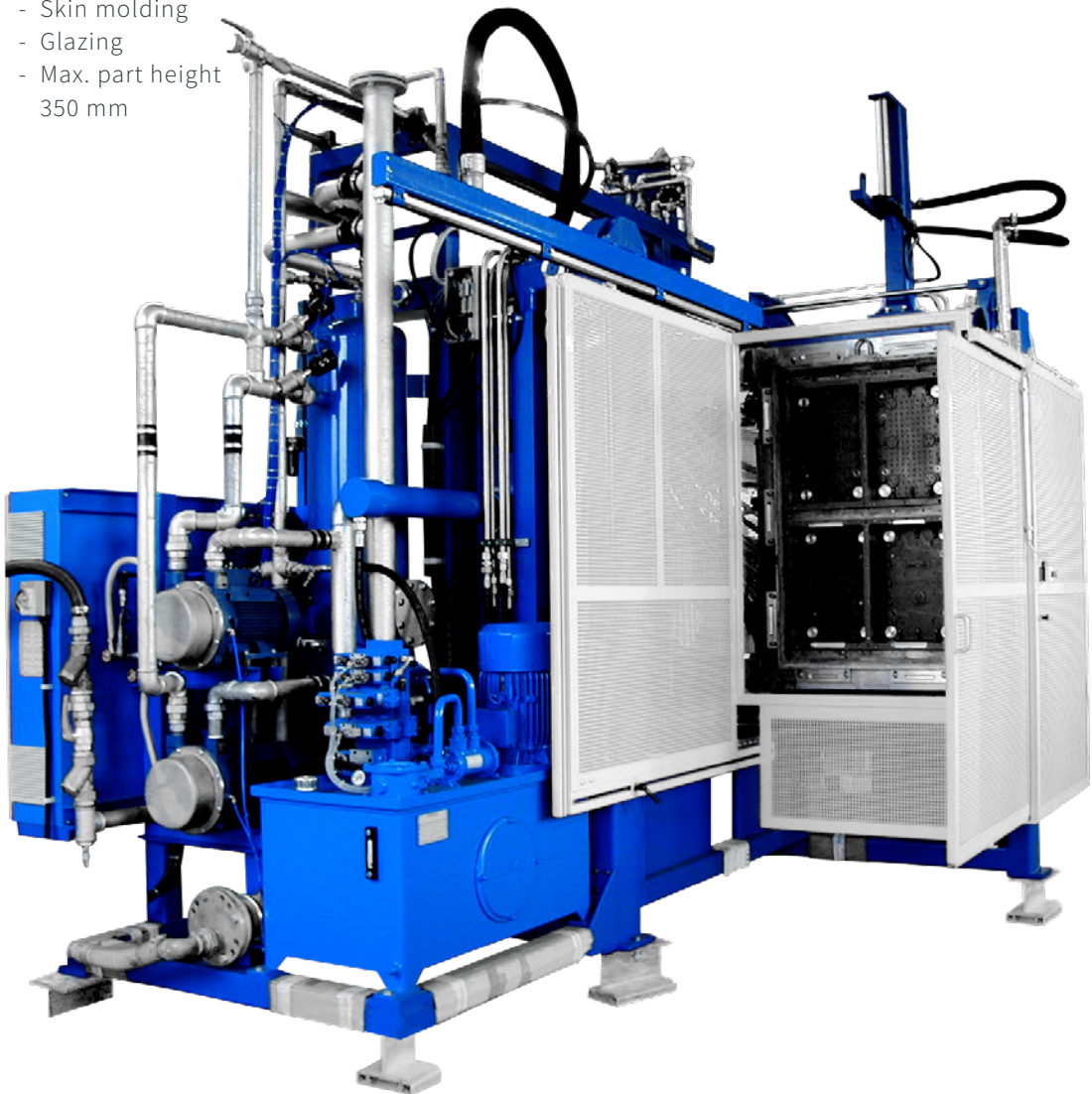
Dati tecnici	
Dimensioni piastra porta-stampi	1300 x 800 mm
Dimensioni mass. pezzo stampabile	1260 x 760 x 350 mm
Corsa di chiusura	800 mm
Dimensioni macchina (lung. x larg. x alt.)	4770 x 3540 x 4670 mm
Peso netto macchina	8100 kg

Datos técnicos	
Superficie de sujeción de moldes	1300 x 800 mm
Medidas max. de piezas	1260 x 760 x 350 mm
Recorrido de cierre	800 mm
Medidas de la máquina (largo x ancho x alto)	4770 x 3540 x 4670 mm
Peso neto de la máquina	8100 kg

技术参数	
模具安装尺寸	1300 x 800 mm
最大产品尺寸	1260 x 760 x 350 mm
行程	800 mm
机器尺寸（长X宽X高）	4770 x 3540 x 4670 mm
机器净重	8100 kg

IDEAL FOR

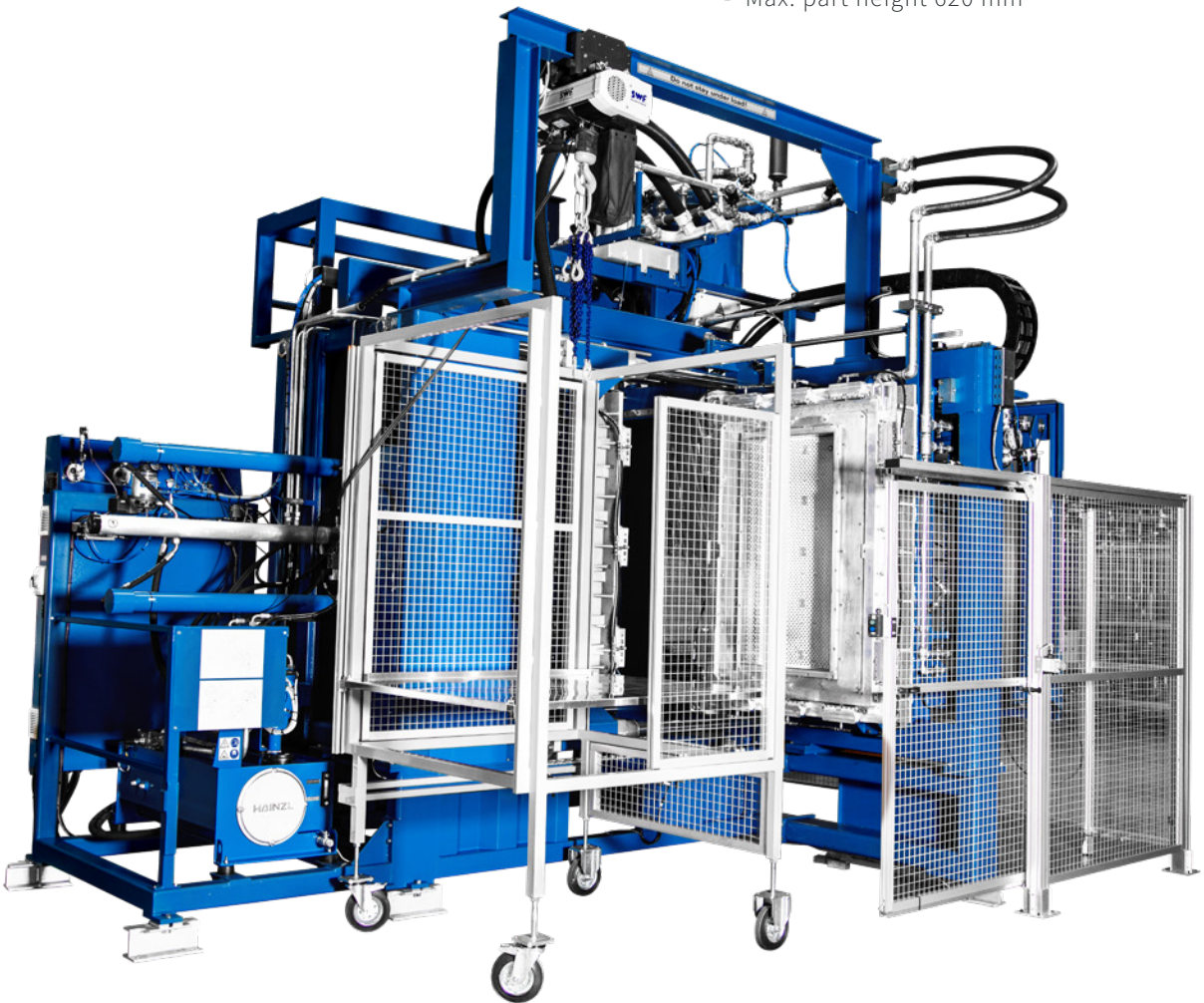
- EPS
- EPP
- DDU
- Packaging parts
- Insulation panels
- Coolers & fish boxes
- Molded parts with inserts
- Helmets
- Skin molding
- Glazing
- Max. part height
350 mm



HS 1400

IDEAL FOR

- EPS
- EPP
- DDU
- Packaging parts
- Insulation panels
- Coolers & fish boxes
- Molded parts with inserts
- Helmets
- Skin molding
- Glazing
- Max. part height 620 mm



HS 1400

Technische Daten	
Werkzeugaufspannfläche	1450 x 1050 mm
Max. Formteilgröße	1410 x 1010 x 620 mm
Schließhub	1225 mm
Größe der Maschine (L x B x H)	5600 x 4260 x 4800 mm
Gewicht der Maschine (netto)	10000 kg

Technical data	
Mold mounting dimensions	57" x 41"
Max. part size	56" x 40" x 24"
Closing stroke	48"
Machine dimensions (l x w x h)	18'15" x 13'12" x 15'10"
Machine net weight	22050 lb

Données techniques	
Surface d'ablocage des moules	1450 x 1050 mm
Taille max. des pièces	1410 x 1010 x 620 mm
Course de fermeture	1225 mm
Dimensions de la machine (l x l x h)	5600 x 4260 x 4800 mm
Poids net de la machine	10000 kg

Dati tecnici	
Dimensioni piastra porta-stampi	1450 x 1050 mm
Dimensioni mass. pezzo stampabile	1410 x 1010 x 620 mm
Corsa di chiusura	1225 mm
Dimensioni macchina (lung. x larg. x alt.)	5600 x 4260 x 4800 mm
Peso netto macchina	10000 kg

Datos técnicos	
Superficie de sujeción de moldes	1450 x 1050 mm
Medidas max. de piezas	1410 x 1010 x 620 mm
Recorrido de cierre	1225 mm
Medidas de la máquina (largo x ancho x alto)	5600 x 4260 x 4800 mm
Peso neto de la máquina	10000 kg

技术参数	
模具安装尺寸	1450 x 1050 mm
最大产品尺寸	1410 x 1010 x 620 mm
行程	1225 mm
机器尺寸（长X宽X高）	5600 x 4260 x 4800 mm
机器净重	10000 kg

HS 1450

Technische Daten	
Werkzeugaufspannfläche	1450 x 1350 mm
Max. Formteilgröße	1410 x 1310 x 620 mm
Schließhub	1200 mm
Größe der Maschine (L x B x H)	6150 x 4850 x 4850 mm
Gewicht der Maschine (netto)	11700 kg

Technical data	
Mold mounting dimensions	57" x 53"
Max. part size	56" x 52" x 24"
Closing stroke	47"
Machine dimensions (l x w x h)	20'2" x 15'11" x 15'11"
Machine net weight	25800 lb

Données techniques	
Surface d'ablocage des moules	1450 x 1350 mm
Taille max. des pièces	1410 x 1310 x 620 mm
Course de fermeture	1315 mm
Dimensions de la machine (l x l x h)	5700 x 3400 x 4220 mm
Poids net de la machine	13000 kg

Dati tecnici	
Dimensioni piastra porta-stampi	1450 x 1350 mm
Dimensioni mass. pezzo stampabile	1410 x 1310 x 620 mm
Corsa di chiusura	1200 mm
Dimensioni macchina (lung. x larg. x alt.)	6150 x 4850 x 4850 mm
Peso netto macchina	11700 kg

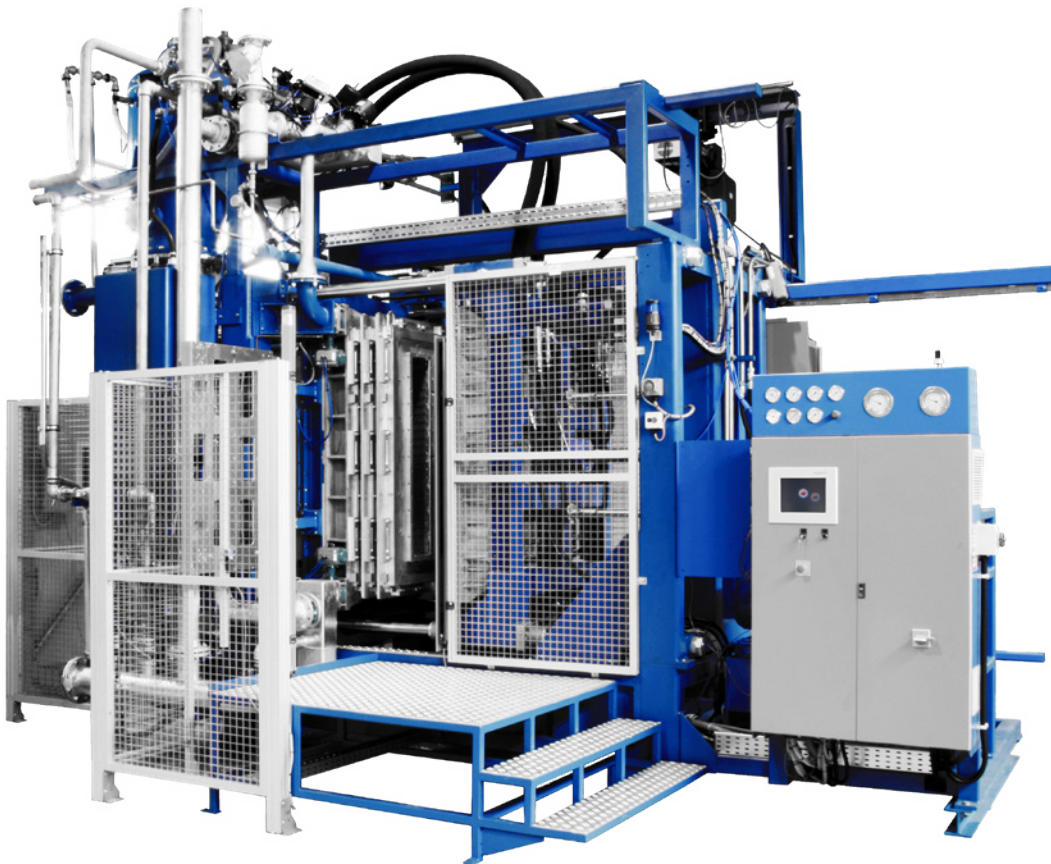
Datos técnicos	
Superficie de sujeción de moldes	1450 x 1350 mm
Medidas max. de piezas	1410 x 1310 x 620 mm
Recorrido de cierre	1200 mm
Medidas de la máquina (largo x ancho x alto)	6150 x 4850 x 4850 mm
Peso neto de la máquina	11700 kg

技术参数	
模具安装尺寸	1450 x 1350 mm
最大产品尺寸	1410 x 1310 x 620 mm
行程	1200 mm
机器尺寸（长X宽X高）	6150 x 4850 x 4850 mm
机器净重	11700 kg

HS 1450

IDEAL FOR

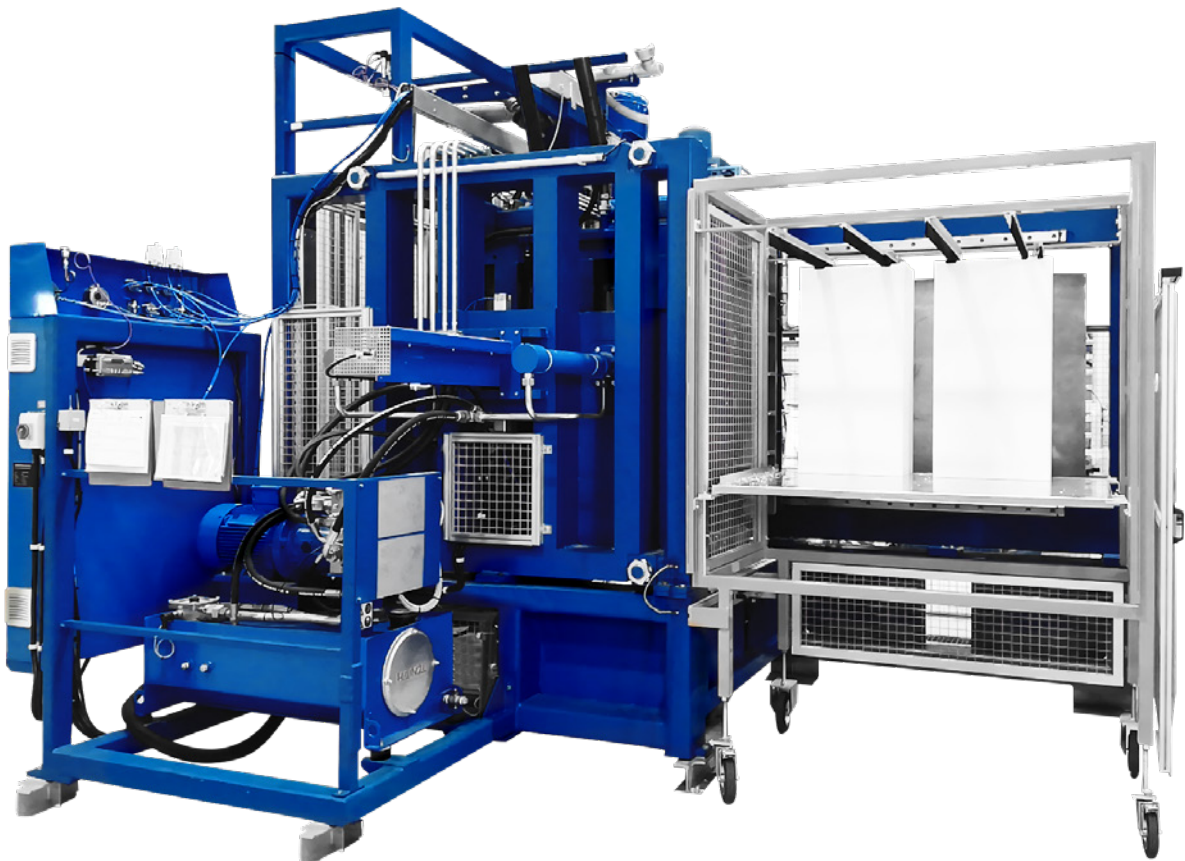
- EPS
- EPP
- DDU
- Packaging parts
- Insulation panels
- Coolers & fish boxes
- Molded parts with inserts
- Helmets
- Skin molding
- Glazing
- Max. part height 620 mm



HS 1500

IDEAL FOR

- EPS
- EPP
- DDU
- Packaging parts
- Insulation panels
- Coolers & fish boxes
- Molded parts with inserts
- Helmets
- Skin molding
- Glazing
- Max. part height 350 mm



HS 1500

Technische Daten	
Werkzeugaufspannfläche	1500 x 1300 mm
Max. Formteilgröße	1460 x 1260 x 350 mm
Schließhub	640 mm
Größe der Maschine (L x B x H)	5000 x 4980 x 4840 mm
Gewicht der Maschine (netto)	10512 kg

Technical data	
Mold mounting dimensions	59" x 51"
Max. part size	58" x 50" x 14"
Closing stroke	25"
Machine dimensions (l x w x h)	16'5" x 16'4" x 15'11"
Machine net weight	23180 lb

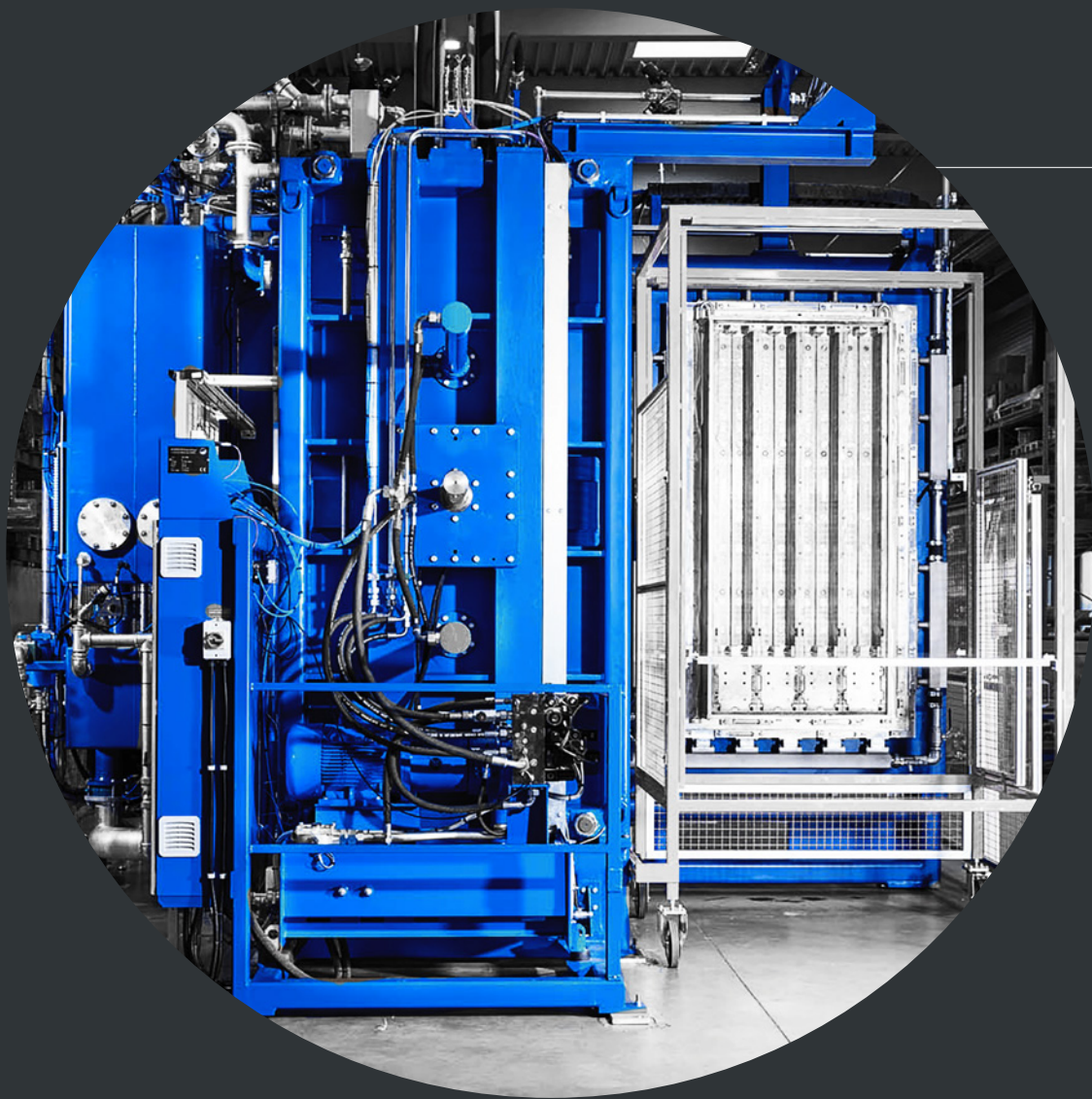
Données techniques	
Surface d'ablocage des moules	1500 x 1300 mm
Taille max. des pièces	1460 x 1260 x 350 mm
Course de fermeture	640 mm
Dimensions de la machine (l x l x h)	5000 x 4980 x 4840 mm
Poids net de la machine	10512 kg

Dati tecnici	
Dimensioni piastra porta-stampi	1500 x 1300 mm
Dimensioni mass. pezzo stampabile	1460 x 1260 x 350 mm
Corsa di chiusura	640 mm
Dimensioni macchina (lung. x larg. x alt.)	5000 x 4980 x 4840 mm
Peso netto macchina	10512 kg

Datos técnicos	
Superficie de sujeción de moldes	1500 x 1300 mm
Medidas max. de piezas	1460 x 1260 x 350 mm
Recorrido de cierre	640 mm
Medidas de la máquina (largo x ancho x alto)	5000 x 4980 x 4840 mm
Peso neto de la máquina	10512 kg

技术参数	
模具安装尺寸	1500 x 1300 mm
最大产品尺寸	1460 x 1260 x 350 mm
行程	640 mm
机器尺寸（长X宽X高）	5000 x 4980 x 4840 mm
机器净重	10512 kg

HES SHUTTLE SHAPE-MOLDING MACHINES



HES Shuttle Shape-Molding Machines

The HES Shuttle Shape-Molding Machines stand for most economic production with short cycle times due to the thin steam chamber which only uses the steam needed for the particular part.

High energy efficiency

- Insulated aluminum steam chest
- Small steam chest design, low volume chamber
- Electronic steam and air valve – precise regulation
- Cooling water time 0,5 sec. – 1 sec.

Basic features

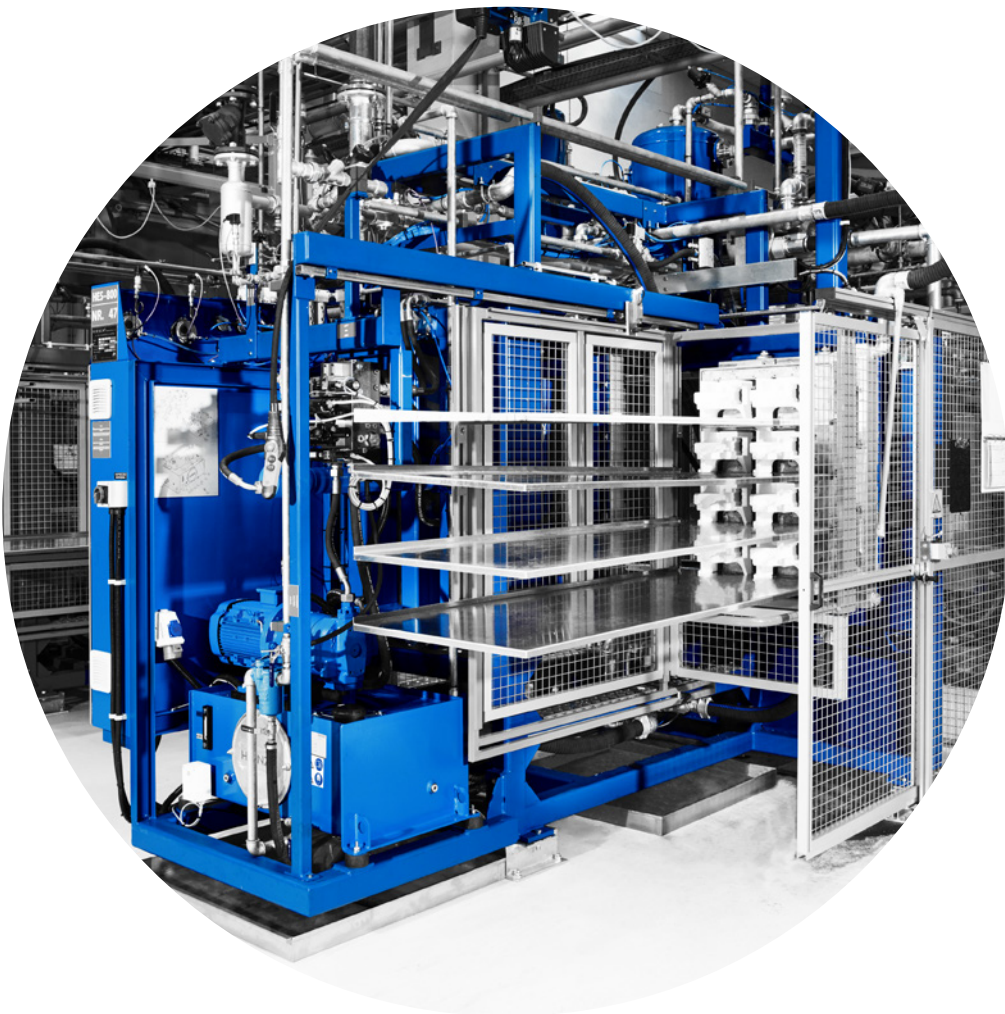
- Integrated stacking device
- Double tank condenser
- Discharge tank for shorter cycle time
- Regulated air pressure for filling air
- Regulated material flow during filling
- Pressure filling hopper
- Integrated cooling system
- Highly efficient hydraulic radial piston pump
- Integrated vacuum pump
- Connection to central vacuum system possible
- Automatic troubleshooting self test
- Recipe data storage
- Online service/troubleshooting/software upgrades

Energy consumption HES		Conventional machines
Steam	1– 3 kg steam / kg EPS	3,5 – 5 kg steam / kg EPS
Air	0,25 m³– 0,5 m³/ cycle	1–2 m³/ cycle

HES 800

IDEAL FOR

- EPS
- DDU
- Packaging parts
- Insulation panels
- Coolers & fish boxes
- Molded parts with inserts
- Max. part height 350 mm



HES 800

Technische Daten

Werkzeugaufspannfläche	960 x 660 mm
Max. Formteilgröße	920 x 620 x 350 mm
Schließhub	740 mm
Größe der Maschine (L x B x H)	4070 x 2425 x 3950 mm
Gewicht der Maschine (netto)	4000 kg

Technical data

Mold mounting dimensions	38" x 26"
Max. part size	36" x 24" x 14"
Closing stroke	29"
Machine dimensions (l x w x h)	13'4" x 7'12" x 12'12"
Machine net weight	8820 lb

Données techniques

Surface d'ablocage des moules	960 x 660 mm
Taille max. des pièces	920 x 620 x 350 mm
Course de fermeture	740 mm
Dimensions de la machine (l x l x h)	4070 x 2425 x 3950 mm
Poids net de la machine	4000 kg

Dati tecnici

Dimensioni piastra porta-stampi	960 x 660 mm
Dimensioni mass. pezzo stampabile	920 x 620 x 350 mm
Corsa di chiusura	740 mm
Dimensioni macchina (lung. x larg. x alt.)	4070 x 2425 x 3950 mm
Peso netto macchina	4000 kg

Datos técnicos

Superficie de sujeción de moldes	960 x 660 mm
Medidas max. de piezas	920 x 620 x 350 mm
Recorrido de cierre	740 mm
Medidas de la máquina (largo x ancho x alto)	4070 x 2425 x 3950 mm
Peso neto de la máquina	4000 kg

技术参数

模具安装尺寸	960 x 660 mm
最大产品尺寸	920 x 620 x 350 mm
行程	740 mm
机器尺寸（长X宽X高）	4070 x 2425 x 3950 mm
机器净重	4000 kg

HES 2200

Technische Daten	
Werkzeugaufspannfläche	2200 x 1250 mm
Max. Formteilgröße	2070 x 1125 x 340 mm
Schließhub	760 mm
Größe der Maschine (L x B x H)	5550 x 5100 x 4950 mm
Gewicht der Maschine (netto)	16700 kg

Technical data	
Mold mounting dimensions	87" x 49"
Max. part size	82" x 44" x 13"
Closing stroke	30"
Machine dimensions (l x w x h)	18'3" x 16'9" x 16'3"
Machine net weight	36820 lb

Données techniques	
Surface d'ablocage des moules	2200 x 1250 mm
Taille max. des pièces	2070 x 1125 x 340 mm
Course de fermeture	760 mm
Dimensions de la machine (l x l x h)	5550 x 5100 x 4950 mm
Poids net de la machine	16700 kg

Dati tecnici	
Dimensioni piastra porta-stampi	2200 x 1250 mm
Dimensioni mass. pezzo stampabile	2070 x 1125 x 340 mm
Corsa di chiusura	760 mm
Dimensioni macchina (lung. x larg. x alt.)	5550 x 5100 x 4950 mm
Peso netto macchina	16700 kg

Datos técnicos	
Superficie de sujeción de moldes	2200 x 1250 mm
Medidas max. de piezas	2070 x 1125 x 340 mm
Recorrido de cierre	760 mm
Medidas de la máquina (largo x ancho x alto)	5550 x 5100 x 4950 mm
Peso neto de la máquina	16700 kg

技术参数	
模具安装尺寸	2200 x 1250 mm
最大产品尺寸	2070 x 1125 x 340 mm
行程	760 mm
机器尺寸（长X宽X高）	5550 x 5100 x 4950 mm
机器净重	16700 kg

IDEAL FOR

- EPS
- DDU
- Packaging parts: Long and dry parts produced in vertical position
- Insulation panels
- Coolers & fish boxes
- Molded parts with inserts
- Max. part height 340 mm





HIRSCH Maschinenbau GmbH

9555 Glanegg 58, Austria

T +43 4277 / 2211 0

F +43 4277 / 2211 370

office.maschinenbau@hirsch-gruppe.com

www.hirsch-technology.com

 [/hirsch.maschinenbau](#)

 [/company/hirsch-maschinenbau-gmbh](#)

 [/HIRSCH Servo Group](#)

© All rights reserved, HIRSCH Maschinenbau GmbH, 2019