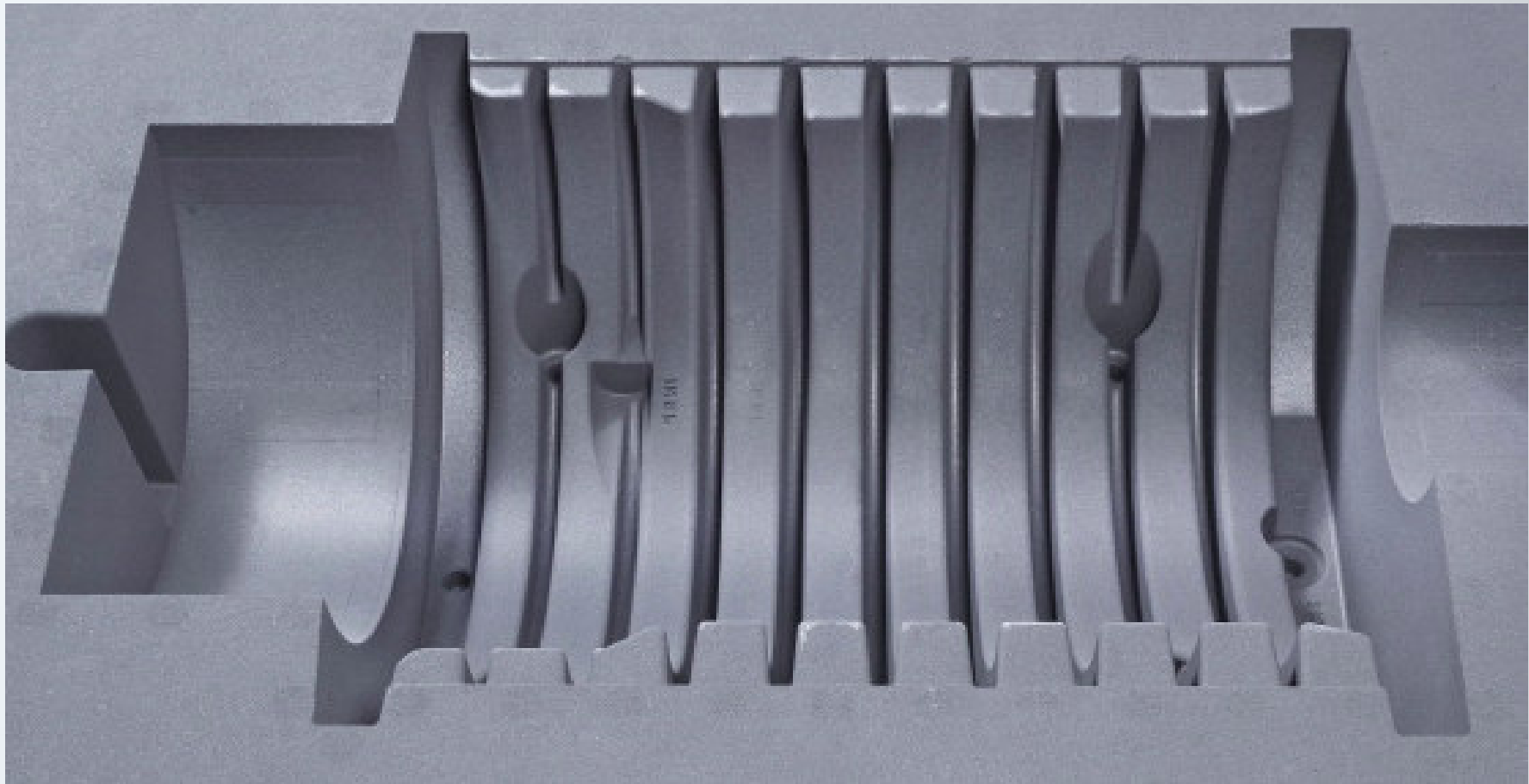




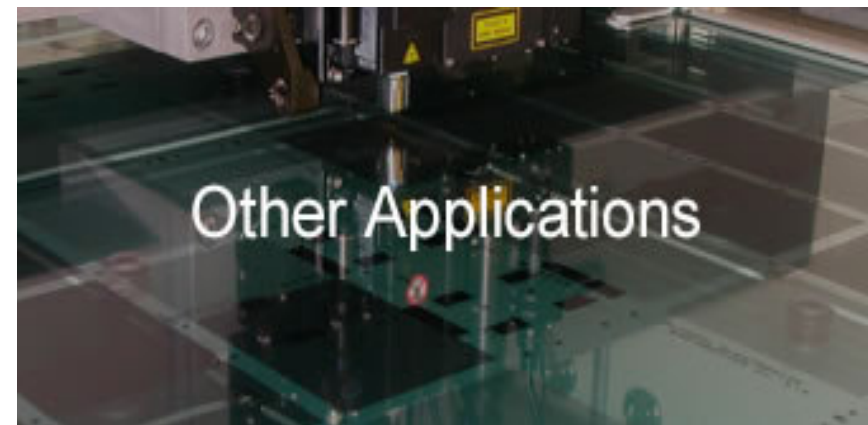
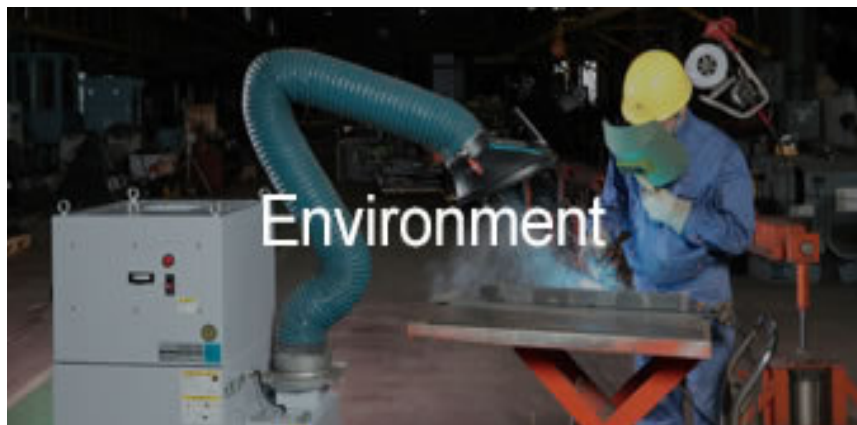
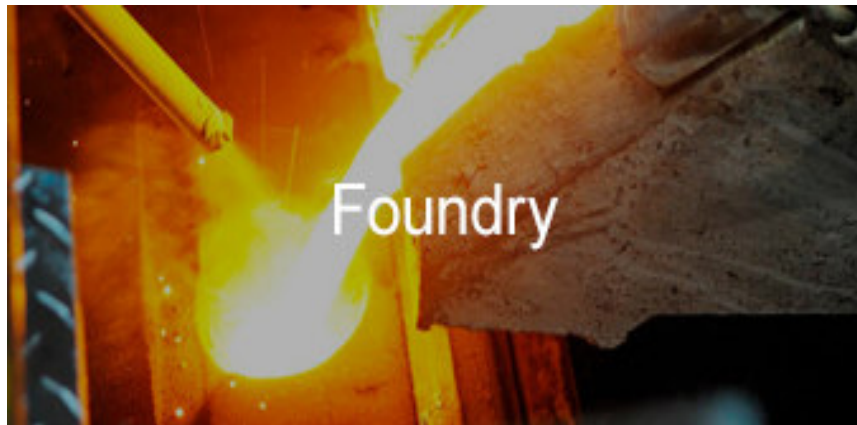
New Harmony >> New Solutions™

PERFECTION IN EVERY SINGLE MOULD



SINTO GROUP – Business Segments

HWS IS MEMBER OF THE GROUP SINCE 33 YEARS



SINTO GROUP – Global Network

43 COMPANIES IN 12 COUNTRIES



HEINRICH WAGNER SINTO

REFERENCES (09/2016)

| | |
|---|------------|
| SEIATSU – PROCESS MOULDING MACHINES | 574 |
| AERATION – PROCESS MOULDING MACHINES | 8 |
| VACUUM – PROCESS MOULDING MACHINES | 57 |
| FBO – HORIZONTAL FLASKLESS MOULDING MACHINES | 9 |
| POURING UNITS | 75 |
| MODIFICATIONS / EXTENSIONS | 218 |






VACUUM MOULDING PROCESS

VARIOUS MACHINE- AND LINE-CONFIGURATIONS



SEIATSU MOULDING PROCESS (TIGHT-FLASK)

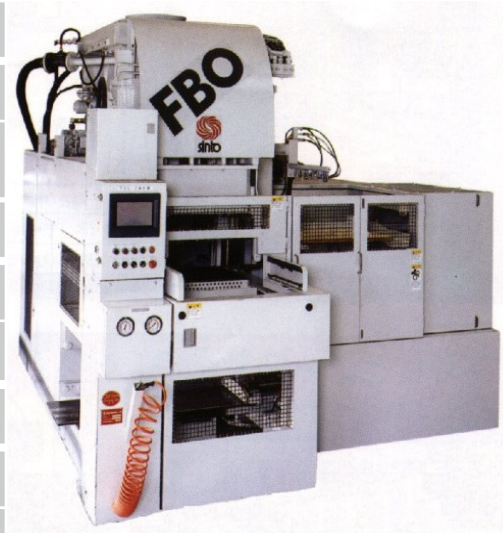
TYPES OF MOULDING MACHINES

| Moulding Method | Aeration + Squeeze | Air Flow + Squeeze | Air Flow + Squeeze | Air Flow + Squeeze | Air Flow + Squeeze |
|-----------------|--|---|--|--|---|
| Model | ACE 3 4 5 6 7 8  | EFA-SD 2 3 4 5 6 7 EFA-S 5 6 7 8 9  | ZFA-SD 2 3 4 5 6 7 ZFA-S 2 3 4 5 6  | DAFM-SD 3 4 5 6 DAFM-S 5 6 7 8 9  | HSP-1D 2D 3D 4D HSP 1 2 3  |
| Features | For small or medium size products Simple & energy saving | For medium or large size products | For medium or large size products High speed molding | Automatic sand feed Pattern is accessible for auxiliary work by operator Suitable for chiller and open top feeder set for cast steel or non-ferrous material | Semi-automatic sand feed Pattern is accessible for auxiliary work by operator Suitable for chiller and open top feeder set for cast steel or non-ferrous material |
| No. of stations | Single / 2 stations | 2 stations | 2 stations | 2 stations | 2 stations |
| Mould Size (mm) | Min. 650 x 750 Max. 1500 x 1200 | Min. 400 x 500 Max. 2000 x 2500 | Min. 400 x 500 Max. 1000 x 1250 | Min. 500 x 650 Max. 2000 x 2500 | Min. 500 x 650 Max. 1000 x 1250 |
| Mould Speed | Up to 150 molds/hr | Up to 140 molds/hr | Up to 250 molds/hr | Up to 80 molds/hr | Up to 70 molds/hr |

HORIZONTAL FLASKLESS MOULDING

TYPES OF FBO MOULDING MACHINES

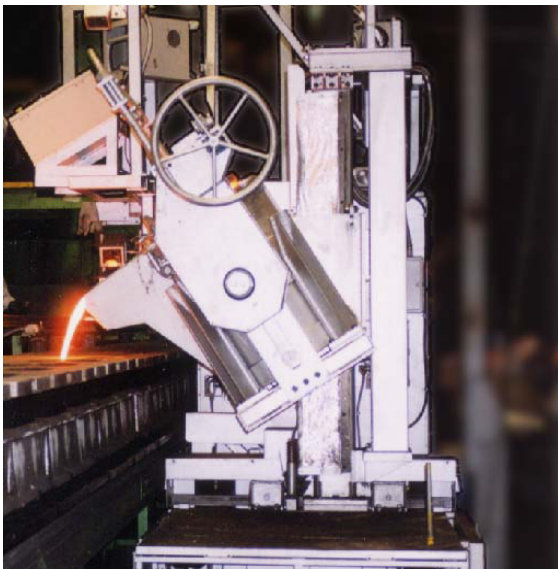
| FBO – II | |
|-------------------------|----------------------|
| Mould package size (mm) | Approx. Output (m/h) |
| 500 x 400 x 130 – 200 | 150 |
| FBO – III S | |
| Mould package size (mm) | Approx. Output (m/h) |
| 600 x 500 x 130 – 200 | 160 |
| FBO – IV | |
| Mould package size (mm) | Approx. Output (m/h) |
| 700 x 600 x 180 – 250 | 100 |
| FBO – V | |
| Mould package size (mm) | Approx. Output (m/h) |
| 900 x 700 x 250 – 300 | 80 |



| FDNX I | |
|-------------------------|----------------------|
| Mould package size (mm) | Approx. output (m/h) |
| 450 x 350 x 150 | 100 |
| FDNX II | |
| Mould package size (mm) | Approx. output (m/h) |
| 550 x 450 x 150 | 80 |

POURING EQUIPMENT

TYPES OF POURING MACHINES & AUTOMATS



FVNX I

| | |
|---------------|--------------|
| Ladle content | 250 – 400 kg |
|---------------|--------------|

FVNX II

| | |
|---------------|--------------|
| Ladle content | 450 – 650 kg |
|---------------|--------------|

FVNX III

| | |
|---------------|--------------|
| Ladle content | 700 – 950 kg |
|---------------|--------------|

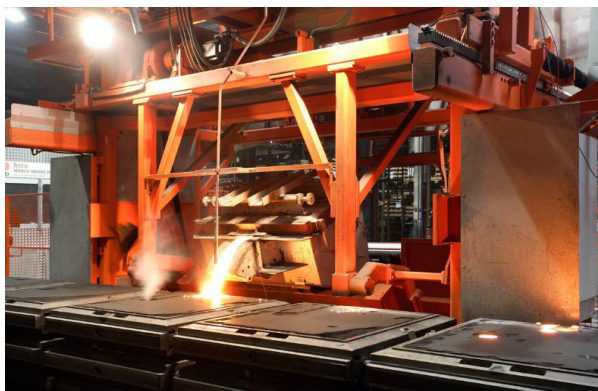


GIMA 8

| | |
|---------------|--------------|
| Ladle content | 500 – 900 kg |
|---------------|--------------|

GIMA 12

| | |
|---------------|------------------|
| Ladle content | 1.000 – 1.500 kg |
|---------------|------------------|



P 10 – S/W

| | |
|---------------|----------------|
| Ladle content | 600 – 1.400 kg |
|---------------|----------------|

P 20 – S/W

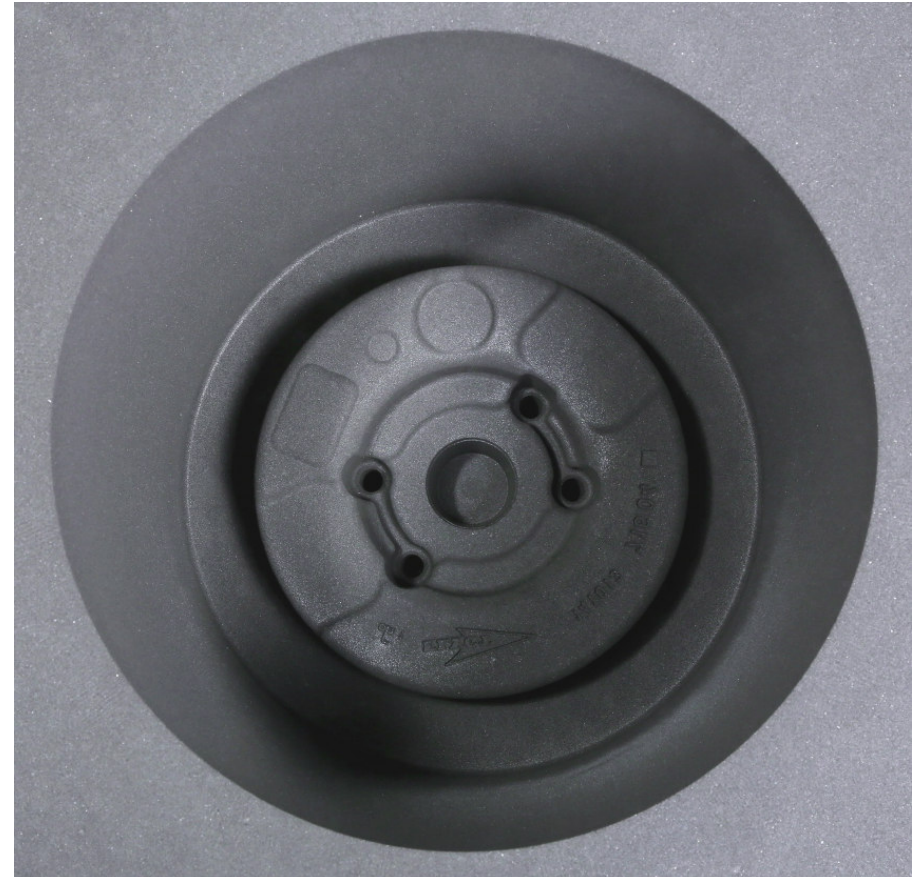
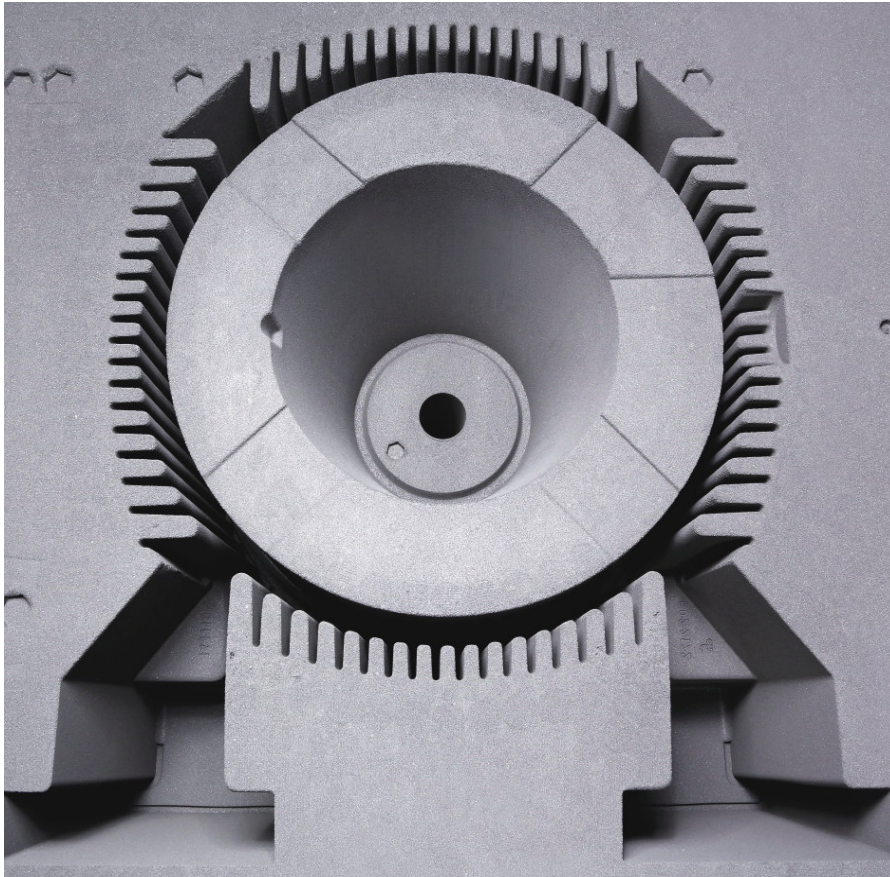
| | |
|---------------|------------------|
| Ladle content | 1.400 – 2.400 kg |
|---------------|------------------|

P 30 – S/W

| | |
|---------------|------------------|
| Ladle content | 2.400 – 3.200 kg |
|---------------|------------------|

HEINRICH WAGNER SINTO

YOUR PARTNER FOR PERFECT MOULDS



HEINRICH WAGNER SINTO

YOUR PARTNER FOR RELIABLE EQUIPMENT



HEINRICH WAGNER SINTO

YOUR FULL SERVICE PARTNER



After Sales Service



Consulting & Planning



Design & Construction



Training



Manufacturing



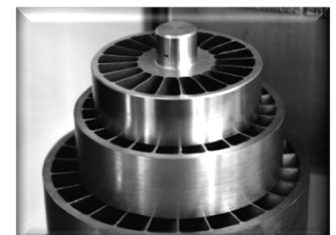
Installation



Logistics



In-house Assembly



GRACIAS
ARIGATO
SHUKURIA
JUSPAXAR
GOZAIMASHITA
EFCCHARISTO
KOMAPSUNNIDA
GRAZIE
MEHRBANI
PALDIES
TASHAKKUR ATU
SUKSAMA
EKHMET
GRACIAS
THANK
YOU
BOLZIN
MERCI
DANKSCHEEN
YAQHANYELAY
TINGKI
BIYAN
SHUKRIA

FOR YOUR ATTENTION