EMHARTGLASS
a BUCHER company

Machine Specification and Data Sheet

# Machine Type NIS

| | 6 1/4 DOUBLE GOB | | | 5" TRIPLE GOB | | | 95mm QUAD GOB | | |
|---|---|---|---|---|---|---|---|---|---|
| | B&B | P&B | NNPB | B&B | P&B | NNPB | B&B | P&B | NNPB |
| Ware Range Reference | | H35002 | | | H35001 | | | H35003 | |
| Min. Height Under Finish | 95 mm | 75 mm | 75 mm | 95 mm | 75 mm | 75 mm | 70 mm | 70 mm | 70 mm |
| Max. Height Under Finish with VertiFlow | 365 mm | 345 mm | 345 mm | 365 mm | 345 mm | 345 mm | 250 mm | 250 mm | 250 mm |
| Max. Body Diameter | 121 mm | 121 mm | 121 mm | 90 mm | 90 mm | 90 mm | 65 mm | 65 mm | 65 mm |
| Max. Finish Diameter | 48 mm | 83 mm | 50 mm | 48 mm | 70 mm | 40 mm | 35 mm | 55 mm | 38 mm |

## MACHINE FEATURES (STANDARD)

Constant Cone Delivery Suspension System DSS
FlexIS TS Control System
Pneumatic Control System PCM Blank side
Servo Electric Gob Distributor
Servo Electric Blank Mold Open-Close
Servo Electric Baffle Mechanism
Servo Electric Invert Mechanism
Servo Electric Blow Mold Open-Close
Servo Electric Takeout Mechanism
Servo Electric FlexPusher
Quick Change Plunger Mechanism
VertiFlow Blank Mold Cooling
VertiFlow Blow Mold Cooling
Neck Ring Cooling
High/Low Deadplate Cooling
Conveyor with Silent Chain
Automatic Lubrication Multi-Forming Process (B&B, NNPB, P&B)
Vacuum Assist Blow Side

## MACHINE FEATURES (OPTIONS)

InVertiFlow Blank Mold Cooling (DG and TG)
Vacuum Assist Blank Side
Variable Center Distance Tonghead VCD TG, QG
Plunger Process Control PPC
Auxilliary Cooling

# Machine Type NIS

- Available in 8, 10 and 12 section configurations
- Production flexibility in 6 1/4 DG, 5" TG, and 95mm QG
- Easy conversion of center distance and process

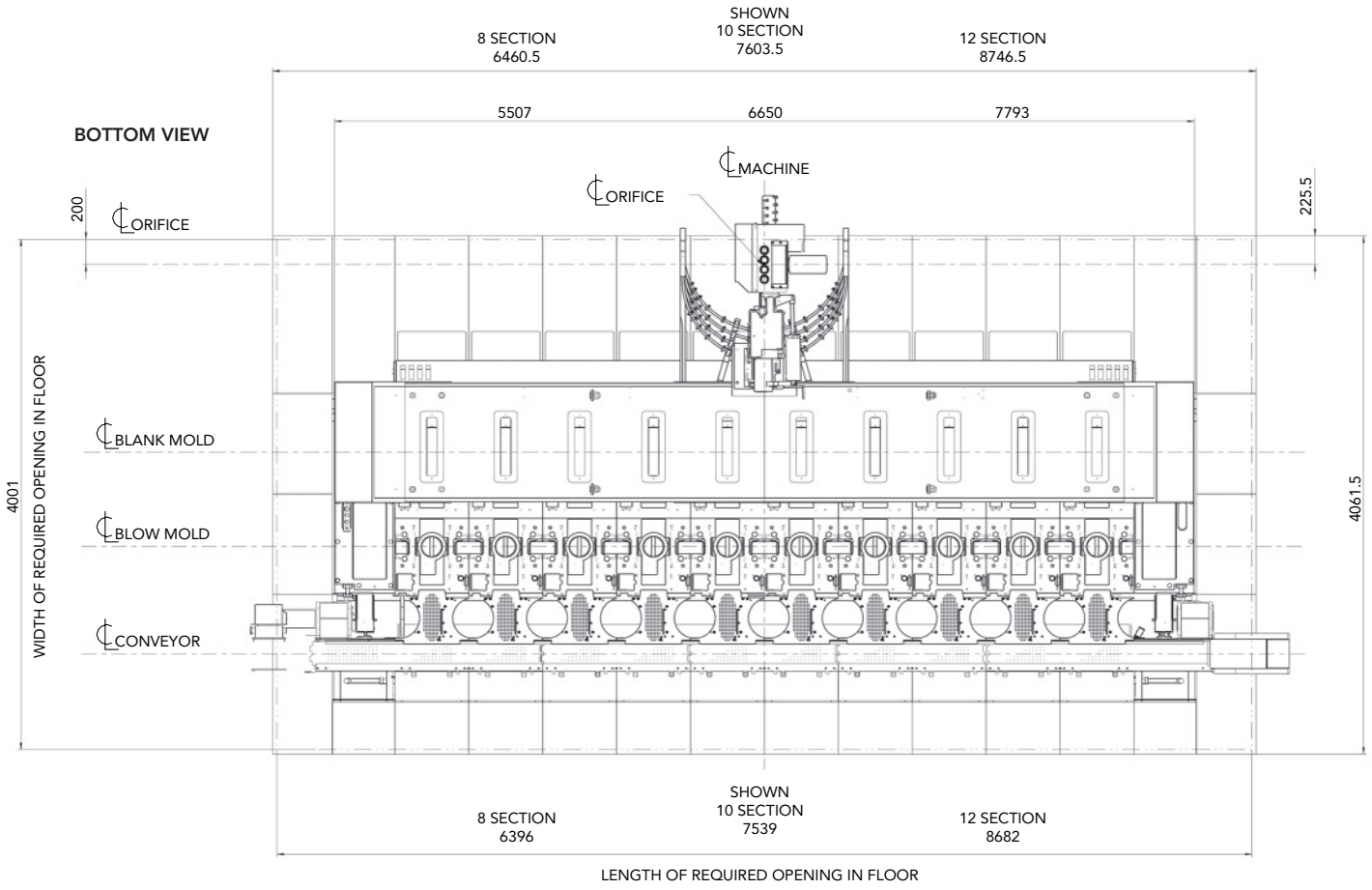
**Dimension specifications – NIS machine sections**

| | 8 mm | 10 mm | 12 mm |
|---|---|---|---|
| Reference Drawing | 400-51555 | 400-51528 | 400-51409 |
| Machine Weight including Molds and Accessories | 46000 kg | 52000 kg | 57000 kg |

**FlexIS with machine controller and ware handling controller cabinet dimensions (mm)**

| Controller Type | A | B | C |
|---|---|---|---|
| Section Controller | 600 | 2500 | 1200 |
| Machine Controller | 600 | 2500 | 600 |
| Ware Handling Controller | 600 | 2500 | 600 |

## Machine Type NIS



## COOLING AIR TO MACHINE

| Supply | Pressure | Consumption [Nm³/min at 1000mmH20] | |
|---|---|---|---|
| | | Machine | Flow |
| Blank & Neck Ring Cooling | Max. 1600 mmH$_2$0 | 8 section | 260 |
| | | 10 section | 320 |
| | | 12 section | 380 |
| Blow Mold Cooling | Max. 1600 mmH$_2$0 | 8 section | 290 |
| | | 10 section | 360 |
| | | 12 section | 430 |
| Conveyor | Max. 1200 mmH$_2$0 | 8 section | 70 |
| | Max. Δp Inlet Conveyor Outlet | 10 section | 85 |
| | Deadplate 250 mmH$_2$0 | 12 section | 100 |

| | Pressure | Consumption |
|---|---|---|
| Gob Distributor | Recommended 400 mmH$_2$0 | 2 Nm³/min |
| Shear Mechanism | Recommended 400 mmH$_2$0 | 7 Nm³/min |
| Feeder Mechanism | Recommended 400 mmH$_2$0 | 7 Nm³/min |
| Revolving Tube | Recommended 400 mmH$_2$0 | 2 Nm³/min |

## VACUUM TO MACHINE (Receiver)

| | | |
|---|---|---|
| Vacuum forming | 150 mbar | 0.3-0.5 Nm3/min/section |

## LUBRICATION OIL SUPPLY TO MACHINE

(4 lines individually timed)

(at typical ambient temperature: 10-55°C)

## TYPICAL CONSUMPTION

| | | |
|---|---|---|
| (Ref. 12 Section M/C) | 90 ± 8bar | 3 liter/day |

## COOLING WATER TO MACHINE

| Supply | Pressure | Consumption |
|---|---|---|
| Air & Water On Beam | 2.1 bar ±0.02 bar | 15 liter/min |

| Condition | Classification |
|---|---|
| Temperature | 20°C ±15°C |
| Filtration | 25 micron |
| Acidity | pH 7±1 |
| Hardness | Max 6 dH (German degree of |
| | hardness according to DIN 38409, Part 6) |

## SERVICE REQUIREMENTS (REF 400-51157 latest revision)

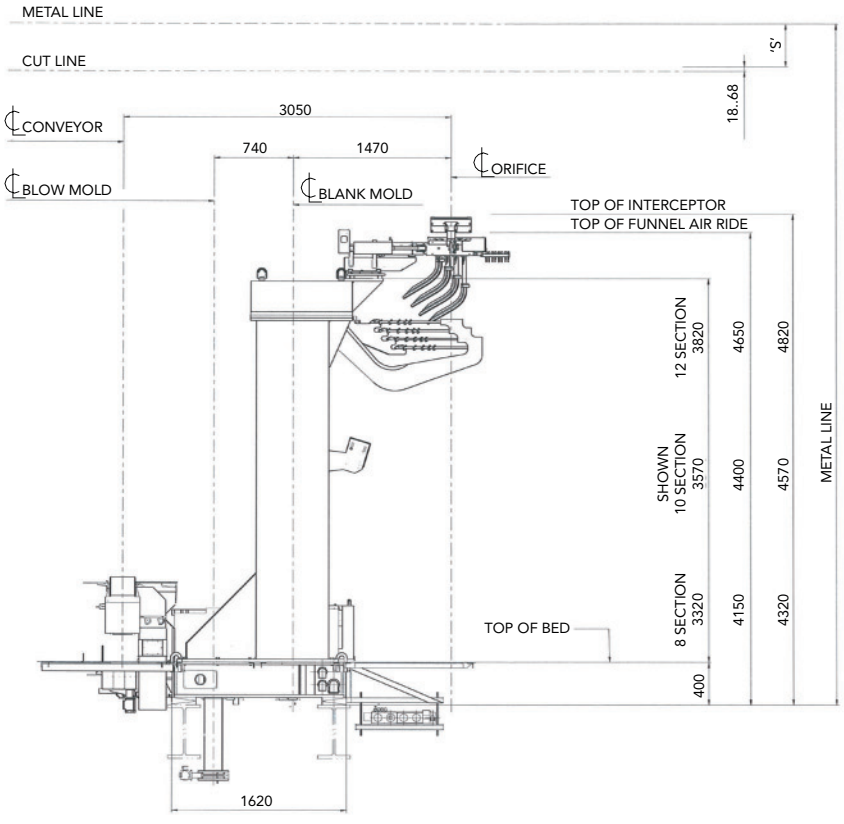
### COMPRESSED AIR SUPPLY TO MACHINE CONTROL UNIT

| Sections | Pressure | Consumption |
|---|---|---|
| 8 | 4.0 ±0.1 bar | 30 ±2 Nm³/min |
| 10 | 4.0 ±0.1 bar | 38 ±2 Nm³/min |
| 12 | 4.0 ±0.1 bar | 45 ±2 Nm³/min |

## COMPRESSED AIR SUPPLY TO MACHINE MANIFOLDS

| | | | |
|---|---|---|---|
| Counterblow/ Plunger cooling | 5bar max. | 0.5 1.5 Nm³/min/cavity | 2xRp 2-1/2" |
| Plunger (15 cycles/min) | 5bar max. | 0.15 Nm³/min/cavity | 2xRp 2" |

ISOCLASS4 ISO-8573-1



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Specification **INSTALLATION REQUIREMENTS (REF 601-20010) latest revision**

| **MAIN CONTROL CABINETS** | |
|---|---|
| Ambient Conditions (without air conditioner) | |
| Temperature | 0-40° C |
| Humidity | 10-80% non condensing |
| Mains Supply | |
| Line Supply | 400 VAC 3 ph. |
| Line voltage tolerance | -10% / +15% |
| Line frequency | 48 - 62 Hz |
| Typical Power Consumption* | |
| Example: 10-section TS10.5 (NIS) | 17 kVA |
| Typical Heat Dissipation* | |
| Example: 10-section TS10.5 (NIS) | 3000 W |

*(depends on actual machine speed and other relevant conditions)

| **USER CONSOLE CABINET** | |
|---|---|
| Ambient Conditions (without air conditioner) | |
| Temperature | 0-40° C |
| Humidity | 10-80% non condensing |
| Ambient Conditions (with air conditioner) | |
| Temperature | 0-55° C |
| Humidity | 10-100% |
| Mains Supply | |
| Line Supply | 230 VAC |
| Line voltage tolerance | -10% / +15% |
| Line frequency | 48 - 62 Hz |
| Power consumption | 1 kVA |

Emhart Glass makes every effort to provide valid, helpful information to its customers so that our equipment will be best utilized. If you encounter information that is not correct or information which can be misunderstood or not understood, please advise Emhart Glass so that we improve this information.
All the above figures are typical values. For project requirements contact Emhart Glass Technical Service.