

IS Machines

#shaping transformation.

"LSG"

- Productive IS machine with Quadruple Gob: 3 ³/₄", 4", 3 ³/₄", between cavities with conversion into 5" TG. It has the ideal characteristics to produce BB and NNPB containers.
- Servo gob distributor of one motor per cavity to perform at maximum precision in the gob delivery.
- Equipped with Servo Invert and Servo Takeout for better product handling during the forming process.
- Axial cooling on the mold side and blank side to improve temperature control that provides lighter containers and increases speed
- "Closed loop" process control system for production and quality critical variables.

"E"

- DG 4 1/4" traditional "E" IS machine with conversion into SG, focused on a **detailed** production.
- This machine model has its own 3 1/2" TG version.
- The wide manufacturing range and variable equipment simplicity make this machine an excellent option for short runs or frequent mold shifts.
- Versatility to work on BB, PB, and NNPB processes
- It can be equipped with a pneumatic mechanism or Servo Invert and Servo Takeout mechanism
- The essential machine section can be equipped from the most basic level to the highest technological advances for the NNPB process control

"F"/"SF"

- TG 4 ¼" versatile high-speed IS machine with conversion into DG 6 ¼" and SG. It has the ideal characteristics to produce glass containers in BB, PB, and NNPB.
- It can work with Axial Cooling in TG and DG.
 - This enables mold cooling during the 360° machine cycle, thus increasing the high productivity.
 - Improves blank temperature control giving, as a result, lighter containers and higher machine speed
- TG, DG, and SG universal Blank Mold Support that reduces the time of conversion system
- Equipped with Servo Invert and Servo Takeout mechanisms
- Tested "closed loop" process control system for critical variables of quality and production
- Delivery equipment and gob distribution system of proven efficiency developed for better alignment and gauging.



IS Machine "LSG"



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"LSG"

General InformationSections10,12GobsTripleQuadrupleCD10"11 ½"ProcessBB/PB/NNPBBB/PB/NNPB

| | P | rocess, colling and limits | | |
|--------------------------------------|-------|----------------------------|--------------------|--|
| - Process | | 11 ½" QG | 10″ TG | |
| | BB | • | • | |
| | NNPB | · | • | |
| - Cooling | | Blank Blank | Blank Blank | |
| | Axial | • • | • • | |
| | Cage | | • | |
| Max. diamenter | BB | 2.625" (66.6 mm) | 3.465" (88 mm) | |
| | NNPB | 2.625" (66.6 mm) | 3.465" (88 mm) | |
| Max. Total Heght under finishs | BB | 9.750" (247.6 mm) | 13.780" (350 mm) | |
| | NNPB | 9.750" (247.6 mm) | 12.705" (322.7 mm) | |



Delivery system: scoop direct gob delivery

| | Sections | Gob | CD | w | Р | I | Α | С |
|-------|----------|-------|-------------|----------|--------------|--------------|----------|-------|
| | 10 | T / Q | 10" – 11 ½" | 207 5/8" | 43 ½″ | 65 ¾″ | 107 7/8" | 57 ¾″ |
| , ype | 12 | T / Q | 10" - 11 ½" | 236" | 43 ¾″ | 64 ½″ | 122 ¼″ | 60 ¼″ |

| Sections | Gob | CD | W | Р | I. | Α | С |
|----------|-----|-------|------|---------|-------|--------|--------------|
| 10 | Q | 11 ½″ | 252" | 44 5/8" | 70 ¼″ | 122 ¼″ | 50 ½″ |
| 12 | т | 10" | 252" | 44 5/8" | 70 ¼″ | 122 ¼″ | 50 ½″ |

IS Machine



- DG 4 1/4" traditional "E" IS machine with conversion into SG, focused on a detailed production.
- This machine model has its own 3 1/2" TG version.
- The wide manufacturing range and variable equipment simplicity make this machine an excellent option for short runs or frequent mold shifts.
- Versatility to work on BB, PB, and NNPB processes
- It can be equipped with a pneumatic mechanism or Servo Invert and Servo Takeout mechanism
- The essential machine section can be equipped from the most basic level to the highest technological advances for the NNPB process control



355 mm Max. height S.G. 4 ¼"





| General Information | | | | | | | | |
|---------------------|--------|------------|------------|--|--|--|--|--|
| Sections | | 6, 8 & 10 | | | | | | |
| Gobs | Simple | Doble | Triple | | | | | |
| CD | - | 4 ¼" | 3 ½ " | | | | | |
| Process | BB/PB | BB/PB/NNPB | BB/PB/NNPE | | | | | |



4 ¼ DG SC 3 ½" TG BB Process PB NNPB Blank Blank Blank Blank Blank Blank Axial Cooling Stack Cage • **Verti Flow** 3 3/16" (81) mm BB 6 9/16" (166.7 mm) 2 ½" (63.5 mm) Max. **NNPB** 2 ½" (63.5 mm) diamenter PB 3 3/16" (81 mm) 6 9/16" (166.7 mm) 2 ½" (63.5 mm) BB 11 ¼" (285.7mm) 14" (355.6 mm) 10 ½" (266.7 mm) Max. Total **NNPB** 11" (279.4 mm) 10 ½" (266.7 mm) **Heght under** finishs PB 9" (228.6 mm) 10" (254 mm) 10 ½" (266.7 mm)

Process, colling and limits



Delivery system: scoop direct gob delivery

| Sections | Gob | CD | W | Р | L. | Α | С |
|----------|-------|------|----------|---------|-------|-----------|-----|
| 6 | S / D | 4 ¼" | 184 7/8" | 37" | 59 ¼" | 95 15/32" | 50" |
| 6 | т | 3 ½" | 184 ¼″ | 36 ½" | 59 ¼" | 95 17/32" | 50" |
| 8 | S / D | 4 ¼" | 177 ½″ | 37″ | 59 ¼" | 95 15/32" | 50" |
| 8 | т | 3 ½" | 180" | 36 ½" | 59 ¼" | 95 17/32" | 50" |
| 10 | S / D | 4 ¼" | 188 ¼″ | 39 5/8" | 59 ¼" | 95 15/32" | 50" |
| 10 | т | 3 ½" | 192″ | 36 ½″ | 59 ¼" | 95 17/32" | 50" |

IS Machine "F/SF"



- TG 4 ¼" versatile high-speed IS machine with conversion into DG 6 ¼" and SG. It has the ideal characteristics to produce glass containers in BB, PB, and NNPB.
- It can work with Axial Cooling in TG and DG.
- This enables mold cooling during the 360° machine cycle, thus increasing the high productivity.
- Improves blank temperature control giving, as a result, lighter containers and higher machine speed
- TG, DG, and SG universal Blank Mold Support that reduces the time of conversion system
- Equipped with Servo Invert and Servo Takeout mechanisms
- Tested "closed loop" process control system for critical variables of quality and production
- Delivery equipment and gob distribution system of proven efficiency developed for better alignment and gauging.

"F"/"SF"

393 mm Max. height S.G. and D.G.



"F" / "SF"

| General Information | | | | | | | | |
|---------------------|--------|------------|------------|--|--|--|--|--|
| Sections | _ | 8, 10, 12 | | | | | | |
| Gobs | Simple | Doble | Triple | | | | | |
| CD | - | 6 ¼" | 4 ¼" | | | | | |
| Process | BB/PB | BB/PB/NNPB | BB/PB/NNPB | | | | | |



6 ¼" DG BB Process PB NNPB Blank **Blank** Blank Blank Blank **Blank** Axial Cooling Stack Cage **Verti Flow** <u>5 1/4" (133.3 mm)</u> BB 6 9/16" (166.6 mm) Max. **NNPB** 51/4" (133.3 mm) diamenter 2 5/16" (74.6 mm) PB 12" (304.8 mm) BB Max. Total **Heght under NNPB** 11" (279.4 mm) 11" (279.4 mm) finishs <u>11" (279.4 mm)</u> 13" (330.2 mm) PB

Process, colling and limits



Delivery system: scoop direct gob delivery

| Sections | Gob | CD | W | Ρ | 1 | Α | С | |
|----------|-------|-----------|------|---------|--------------|------------|---------|--|
| 8 | S/D/T | 6 ¼" 4 ¼" | 185″ | 38 ¼″ | 65 3/8" | 102 23/32" | 56 7/8" | |
| 10 | S/D/T | 6 ¼" 4 ¼" | 193″ | 38 ¼″ | 65" | 102 23/32" | 56 7/8" | |
| 12 | D / T | 6 ¼" 4 ¼" | 217" | 41 1/8" | 65 ½″ | 118 17/32" | 50" | |