Reduce molding defects caused by oxygen. Saving space can be done by built-in unit.

Nitrogen gas supply control system N₂Seal

Concept

- The system suppresses resin oxidation by placing the nitrogen in the cylinder with a nitrogen gas generator.
- By suppressing yellowing due to resin oxidation and carbide adhesion on the screw.

Features

- It has achieved space savings by incorporating the industry's smallest class nitrogen gas generator into the molding machine.
- It can be operated on the molding machine screen for controlling nitrogen gas supply/stop and also monitoring oxygen concentration and nitrogen gas flow rate.

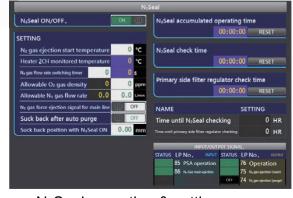




N₂Seal appearance

Specification

Separation method	PSA method
N ₂ gas purity	99.9 %
N ₂ gas flow rate	10 - 18 L/min
N ₂ gas pressure	0.3 - 0.4 MPa
Required air volume	45 L/min or more
Supply air compressor pressure	0.5 - 0.85 MPa



N₂Seal operation & setting screen

Reduction of carbide adhesion to screws

Advantage

Reduction of defective rate caused by black spots.

0.70% N2Seal: Not used Average black-spot occurrence: 0.33% 0.30% 0.30% N2Seal: Used Average black-spot occurrence: 0.010% N2Seal: Used Average black-spot occurrence: 0.000% N2Seal: Used N2Seal: Used

[Resin: PPS, Period: 4 months]

N₂Seal is not used.

Carbide is attached.

N₂Seal is used.

Almost no carbide is attached

[Resin: PPS, Period: 4 months]

