

# Instruction Manual for Injection molding

## Basic procedure for changeover of materials/color

**\* Set backpressure "zero," repeat meter and injection**

1) After finishing the preceding molding, discharge the remaining material.  
 ↓ · Clean the hopper.

2) Add CELPURGE into the hopper, repeat metering and injection. ← **Set backpressure "zero."**  
 ↓ · The cylinder temperature and metering position can be as-is.  
 ↓ · The preceding materials should be **almost** displaced by CELPURGE.  
 ↓ · 5-10 times purging may usually be enough.

3) Set the metering position **ca.30 mm** and repeat metering and injection. ← **Set backpressure "zero."**  
 ↓ · Check-ring, tip of the screw and the nozzle should be **completely** cleaned.  
 ↓ · Over 15 shots will normally be necessary.  
 ↓ · After the cleaning finished, allow **one shot** of CELPURGE to **remain** in cylinder, start preparation for the next molding. ( Changing temperature settings, mold, etc. )

4) Discharge CELPURGE.  
 ↓ · Clean the hopper.  
 ↓ · Change the molding conditions for the next material.

5) Add the next material into the hopper and discharge CELPURGE completely.  
 ↓ · Start molding with the next material.

\* For effective cleaning, in procedure 2) & 3), set the **screw rotation speed / injection pressure / injection speed** as high as possible, set the **cushion** as small as possible.

### Example of changeover procedure (Mold clamping force;100ton, Screw diameter; 32mm)

	Material	Cylinder Temp.	Metering Position	Screw rotation	Backpressure	Injection Pressure	Injection speed	Cushion
1)	PC/ABS	250	50mm	40rpm	35kgf/cm <sup>2</sup>	50kgf/cm <sup>2</sup>	40%	12mm
2)	CELPURGE	As above	As above	150rpm	<b>0 kgf/cm<sup>2</sup></b>	100 kgf/cm <sup>2</sup>	99%	1mm
3)	CELPURGE	As above	<b>30mm</b>	As above	As above	As above	As above	As above
4)	CELPURGE	<b>220</b>	As above	As above	As above	As above	As above	As above
5)	PP	As above	55mm	35rpm	30 kgf/cm <sup>2</sup>	80 kgf/cm <sup>2</sup>	35%	8mm

### Notes for usage

- Read MSDS through before usage.
- Do not blend with other materials.
- Use CELPURGE within operational temp. range.
- Purged materials can cause smoke or fire, do not leave around combustible matters.
- Use under well-ventilated places.
- For your safety, use protective equipments ( gloves, goggle, etc.).

Grades	Temp.Range [ °C ]	Features	Remarks
MA2	180 – 280	Standard	Non-filled
ME1	140 – 280	For PE	Non-filled
MP1	160 – 280	For PP	Non-filled
MS1	160 – 240	For PS	Non-filled
AW2	200 – 320	High cleaning	Mineral-filled
AG4	200 – 320	High abrasive	GF-filled
HG2	140 - 370	For Super Engineering plastics	GF-filled

