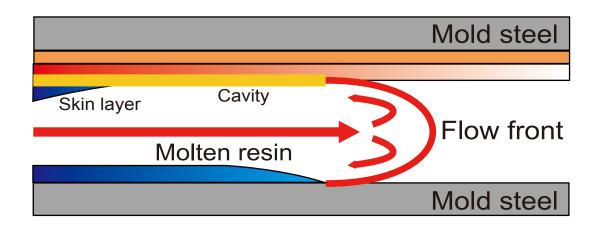
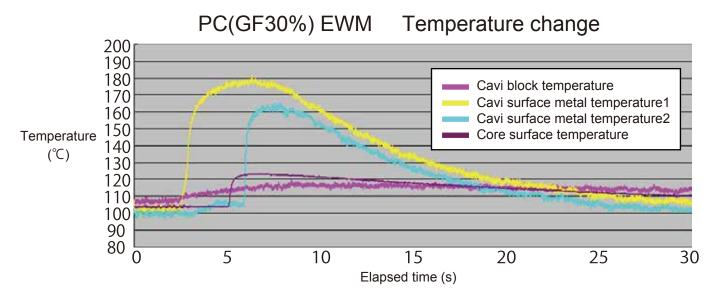
## Eco Weldless Mold





1,Weldless molding 2,High appearance molding 3,Thin walled molding ---1,2,3 ~without any other incidental equipment!

This technology enable to realize not only the high Quality Molding, but also the reduction of powerconsumption. So we can contribute to the reduction of greenhouse gases which become a global probrem.

#### Eco weldless molding Comparison table

|                      | Normal     | Eco<br>weldless | Heat&Cool   | Advantages of Eco weldless   |  |
|----------------------|------------|-----------------|-------------|--|--|
| Energy consumption   | 0          |                 | ×           | It does not require energy from the outside.   |  |
| Molding cycle        | $\bigcirc$ | 0               | $\triangle$ | Equivalent to the normal mold.   |  |
| Mold cost            | $\circ$    | Δ               | ×           | About 1.3 times the normal mold. The affordable than Heat&Cool.                                      |  |
| Incidental equipment | $\circ$    | 0               | ×           | Equivalent to Normal molding. (Boiler and Chiller is not required)                                   |  |
| appearance quality   | ×          |                 | $\circ$     | Good appearance equivalent to the Heat&Cool.   |  |
| Molding pressure     | 100%       | About 70%       | About 120%  | For molding at low speed and low pressure is possible, you can reduce the power to tighten the mold. |  |
| Mold size            | 100%       | About 75%       | About 120%  | Internal pressure of the mold becomes small, can be lightweight and compact.                         |  |



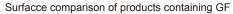


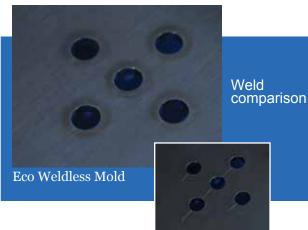
# Effect of Eco Weldless Mold

#### High Quality

Weldless! High Appearance!



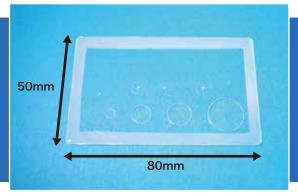


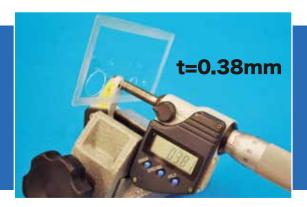


Normal Mold

# High flowability

Thin walled Molding with no incidental!





#### **High Strength**

| Test pieces | Lord<br>direction | Cavity       | Maximum point stress | Intensity change |  |
|-------------|-------------------|--------------|----------------------|------------------|--|
| (Material)  | airection         | Í            | N/mm2                | %                |  |
|             | Cavity            | Normal 47.95 |                      | 0.50%            |  |
| PS          | Cavity            | one side ECO | 48.19                | 0.50%            |  |
| F 3         | 0                 | Normal       | 48.75                | 5.08%            |  |
|             | Core              | one side ECO | 51.23                |                  |  |
| AS          | Cavity            | Normal       | 92.55                | 12.64%           |  |
|             | Cavity            | one side ECO | 104.25               |                  |  |
| A3          | Coro              | Normal       | 95.10                | 17.03%           |  |
|             | Core              | one side ECO | 111.30               |                  |  |
|             | Cavity            | Normal       | 59.90                | 10.11%           |  |
| PMMA        | Cavity            | one side ECO | 65.96                |                  |  |
| L IAIIAI\   | C                 | Normal       | 78.21                | 36.64%           |  |
|             | Core              | one side ECO | 106.87               |                  |  |
|             | Cavity            | Normal       | 35.16                | 9.49%            |  |
| DC + CE200/ |                   | one side ECO | 38.50                |                  |  |
| PC+GF30%    | Core              | Normal       | 38.21                | 14.99%           |  |
|             | Cole              | one side ECO | 43.94                |                  |  |

Mesurement photo

Lord direction

Weld less side

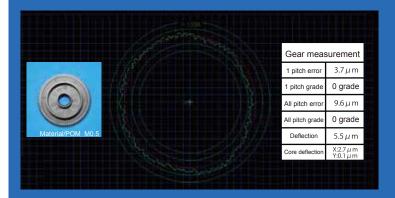
Cavity
surface

Weld strength test results

Lord direction

To Use EWM, improving the strength of the point of weld line.

### **High Transcription**



You can make a 0 grade gear(JGMA) with EWM

