Metal layer

Wetal layer

STEP1

STEP1

Sustaining flowability of moltenresin

STEP2

Reducing the Diameter of Sprue

STEP3

- · Material Reduction
- Affectivity for cob webbing Prevention
 - Reduction of Cycle Time

STEP4

Cost Reduction

Ecologically friendly Equipment

E.S.PRUE BUSH is a one proposal for the answer to the environmental problems!!

Cost reduction by productivity improvement

Reduction the diameter of spurue not only helps the reduction of material, but also the Cycle time for molding. the productivity improvement contributes to the cost reduction.

The reduction of defective product

Cold slug well brings to the short product. E.S.Sprue Bush helps the liquidity, so if you use it, you can manufacture the superior product and maintain the stable product!

Eco-friendly Technology

E.S.Sprue Bush uses the melting resin heat. It doesn't need the Thermal Heat from the outside.

Simple installation

E.S.Sprue Bush doesn't need the modification. You can use it by replacing the current sprue bush. It doesn't need the other electricity or water. Maintenance-free!!

Comparison of the cooling time

(Use material:PS)







Normal sprue

F.S. sprue F.S. sprue (φ 3.5/Both angle 2°) (φ 2/Both angle 2°) (φ 1.5/Both angle 1.5°)

A narrow path of the Sprue leads to the shortening of the cooling time!!

The diameter of E.S. sprue bush is thinner a normal one, so you can mold it in shorter cooling time.

It leads to the shortening the cycle time, in short, improving productivity.

Shortening of the cooling time.it leads to the large reduction in cost!

The introduction of the E.S.sprue bush, you can cut off the cost up to about \$1400 by 50,000 shots

Cost Merit (Material unit price 2us\$/kg, Molding cost 20us\$/h)

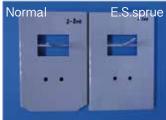
| | Sprue weight [g] | Cooling time [sec] | Cost reduction of 1shot [\$] | Cost reduction of 10000shot [\$] | Cost reduction of 50000shot [\$] |
|--------------------------------------|---------------------|-----------------------|------------------------------|----------------------------------|----------------------------------|
| Normal sprue ϕ 3.5/2 $^{\circ}$ | 0.56 | 13 | - | - | - |
| E.S. sprue φ 2/2° | 0.25 | 10 | 0.0173 | 173 | 865 |
| E.S. sprue φ 1.5/1.5° | 0.14 | 8 | 0.0286 | 286 | 1430 |

E.S.sprue

(Use material:PS)

Comparison of pressure loss

Normal





(Use material:ABS)

(Use material:PS)

The maintenance a flowability of the molten resin leads to the low pressure molding.

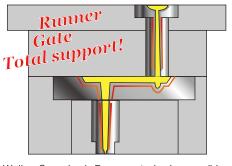
Even the term that shortstop produces, you can fill the molten resin with E.S.sprue bush. Low pressure molding leads to the miniaturizing mold and is suitable for a long life.

Comparison

E.S. sprue Comparison table

| | Normal sprue | Thin sprue | E.S. sprue | Cooling sprue | Heating sprue |
|------------------------|--------------|------------|-------------|---------------|---------------|
| Energy consumption | 0 | Δ | 0 | Δ | × |
| Cooling time | × | 0 | 0 | 0 | 0 |
| Expense | 0 | 0 | \triangle | × | × |
| Incidental facilitiess | 0 | 0 | 0 | × | × |
| Pressure loss | 0 | × | 0 | 0 | 0 |
| Material reduction | × | 0 | 0 | × | 0 |
| Additional procesing | None | None | None | Need | Need |

E.S. series



Well as Sprue bush, Runners, etc. is also possible orders E.S.series. We are looking forword to your order and consult at any time.



E.S.sprue bush Build-to-order manufacturing 380\$



Contact us

If you have any order or any question about the products, we accept from the website or phone.

■ Manufacture and Sale LOYAL ENGINEERING Co., Ltd.