

# Data Sheet



## SOREL FORGE

### PREMIUM QUALITY MOLD STEEL **SF-2000 ESR**

#### ■ GENERAL:

**AISI P-20**

Delivery Condition:

Hardened & tempered to  
321-352 BHN (34-38 Rc)

**SF-2000 ESR** is a superior product for  
molding plastics.

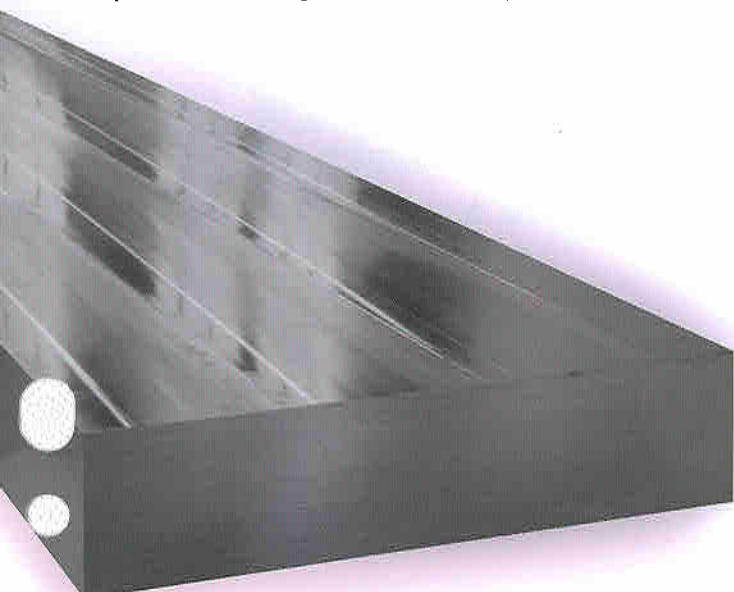
**SF-2000 ESR** is an improved prehard-  
ened mold steel. It is the result of a spe-  
cial melting process: [Electro-Slag-Remelt]  
(ESR). This premium mold steel offers the  
finest quality finish with high polishability,  
photo-etching and texturing.

Typical Analysis (%)					
C	Mn	S	Si	Cr	Mo
.34	.90	.003 max	.30	1.75	.40
Standard Specification		AISI P20			

**SF-2000 ESR** is forged using a special  
densifying process which assures optimum  
consolidation of centers.

**SF-2000 ESR** is 100% ultrasonic tested to  
very stringent acceptance levels (lens quali-  
ty). It is supported by our Material and  
Labor Warranty.

**SF-2000 ESR** is available in standard  
incremental sizes in premachined condition.



## ■ APPLICATIONS

**SF-2000 ESR** premium quality is the most reliable mold steel. It is suitable for,

- Lens molds
- Injection molds
- Compression molds (in carburized conditions)
- Blow molds
- Die-casting dies for tin, lead and zinc alloys

What makes **SF-2000 ESR** excellent?

### • Microcleanliness

**SF-2000 ESR** fully conforms to a maximum rating of 1 in all categories as measured against ASTM E-45. This provides excellent polishability and improved fatigue life as well.

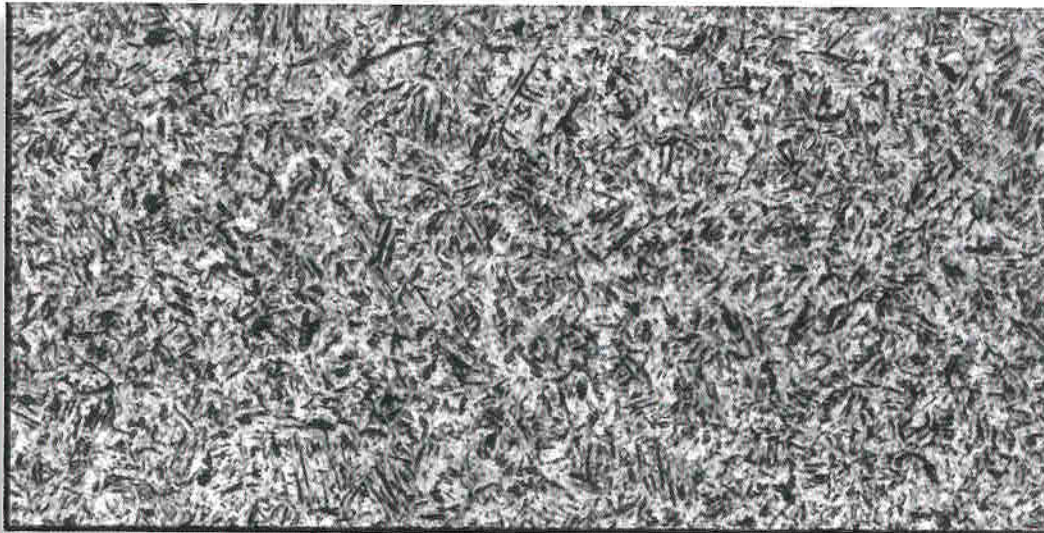
### • Homogeneity

**SF-2000 ESR** is virtually free from microsegregation and microbanding. It has uniform carbide distribution. Homogeneity provides superior dimensional stability and improves transverse impact strength.

### • Chemistry

The **E.S.R.** process allows a tight control of chemical elements. It translates for the users in a uniform product with lot to lot consistency.

### • Microstructure of SF-2000 ESR



(X 500)

More **SF-2000** material characteristics are available in our **SF-2000** detailed version data sheet.

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