



25 - 27 October / Ekim 2018

TÜYAP Fair, Convention & Congress Center, İstanbul

Tüdüksad Akademi **10. Uluslararası Döküm Kongresi / 10th International Foundry Congress** by Tudöksad Academy

In conjunction with **ANKIROS / ANNOFER / TURKCAST** fairs

## **«A360 Alüminyum Alaşımının Yüksek Basıncılı Dökümünde Seramik Difüzörlerin Son Ürün Kalitesine Etkisi»**

### **«Effects of Diffuser Types On The Melt Quality Of A360 Aluminium Alloy»**

**Furkan Karasoy, Özen Gürsoy, Eray Erzi, Derya Dışpınar  
(Arslan Makina, İstanbul Üniversitesi)**

### **3.Oturum / 3rd Session**

**Oturum Başkanı / Session Chairman: Prof. Dr. Altan Türkeli (Marmara Üniversitesi)**



# Yüksek Basıncılı Dökümde Seramik Difüzör kullanımı

Furkan Karasoy <sup>1,2</sup>

Özen Gürsoy<sup>1</sup>, Eray Erzi<sup>1</sup>, Derya Dispinar<sup>1</sup>



# motivasyon

- Sıvı metal temizliliđi
- Fire oranı arasındaki ilişki

# Deneysel çalışma

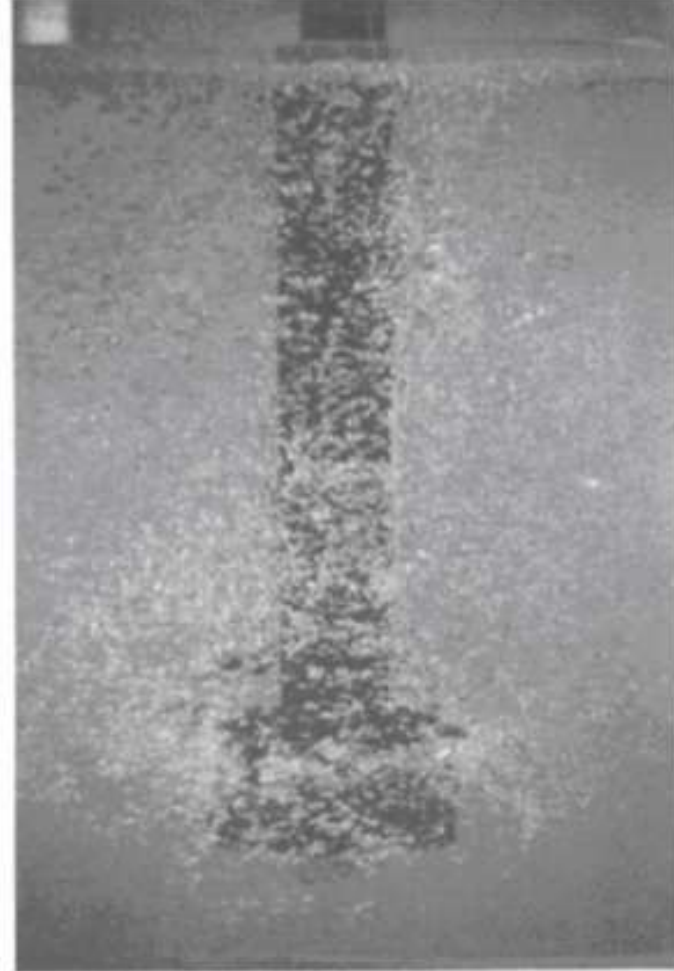
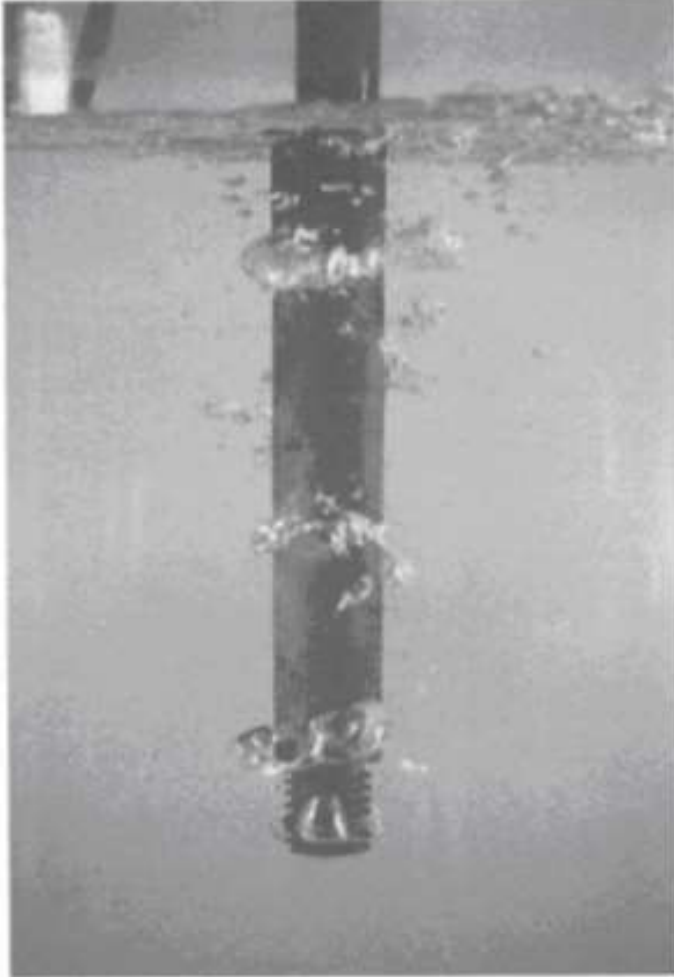
A360 alaşımı

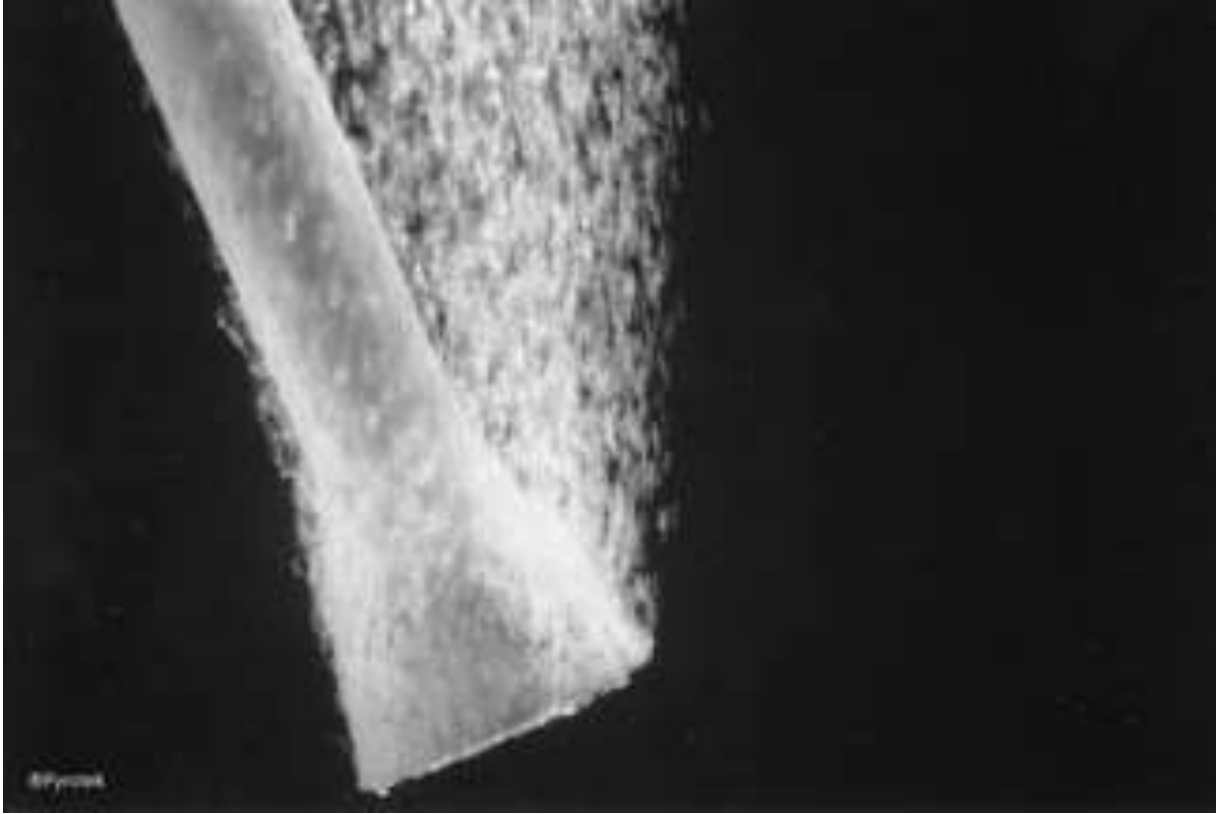
Fe	Si	Mn	Cu	Mg	Zn	Cr	Zi	Al
0.8	10.5	0.3	0.5	0.4	0.5	0.1	0.15	rem

300 kg  
710°C

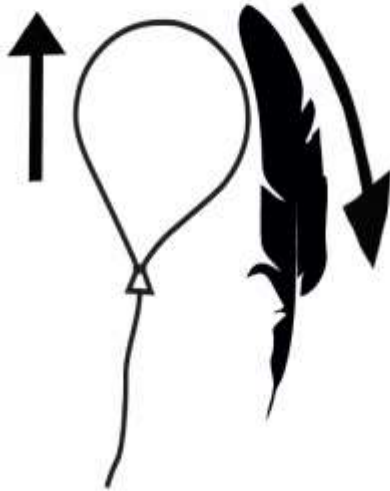
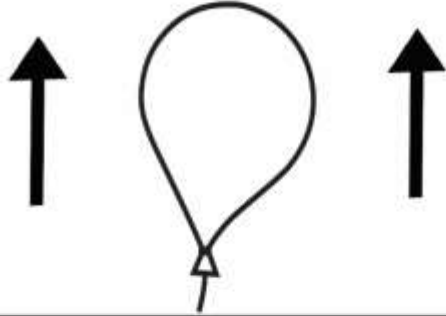


# Gaz giderme





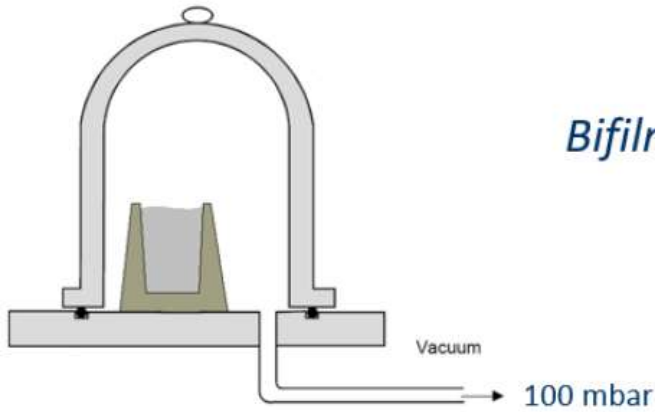
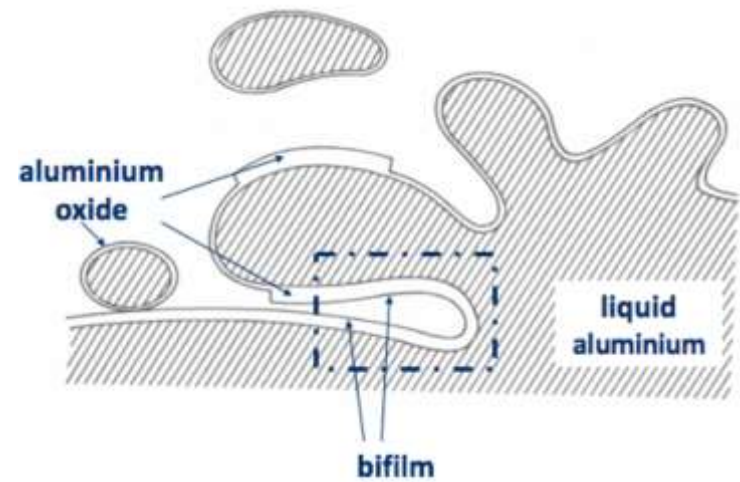
kötü



iyi



# Bifilm Index

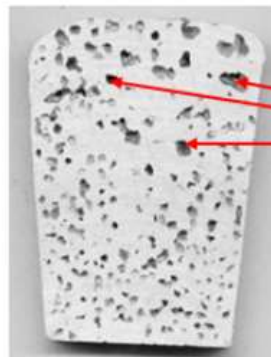


$$\text{Bifilm Index} = \frac{\sum(\text{max pore length})}{\text{total oxide length}}$$

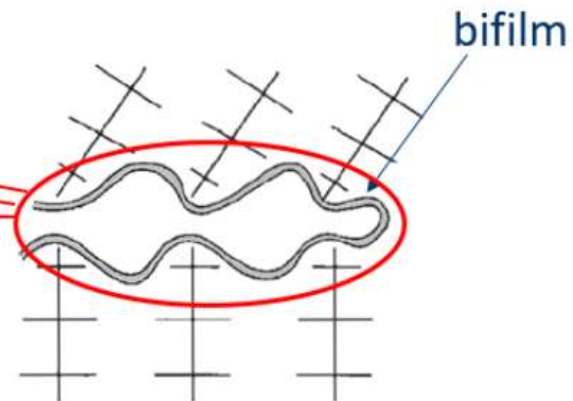
total oxide length



air



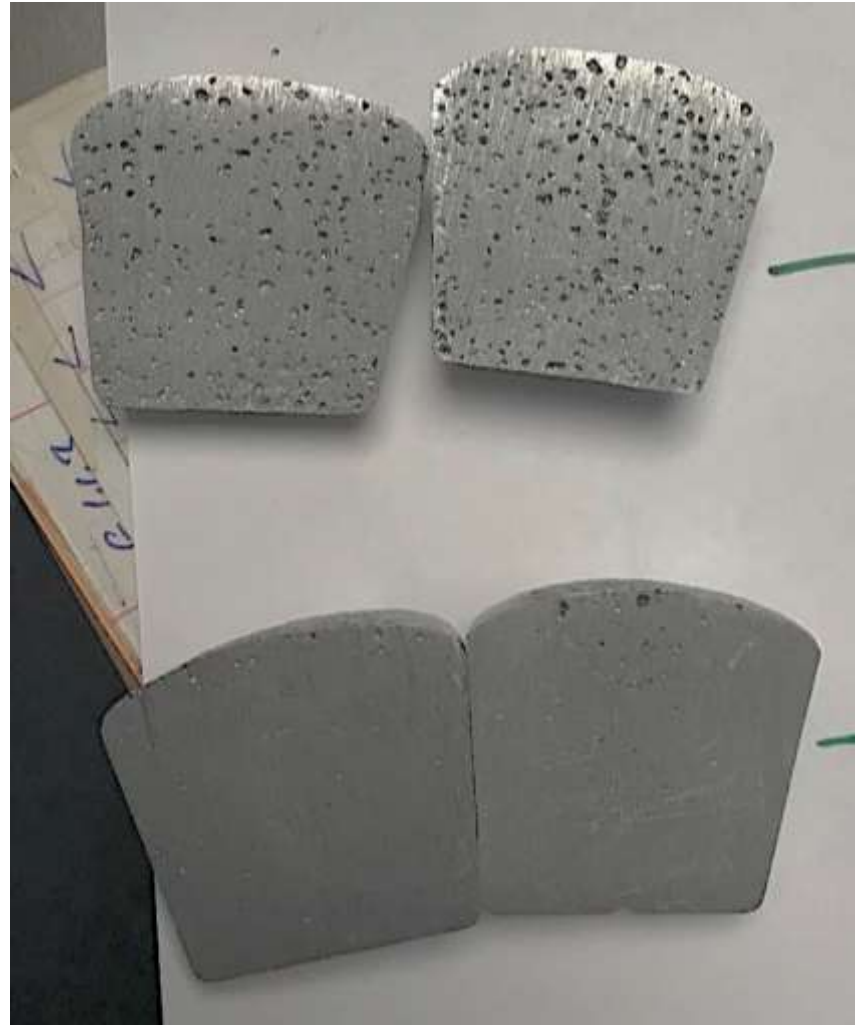
vacuum



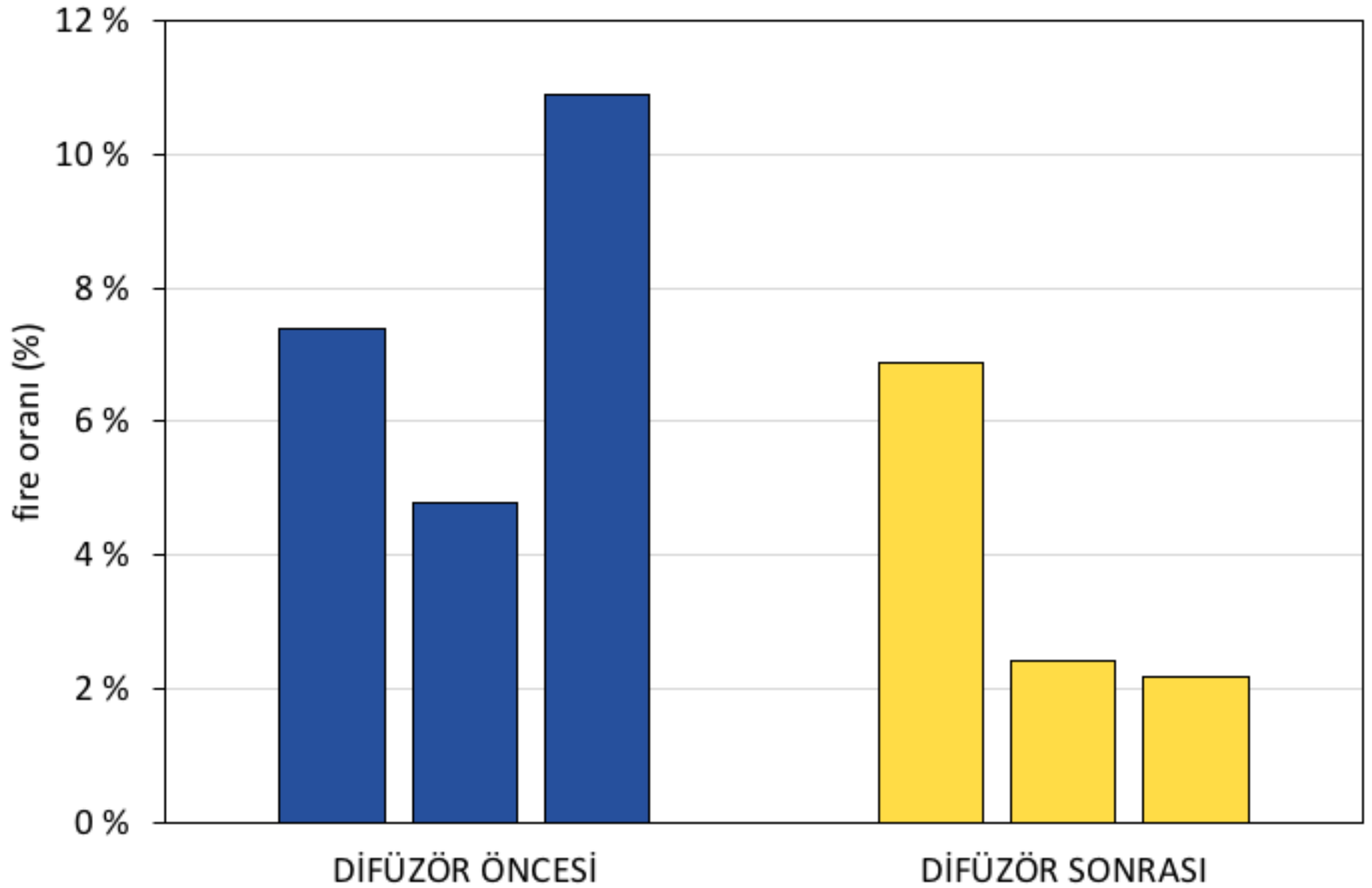




**Bl: 210 mm**



**Bl: 45 mm**



# Sonuç

- Doğru gaz giderme yöntemi, uygun kabarcık oluşumu ile sıvı metal içerisindeki bifilmeler temizlenebilir ve sıvı metal kalitesi arttırılabilir
- Uygun gaz giderme ile fire oranları %2'lere kadar düşürülebilir

# TEŞEKKÜRLER

