

**TEKNİK ŞARTNAME/
TECHNICAL SPECIFICATION****ALLOYING ELEMENT (Chromium)**

Döküman No
Document No : TŞ.068
İlk Yayın Tarihi
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REVİZYON TARİHÇESİ/REVISION HISTORY

Rev. No	Revizyon Tarihi <i>Revision Date</i>	Revizyon Açıklaması <i>Revision Explanation</i>	Değişen Sayfa <i>Changed Page</i>	Revize Eden <i>Revised By</i>
1	14.10.2011	Change of people responsible with the issuing of this document does not change the acceptance criteria.		Murat Dünder
2	22.11.2011	Responsibility part has been updated. Change in acceptance criteria for physical properties Metallographic properties part has been removed		Murat Dünder
3	20.12.2011	Change in acceptance criteria for chemical properties		Murat Dünder
4	27.09.2013	Document has been revised	All	Murat Dünder

1.0. KAPSAM/SCOPE

This specification identifies the required properties of Chromium (Cr) master alloy added into the liquid aluminum in alloying practices of ASSAN aluminum.

2.0. MALZEME TANIMI VE ÖZELLİKLERİ/ PRODUCT DESCRIPTION AND SPECIFICATIONS

The materials to be delivered shall meet the qualities stipulated in this specification.

2.1. Chemical Composition

By mass,

Cr %	Si	Fe	Cu	Mn	Mg
18 - 22	<0,50	<0,70	<0,20	<0,40	<0,50


2.2. Physical Properties

No oxidation or dirt (rust, mud etc.) should be present on the surfaces of waffles.

2.3. Dissolution in liquid metal

The recovery rate of Cr element in the metal bath must be above 95% for the application temperature of 700-800 °C at the end of 30 minutes.

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YETKİLİ İSİM/ <i>RESPONSIBLE</i>			
TARİH/ <i>DATE</i>			

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3.0. TEST SERTİFİKASI VE / VEYA KOŞULLARI/ TEST CERTIFICATE AND/OR CONDITIONS

The supplier shall provide a test certificate for each material delivered showing the content of the master alloy that comply the specified values above. The following information must be included in the certificate:

Supplier's Name
Assan Order Number
Material Test Results
Product Name (and code, if available)

4.0. TESLİMAT ŞEKLİ/ DELIVERY CONDITIONS

4.1. Packaging

Shall be packed in maximum 1.5-ton pallets that are not affected by the environmental conditions (such as rain, moisture, mud and dust) and the packaging shall allow ease of handling by forklift. Every package or pieces should not exceed 15 kg.


Height (mm)	Length (mm)	Width (mm)
1200	1100	1150

4.2. Labeling

The following information should be shown on the label prepared for each skid:

Supplier's Name
Material Name
Net Weight
Shipping date
Production no

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5.0. YÜKÜMLÜLÜK/ OBLIGATION

The supplier is obligated to meet the requirements indicated in this specification for each lot of materials delivered. The materials that do not meet with the requirements specified shall be returned. ASSAN may charge all the losses originating from the master alloy itself, that does not comply the specification, to the supplier, including all the processing cost so far incurred and any charges endorsed by the customer of ASSAN. In case of any discrepancy related to the quality issue violating the specification, the investigation reports issued by local research institute, TUBİTAK or universities İTÜ, ODTÜ, YTÜ will be employed for resolution.

6.0. SORUMLULUK/ RESPONSIBILITIES

The Product and Process Development Department is responsible from checking of certificate provided by the supplier for compliance with the specification. The Cast shop is responsible for checking physical properties and the proper use of the material in prescribed practices.

7.0. DİĞER HUSUSLAR/ OTHER

Supplier is obliged to have master alloy be tested in an accredited laboratory once in a year and submit the results to ASSAN.

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