

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

Döküman No
Document No : TŞ.055
İlk Yayın Tarihi
Publish Date :-
Rev. Tarihi
Rev.Date :27.09.2013
Rev. No: :5
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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		
2		
3	14.10.2011	Change of people responsible with the issuing of this document does not change the acceptance criteria.		
4	22.11.2011	Responsibility part has been updated. Change of acceptance criteria for physical properties.		
5	27.09.2013	Revised.	All	M.Dündar

1.0. KAPSAM/SCOPE

This specification identifies the required properties of Manganese (Mn) 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

Form of master alloy	By weight (%)	
	Mn	Al ve flux
%75 tablet	% 74-76	% 24-26
% 80 tablet	% 79-81	% 19-21

2.2. Physical Properties

No oxide deposits, swelling or any dirt (rust, mud etc.) should be present on the surface of tablet and pallets. Tablets shall be intact enough not to fall apart during handling.

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İMZA/ <i>SIGNATURE</i>			

TEDARİKÇİ ONAYI/ APPROVAL OF SUPPLIER

TEDARİKÇİ ADI/ <i>SUPPLIER NAME</i>		MÜHÜR / İMZA/ <i>SIGNATURE</i>
YETKİLİ İSİM/ <i>RESPONSIBLE</i>		
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2.3. Dissolution in liquid metal

The recovery rate of Mn element in the metal bath must be above 95% for the application temperature of 700-800 °C at the end of 45 minutes.

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
Chemical analysis
Product Name (and code, if available)

4.0. TESLİMAT ŞEKLİ/ DELIVERY CONDITIONS**4.1. Packaging**

Shall be packed in maximum 1.5-ton packages 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.

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

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Production no

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 from 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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