

BRAMMER STANDARD COMPANY, INC.

Provisional Certificate of Analysis BS 285CH

Certified Reference Material for Chill Cast Iron

	Estimated Analysis ¹		Estimated Analysis ¹
Analysis listed as percent by weight			
Al	0.021	Nb	0.005
As	0.002	Ni	1.28
B	0.008	P	0.050
C	3.30	Pb	0.001
Ca	0.002	S	0.009
Co	0.005	Sb	0.013
Cr	1.00	Si	1.95
Cu	0.30	Sn	0.002
Fe	[90.9]	Ti	0.045
Mg	0.039	V	0.13
Mn	0.70	W	0.048
Mo	0.19	Zr	0.006

¹ The estimated value listed is the present best estimate of the true value. Values are given in weight percent.

Form: This CRM is machined in the form of a disc approximately 33mm in diameter and 30mm thick by Brammer Standard Company, Inc.

A detailed final certificate of analysis will be supplied by November 23, 2024.

285CH	V	W	Zn	Zr									
CSONH													
SAES 10/19	0.134	0.0484		0.0049									
SAES 10/24	0.133	0.0486		0.005									
SAES 10/26	0.134	0.0484		0.005									
SAES 10/31	0.133	0.0481		0.0049									
SAES 11/3	0.133	0.0477		0.0049									
SAES Depth	0.135	0.0489		0.005									
GDS 10/26	0.134	0.0466		0.0061									
GDS 10/31	0.135	0.0463		0.007									
GDS 11/3	0.135	0.0478		0.0066									
GDS 11/3	0.135	0.0469		0.007									
GDS 11/3	0.134	0.0464		0.0069									
GDS Depth	0.134	0.0477		0.0068									
MTR	0.1412												
Average	0.13463	0.04765		0.00584									
Certificate	0.13	0.048		0.006									

Homogeneity: This Certified Reference Material (CRM) was tested for homogeneity using ASTM Standard Method E826 and found acceptable. It was also examined by spark atomic emission spectrometry and found to be compatible with the following Reference Materials — BS 27, 284D, 285, 285AA, 285BB, 285BF, 285BJ, 286CF; CKD 244.

Validity statement: ISO Guide 31 states that the certification should contain an expiration date for all materials where instability has been demonstrated or is considered possible, after which the certified value is no longer guaranteed by the certifying body. The certification of BS 285CH is valid indefinitely. The certification is nullified if this CRM is damaged, contaminated, or otherwise modified.

Storage: This CRM must be stored in a cool, dry, non-corrosive environment.

Certified Area: The certified area of each disc is the portion extending upward 25mm from the analytical surface.

Note: Shrinkage cavities may appear in the top portion of some discs. These cavities are normal and will not affect the certified portion of the disc.

Sample Preparation: For best analytical results, use the same method for preparing the analytical surface on all reference materials as used for production specimens. Avoid overheating the sample during surface preparation.

Caution: CRM contains significant insoluble soft metal inclusions. Surface smearing may occur. Spark atomic emission spectrometers may require extended preburns to compensate.

Safety Notice: A Safety Data Sheet (SDS) is not required for this material. This material will not release or otherwise result in exposure to a hazardous chemical, under normal conditions of use. Inquiries concerning this Reference Material should be directed to:

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 Houston, Texas 77069-2895 USA

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Fax: (281) 440-4432

Web: www.brammerstandard.com
Email: contact@brammerstandard.com

Certified by: _____ on November 23, 2022.

Beau R. Brammer
 President