

GOVERNMENT OF ODISHA  
FOOD, SUPPLIES & CONSUMER WELFARE DEPARTMENT

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No. QC-7/16(Part)

8303

/ Bhubaneswar, Dated,

21-4-16

From

Sri Bijay Kumar Prusty, OAS-Gr'A'(S.B)  
Deputy Secretary to Govt.

To

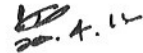
The Managing Director, OSCSC Ltd, Bhubaneswar.

Sub: Problem faced by State agencies to deliver CMR to FCI on account of low weight of newly specified gunny bags of 580gms as per IS 16186:2014 for packing food grains.

Sir,

In inviting a reference to the subject cited above, I am directed to enclose here with a copy of letter no .TX 03/ Misc dt 16.03.16 of DDG, Standardization, BIS, Government of India for taking necessary action at your end.

Yours faithfully,

 20.4.16

Deputy Secretary to Govt.



Speed Post

D/N O = 3623/FSCW  
26.3.16

153



मानक: पथप्रदर्शकः

## भारतीय मानक ब्यूरो

उपभोक्ता मामले, खाद्य एवं सार्वजनिक वितरण मंत्रालय, भारत सरकार  
मानक भवन, 9 बहादुरशाह ज़फर मार्ग, नई दिल्ली-110002

### BUREAU OF INDIAN STANDARDS

Ministry of Consumer Affairs, Food & Public Distribution, Govt. of India  
MANAK BHAVAN, 9, BAHADUR SHAH ZAFAR MARG, NEW DELHI-110002

डी. क. नैयर

वैज्ञानिक-जी एवं उप महानिदेशक (मानकीकरण)

D. K. NAYYAR

SCIENTIST-G & DDG (STANDARDIZATION)

By Secy (Pwr)  
22/3

Our Ref: TX 03/Misc

16 March 2016

**Subject: Problem faced by State agencies to deliver CMR to FCI on account of low weight of newly specified gunny bags of 580 grams as per IS 16186:2014 for packing foodgrains**

Shri Madhusudan Padhi, IAS  
Principal Secretary  
Food Supplies & Consumer Welfare Department,  
Orissa State Secretariat,  
Sachivalaya Marg,  
Unit-2, Bhubaneswar, Orissa,

Dear Sir,

This has reference to your letter No. QC-7/16(Pt) 3641/SFSCW dated 17.02.16 addressed to the Chairman-Cum-Managing Director FCI, New Delhi with a copy endorsed to Director General, BIS vide Memo No.-3647 dated 17.02.2016 regarding the problem of low weight of 580 gms Light Weight Jute Sacking Bags for packing 50 kg foodgrains as per IS 16186:2014 and request for allowing the additional negative tolerance of 5% over and above the existing tolerance of (-) 6% on the bag weight.

In this regard, this is stated that the Indian Standard on Light Weight Jute Sacking Bags for packing 50 kg Foodgrains, IS 16186:2014, specifies the corrected mass per bag as 580 gms  $\pm$  8.0% - 6.0% (i.e 545.2 gm to 626.4 gm) at a contract moisture regain of 20%. Thus, while calculating the mass of the Jute Bags, appropriate calculation in line with the moisture regain as specified above are needed to be carried out. The method and illustration to calculate the corrected mass of jute bags is attached in the Annex for your ready reference.

From the Annex, it is clear that the correct weight of the bag can only be calculated after taking into consideration the observed moisture regain and hence request for allowing additional negative tolerance of 5% on the bag weight cannot be justified as per the existing provision given in the standard.

In this context, this is also informed that Smt. Seema Kakar, Executive Director, FCI along with her team visited BIS recently regarding the above clarification and the method to calculate corrected mass of the Jute Bags on actual moisture regain at consignee end was explained to her.

However, even after considering the contract moisture regain, if the mass of the bag is still reported to be less than the specified value, the same may be informed to us for taking up the issue appropriately at our end.

With Regards,

Yours Sincerely,



D. K. Nayyar  
DDG, Standardization

ANNEX

ILLUSTRATION OF CALCULATING CORRECTED MASS OF JUTE BAGS

Corrected mass can be calculated by the following formula as specified in clause 8.5.2 of IS 9113:2012:

$$\text{Corrected mass of the bag} = \frac{\text{Observed mass} \times (100 + \text{Contract moisture regain, Percent})}{(100 + \text{Observed moisture regain, Percent})}$$

As per clause 5.3 of IS 16186:2014, contract moisture regain has been specified as 20%.

Two illustrations are provided:

**Illustration 1-**

- i) Observed mass of bag- 540 grams
- ii) Observed moisture regain- 18%
- iii) Contract moisture regain- 20%

$$\begin{aligned} \text{Corrected mass of bag} &= \frac{540 (100+20)}{(100+18)} \\ &= 549.15 \text{ grams} \end{aligned}$$

From the above, it is clear that although the sample appears to failing in the mass requirement. However, when corrected mass was calculated, it is meeting the requirement of specification.

**Illustration 2-**

- i) Observed mass of bag- 560 grams
- ii) Observed moisture regain- 25%
- iii) Contract moisture regain- 20%

$$\begin{aligned} \text{Corrected mass of bag} &= \frac{560 (100+20)}{(100+25)} \\ &= 537.6 \text{ grams} \end{aligned}$$

From the above, it is clear that although the sample appears to passing in the mass requirement. However, when corrected mass was calculated, it is not meeting the requirement of specification.