

**HSFG Bolts**

<b>Sl. No.</b>	<b>Thread Type</b>	<b>Thread Length (mm)</b>	<b>Length (mm)</b>	<b>Total Requirement in Nos</b>
<b>SHOP</b>				
1	M16	38	60	<b>918</b>
2	M20	45	55	<b>5832</b>
3	M20	55	65	<b>3285</b>
4	M20	46	75	<b>828</b>
<b>TOTAL - SHOP BOLTS</b>				<b>10863</b>
<b>SITE</b>				
1	M20	36	55	<b>9990</b>
2	M20	36	60	<b>378</b>
3	M20	36	65	<b>2052</b>
4	M22	38	60	<b>4995</b>
6	M22	38	70	<b>40185</b>
7	M22	38	75	<b>9315</b>
9	M22	38	85	<b>11835</b>
10	M22	38	90	<b>990</b>
11	M22	38	95	<b>1053</b>
12	M22	38	100	<b>882</b>
13	M22	43	120	<b>3465</b>
14	M22 [Taper Washer]	38	75	<b>450</b>
<b>TOTAL - SITE BOLTS</b>				<b>85590</b>

**THE BRAITHWAITE BURN & JESSOP CONSTRUCTION CO. LTD.**

( A Govt. of India Enterprise )

**HSFG BOLT ORDER LIST FOR SHOP**

MADE BY - R.Bose

CHECKED BY- S. Majumder

DATE - 18.05.2023

PROJECT:- 9x45.7 M. 25 T. AXLE LOADING STD WELDED GIRDER FOR  
BR. NO.-63D GADAG-HOTGI DOUBLING PROJECT, KARNATAKA

ORDER NO.- HSGF/SHOP/2151/45.7/01

RDSO'S DRG.NO.-

ORDER NO.- 2151

REV.- DATE:

	Gross Nos. For 9 Nos. Span	Gross Nos. For 1 No. Span	BOLT HEAD & NUT TYPE	THREAD TYPE	GRIP (in mm)	THREAD LENGTH (IS:3757) (in mm)	Bolt Length Provided (in mm)	REMARKS
<b>HEX. HD. HSGF BOLTS, NUTS, PLAIN WASHER/TAPER WASHER, DTI WASHER ( FOR 9x45.7 M. SPAN)</b>								
	<b>ORDER QTY</b>							
	With Spare							
	918	102	HEX.	16	30	38	60	EACH HSGF HEX. HD. BOLT CONSIST OF ONE DTI WASHER, ONE PLAIN WASHER & ONE HEX. HD. NUT.
<b>Total=</b>	<b>918</b>	<b>102</b>						
	5832	648	HEX.	20	20	45	55	
	3285	365	HEX.	20	30	55	65	
	828	92	HEX.	20	40	46	75	
<b>Total=</b>	<b>9945</b>	<b>1105</b>						

**NOTE:-**

- ALL HSGF BOLTS ARE CL-8.8 (AS PER RDSO. DRG. NO. B-11760/R) CONFORMING TO IS:4000-1992, IS: 3757-1985 (REAFFIRMED 2003).
- ALL NUTS ARE CONFORMING TO IS:6623-2004 & IS:1367, PART-6 & PLAIN/TAPER WASHERS (for ISMC) ARE CONFORMING TO IS:6649.
- EACH HSGF HEX. HD. BOLT CONSIST OF ONE DTI WASHER, ONE PLAIN/TAPER WASHER (As Required) & ONE HEX. HD. NUT.
- ALL BOLTS, NUTS & WASHERS MUST HAVE IDENTIFICATION MARK & MANUFACTURER'S SYMBOL & PROPERTY CLASS.
- ALL BOLTS, NUTS & WASHERS MUST HAVE MANUFACTURER'S TEST CERTIFICATE IN ADDITION THREE SETS OF RANDOM SAMPLE CONSISTING OF 1 NO. Hex. HD. BOLT+Hex. HD. NUT+PLAIN WASHER/TAPER FROM EACH LOT TO BE SENT TO REPUTED INDEPENDENT NABL ACCREDITED LABORATORY.
- ALL BOLTS, NUTS & WASHERS SHOULD HAVE COATING OF ZINC PHOSPHATE AS PER IS 1367 (PART-XII).
- BOLT LENGTH WITH RESPECT TO GRIP & OTHER ALL DIMENSIONAL DETAILS TO BE VERIFIED BY THE PARTY PRIOR TO APPROVAL OF MANUFACTURING.
- DIMENSIONAL DETAILS TO BE PROVIDED BY THE PARTY FOR PRIOR APPROVAL BEFORE MANUFACTURE.

*Handwritten signature and date: 18/05/23*

Requisition No:- **D/2344**

DATE:- **20.05.2023**

**THE BRAITHWAITE BURN & JESSOP CONSTRUCTION CO. LTD.**

( A Govt. of India Enterprise )

**HSFG BOLT ORDER LIST FOR SITE**

MADE BY - R. Bose

CHECKED BY- S. Majumder

DATE - 18.05.2023

PROJECT:-

9x45.7 M. 25 T. AXLE LOADING STD WELDED GIRDER FOR  
BR. NO.-63D GADAG-HOTGI DOUBLING PROJECT, KARNATAKA

ORDER NO.- HSFG/SITE/3132/45.7/01

RDSO'S DRG.NO.-

ORDER NO.- 3132

REV.-

DATE:

	Gross Nos. For 9 Nos. Span	Gross Nos. For 1 No. Span	BOLT HEAD & NUT TYPE	THREAD TYPE	GRIP (in mm)	THREAD LENGTH (IS:3757) (in mm)	Bolt Length Provided (in mm)	REMARKS
<b>HEX. HD. HSFG BOLTS, NUTS, PLAIN WASHER/TAPER WASHER, DTI WASHER ( FOR 9x45.7 M. SPAN)</b>								
<b>ORDER QTY</b>								
	<b>With Spare</b>							
	9990	1110	HEX.	M 20	20	36	55	EACH HSFG HEX. HD. BOLT CONSIST OF ONE DTI WASHER , ONE PLAIN WASHER & ONE HEX. HD. NUT.
	378	42	HEX.	M 20	22	36	60	
	2052	228	HEX.	M 20	26,30	36	65	
<b>Total=</b>	<b>12420</b>	<b>1380</b>						
	4995	555	HEX.	22	19,20,22	38	60	EACH HSFG HEX. HD. BOLT CONSIST OF ONE DTI WASHER , ONE PLAIN WASHER & ONE HEX. HD. NUT.
	1260	140	HEX.	22	26	38	65	
	40185	4465	HEX.	22	28,30,32	38	70	
	9315	1035	HEX.	22	34,35,36	38	75	
	6300	700	HEX.	22	38,40,42	38	80	
	11835	1315	HEX.	22	44,45,46	38	85	
	990	110	HEX.	22	48,52	38	90	
	1053	117	HEX.	22	54,55	38	95	
	882	98	HEX.	22	62	38	100	
	3465	385	HEX.	22	76	43	120	
<b>Total=</b>	<b>80280</b>	<b>8920</b>						
	450	50	HEX.	22	25	38	70	EACH HSFG HEX. HD. BOLT CONSIST OF ONE DTI WASHER, ONE TAPER WASHER & ONE HEX. HD. NUT.
<b>Total=</b>	<b>450</b>	<b>50</b>						

**NOTE:-**

- ALL HSFG BOLTS ARE CL-8.8 (AS PER RDSO. DRG. NO. B-11760/R) CONFORMING TO IS:4000-1992, IS: 3757-1985 (REAFFIRMED 2003).
- ALL NUTS ARE CONFORMING TO IS:6623-2004 & IS:1367, PART-6 & PLAIN/TAPER WASHERS (for ISMC) ARE CONFORMING TO IS:6649.
- EACH HSFG HEX. HD. BOLT CONSIST OF ONE DTI WASHER, ONE PLAIN/TAPER WASHER (As Required) & ONE HEX. HD. NUT.
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- ALL BOLTS, NUTS & WASHERS MUST HAVE MANUFACTURER'S TEST CERTIFICATE IN ADDITION THREE SETS OF RANDOM SAMPLE CONSISTING OF 1 NO. Hex. HD. BOLT+Hex. HD. NUT+PLAIN WASHER/TAPER FROM EACH LOT TO BE SENT TO REPUTED INDEPENDENT NABL ACCREDITED LABORATORY.
- ALL BOLTS, NUTS & WASHERS SHOULD HAVE COATING OF ZINC PHOSPHATE AS PER IS 1367 (PART-XII).
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- DIMENSIONAL DETAILS TO BE PROVIDED BY THE PARTY FOR PRIOR APPROVAL BEFORE MANUFACTURE.

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