

Indiana Gratings Pvt. Ltd.

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11/15
033



MILL TEST CERTIFICATE

[SSIPL/995/2014 : SSIPL/993/2014 : SSIPL/1133/2014 : SSIPL/1136/2015 : SSIPL/1134/2015 : SSIPL/051/2015 : SSIPL/047/2015]
 [SSIPL/00136/2015 : SSIPL/00137/2015 : SSIPL/00146/2015 : SSIPL/00145/2015 : SSIPL/00147/2015 : SSIPL/1296/2015]
 [SSIPL/1297/2015 : SBIPL/452/2014 : SBIPL/451/2014 : SBIPL/835/2014 : SBIPL/834/2014 : SBIPL/833/2014 : SBIPL/831/2014 :: PLS_09E14_014/1]
 [Heat no. : SB/C/152/14 : SB/C/180/15 : SB/C/12/15 : SB/C/033/15 : SB/C/215/15 : SB/C/033/14 : SB/C/127/14]

MTC NO. & DATE	MT - 11 / 2015-16 17.06.2015
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IMPORTER	: NIPPON STEEL & SUMIKIN BUSSAN AMERICAS , INC. 8600 W BRYN MAWR AVE. SUITE 580N CHICAGO, IL 60631, USA.
P.O. NO. & DATED	: 800506/PO149481-11 Dated - 22.05.2015
LC NO.	:
EXPORTER	: Indiana Gratings Pvt. Ltd., MUMBAI [Invoice no : IGPL / 7116 :: 17.06.2015]
JOB NO. & DATE	: E-15/13
PACKING LIST NO.	: 11 / 15 - 16

SPECIFICATION'S :

PRODUCT : ELECTROFORGE GRATINGS

PRODUCT DETAILS	BEARING BAR	CROSS BAR	FRAME BAR	MESH	QTY.	SIZE	FINISH
	1-1/4" X 3/16" Serrated	7 mm sq. twist.	Open end	1-3/16" X 4"	96 no's.	36" X 240"	Self Colour
	1" X 3/16" Serrated	7 mm sq. twist.	Open end	1-3/16" X 4"	100 no's.	36" X 240"	Self Colour
	1" X 3/16" Serrated	7 mm sq. twist.	Open end	1-3/16" X 4"	250 no's.	24" X 240"	Galvanized
	1" X 3/16" Serrated	7 mm sq. twist.	Open end	1-3/16" X 4"	1000 no's.	36" X 240"	Galvanized
	1-1/4" X 3/16" Serrated	7 mm sq. twist.	Open end	1-3/16" X 4"	496 no's.	36" X 240"	Galvanized
	1-1/2" X 3/16" Serrated	7 mm sq. twist.	Open end	1-3/16" X 4"	500 no's.	36" X 240"	Galvanized

CHEMICAL ANALYSIS :

	1-1/4" X 3/16"(Sr.)	1" X 3/16"(Sr.)	1" X 3/16"(Sr.)	1" X 3/16"(Sr.)	1-1/4" X 3/16"(Sr.)	1-1/2" X 3/16"(Sr.)	7 MM ² Twisted
CARBON	0.19%	0.17%	0.20%	0.17%	0.16%	0.19%	0.14%
SULPHUR	0.030%	0.029%	0.029%	0.024%	0.029%	0.027%	0.025%
PHOSPHORUS	0.037%	0.037%	0.038%	0.036%	0.035%	0.039%	0.036%
SILICON	0.18%	0.17%	0.15%	0.16%	0.17%	0.19%	0.14%
MANGANESE	0.59%	0.57%	0.61%	0.57%	0.58%	0.58%	0.41%
CARBON EQUI.	0.29%	0.27%	0.30%	0.27%	0.26%	0.29%	Cu - 0.003%

MECHANICAL PROPERTIES :

	1-1/4" X 3/16"(Sr.)	1" X 3/16"(Sr.)	1" X 3/16"(Sr.)	1" X 3/16"(Sr.)	1-1/4" X 3/16"(Sr.)	1-1/2" X 3/16"(Sr.)	7 MM ² Twisted
Gauge Width	1-1/4"	1"	1"	1"	1-1/4"	1-1/2"	7 mm
Thickness	3/16"	3/16"	3/16"	3/16"	3/16"	3/16"	7 mm
Yield Stress [Mpa]	319	336	317	307	327	307	444.79
Ultimate Tensile Strength [Mpa]	514	533	525	495	510	500	521.47
Elongation	30.3%	30.6%	30.6%	31.1%	28.9%	31.5%	23.50%
Former Diameter for Bend	1.51=7.1 mm	1.51=7.1 mm	1.51=7.1 mm	1.51=7.1 mm	1.51=7.1 mm	1.51=7.1 mm	21 mm
Bend test	180 DEG.	180 DEG.	180 DEG.	180 DEG.	180 DEG.	180 DEG.	180 DEG.

Material confirms to ASTM A 36
 Hot Dip Galvanising confirms to ASTM A 123
 Gratings Manufactured as-per NAAMM MBG-531-00



For - IGPL Q.C.

FORM NO. : QC/F/37/RO

FACTORY: Plot No. D-5, D-7, D-9, MIDC, Jejuri 412 303, Dist. Pune, Maharashtra, India.

