GRAVITY CAST PVT. LTD.
GRAVITY GROUP OF COMPANIES

Material - SAE J 1442 Grade 450

Standard Specification for High-Strength, Hot-Rolled Steel Bars

Group - Ferrous Mild Steel Alloys

Sub Group - SAE J 1442 Grade 450 High-Strength, Hot-Rolled Steel Bars

Application - Intended for Valve, Pump, General Engineering, Automotive and other Industries

Grade Belongs to the Industry - Steel and Bars

Chemical Composition		
Carbon	C %	0.260 max.
Manganese	Mn %	1.650 max.
Silicon	Si %	0.400 max.
Phosphorus	P %	0.040 max.
Sulphur	S %	0.050 max.
Iron	Fe %	Balance
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-

Heat Treatment
As-Raw

Mechanical Properties	
Tensile Strength in Mpa	725 max.
Yield Strength in Mpa	450 min.
Elongation in %	17 min.
Reduction of Area in %	-
Hardness in HRB	-
Impact in Joule	-

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Cross Reference Table			
Material	**Standard**	**Country**	**Grade Belong to the Industry**
J 1442 450A	SAE	USA	Plates, Bars and Shapes
G 5102 SCW 450	JIS	Japan	Steel and Casting
G 3115 SPV 450	JIS	Japan	Steel and Plates
A 49-402 TS E 450	AFNOR NF	France	Steel and Pipe
A 49-501 TS E 450 2	AFNOR NF	France	Steel
A 49-501 TS E 450 3	AFNOR NF	France	Steel
A 49-501 TS E 450 4	AFNOR NF	France	Steel

Further any inquiry to discuss with Gravity Cast Pvt. Ltd. – Gravity Group of Companies team member Call on +918469160029, or email marketing@gravitycastindia.com

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