

Gold Star Steels (P) Ltd.

MANUFACTURER OF S.G. IRON ACCICULAR ROLLS, ADAMITE ROLLS,
ALLOY AND CARBON STEEL INGOTS



Shaping the
METAL
for **FUTURE**



Adamite Rolls

S. G. Accicular Rolls

Alloy & Carbon Steel Ingots

53/A, Industrial Area, Bhanpuri, P.O.: Birgaon, RAIPUR 493 221 (C.G.) INDIA

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About Gold Star Steels (P) Ltd.

Gold Star Steels (P) Ltd. is an induction melting foundry.

Established in the year _1999. **Gold Star Steels (P) Ltd.** has made its market in the world market as one of the leading manufactures of Ductile Iron, Grey cast Iron & Cast Steel products.

We Manufacture all Grades of Adamite and S.G. Acicular Rolls

We Manufacture SGCI Inserts for Railway Sleepers Under strict quality control measures of RITES and RDSO.

We Manufacture 3 x 3 ply High Carbon Wires for Railway Sleepers and various other applications.

We Manufacture Ductile Iron Manhole covers other general agriculture and industrial castings.

We are proud to declare that we have Fully Equipped Laboratory and state of art testing facility.

From Spectrometer to chemical testing lab, from UTMs to Load Testing machines everything required we have under one roof.



OUR QUALITY

We have an experience team of engineers & a full proof **QUALITY ASSURANCE PLANE** which helps us to successfully meet the quality requirement of our clients. Our labs are fully equiped as detailed bellow :

1. Sand Labs :

For testing Moisture, Sand Compatibility, Sand Compressive, Permeability, clay content, sieve Analysis, Mould Hardness Testers etc.

2. Chemical Labs :

Instant determination of C, Si, S, P, Mn, Residual Mg, CE. wet lab for fuel Chemical Analysis.

3. Physical Lab :

Computerized Universal testing Machine, Microscope with image Analyzer, Brinell Hardness tester, temperature thru immersion pyrometer.

4. Load Testing Machine

We have 60 MT break load testing facility.



Our Products & Specifications

Grades of Casted Rolls

	C%	Mn%	Si%	S%	P%	Cr%	Ni%	Mo%	V%
Adamite Rolls (Hardness 40 - 45 Shore)	1.40-1.60	0.45-0.65	0.45-0.50	0.050 Max	0.050 Max	1.00-1.15	0.60-0.80	0.25-0.35	0.10 Max
Adamite Rolls (Hardness 45 - 50 Shore)	1.50-1.70	0.55-0.75	0.50-0.55	0.050 Max	0.050 Max	1.15-1.35	1.00-1.20	0.30-0.40	0.10 Max
Adamite Rolls (Hardness 50 - 55 Shore)	1.70-1.80	0.65-0.85	0.55-0.60	0.050 Max	0.050 Max	1.30-1.50	1.10-1.35	0.40-0.50	0.10 Max
S.G. Iron Rolls Grade - I (Pearlitic) (Hardness 52 - 57 Shore)	3.10-3.60	0.50-0.65	1.60-1.75	0.020 Max	0.045 Max	0.55-0.60	1.70-1.90	0.40-0.50	-
S.G. Iron Rolls Grade - II (Pearlitic) (Hardness 58 - 63 Shore)	3.10-3.40	0.50-0.70	1.55-1.70	0.020 Max	0.045 Max	0.65-0.70	1.9-2.15	0.45-0.65	-
S.G. Iron Rolls Indefinite Chill Roll (Accicular) Grade - I (Hardness 63 - 68 Shore)	3.10-3.35	0.60-0.75	1.45-1.65	0.020 Max	0.045 Max	0.65-0.75	2.10-2.75	0.60-0.80	-
S.G. Iron Rolls Indefinite Chill Roll (Accicular) Grade - II (Hardness 68 - 75 Shore)	3.10-3.25	0.60-0.80	1.40-1.60	0.020 Max	0.045 Max	0.70-0.80	2.25-3.00	0.65-0.90	-

Chemical Composition of Regular Grades for forging Quality

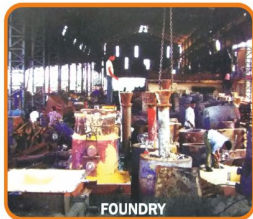
Carbon Steel & Alloy Ingots

	C%	Mn%	Si%	S%	P%	Cr%	Ni%	Mo%	V%
En8	0.35/0.45	0.6/1.00	0.05/0.35	0.05	0.05				
En9	0.5/0.6	0.6/1.00	0.05/0.35	0.05	0.05				
En42	0.70/0.85	0.55/0.75	0.10/0.4	0.04	0.04				
En18	0.35/0.45	0.62/0.95	0.1/0.35	0.05	0.05	0.85/1.15	-	-	
En19	0.35/0.45	0.5/0.8	0.1/0.35	0.05	0.05	0.9/1.5	-	0.2/0.4	
En31	0.9/1.2	0.3/0.75	0.1/0.35	0.05	0.05	1.00-1.6	-	-	
En24	0.35/0.45	0.45/0.70	0.1/0.35	0.05	0.05	0.9/1.4	1.3/1.8	0.2/0.35	
En25	0.27/0.35	0.5/0.7	0.1/0.35	0.05	0.05	0.5/0.8	2.3/2.8	0.4/0.7	
EN 36C	0.12/0.18	0.3/0.6	0.1/0.35	0.05	0.05	0.6/1.1	3.0/3.75	0.1/0.25	
En 353	0.2 MAX	0.5/1.0	0.35 max	0.05	0.05	0.75.1.25	1.0/1.5	0.08/0.15	
16MnCr5	0.14/0.19	1.0/1.3	0.15/0.35	0.04	0.04	0.8/1.1	-	-	-
20MnCr5	0.17/0.22	1.1/1.4	0.15/0.35	0.04	0.04	1.0/1.3	-	-	-
31CrV3	0.28/0.35	0.4/0.6	0.2/0.4	0.04	0.04	0.5/0.7	-	-	0.07/0.12

1. Any Other grade as per requirement can be casted.

Our Workshop Facilities

- **Lathe Machine**
- **Cylindrical Grinding Machine**
- **Horizontal Boring Machine**
- **Shaper Machine**
- **Planer Machine**
- **Radial Drilling Machine**
- **Digital Hardness Tester**



Write Up

Adamite Rolls

These are High Carbon, Alloy Steel Rolls which are given special multi-stage heat-treatment in order to develop the combination of hardness, toughness and wear resistance. The structure produced consists of well broken up and dispersed carbides in matrix of bainite and pearlite.

The high carbide content and tough, hard matrix make these rolls suitable for section rolling.

Application : Small, Medium and Heavy Structure Mills, Plate, Strip and Tube Mills.

S.G. Pearlitic

These are basically a combination of free carbide and hard matrix. These characteristics give the roll good hardness penetration.

Application

1. Intermediate TMT/Wire rod Mill Stands 2. Polish Stand of Patra Mills.

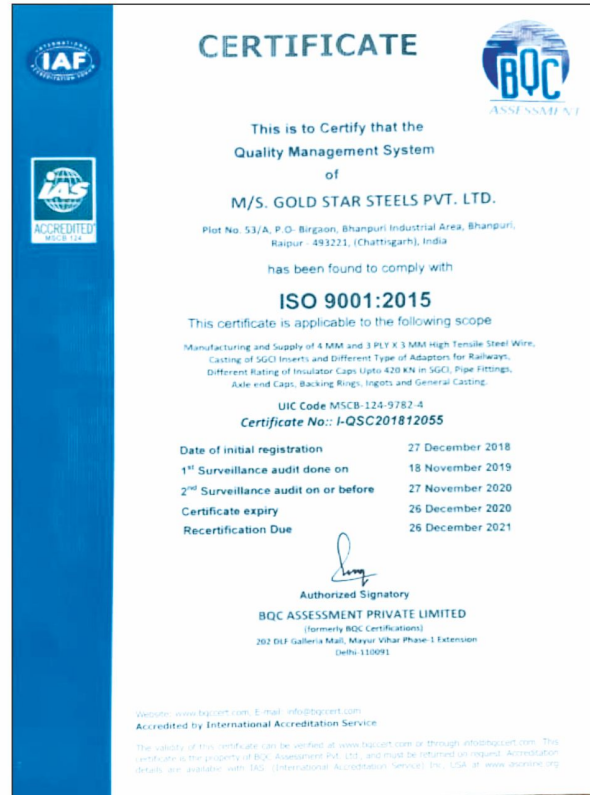
S.G. Accicular

These rolls are stronger and more wear resistant than S.G. Pearlitic rolls and are capable of a higher hardness, especially in depth. These properties are produced by increasing the alloy content mainly nickel, molybdenum and chromium modifying the matrix structure from pearlitic to an accicular form.

Application

Polish continues stand of TMT/Wire rod Coil and medium section mills.

Certificate of Quality Management System ISO 9001:2015



CERTIFICATION AND APPROVALS		
S.NO.	ITEM DESCRIPTION	DRAWING & SPECIFICATION
1.	Spheroidal Graphite Cast Iron Insert	RDSO/T-381 Alt.9 (IRS/T-46-1996)
2.	Spheroidal Graphite Cast Iron Insert	RDSO/T-6901 Alt- 4 & Alt- 5 (IRS/T-46-1996)
3.	Spheroidal Graphite Cast Iron Insert	RDSO/T-3705 (IRS/T-46-1996)
4.	Narrow Jaw Adapter	WD-89067-S-9 Alt.7 (AB/RB-39-2002 Rev. 3)
5.	Wide Jaw Adapter	SK-78527 Alt.5 (AB/RB-39-2002 Rev. 3)
6.	Modified Adapter	WD-85033-S-1 Alt.5 (AB/RB-39-2002 Rev. 3)
7.	Uncoated Stress Relieved Strand for Prestressed Concrete	CM/L-8362276 (IS 6006 : 2014)
8.	Indented Wire For- Prestressed Concrete	CM/L-5900048111 (IS 6003 : 2010)



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Company reserves a right to change the design of the specified models according to the latest technological changes without any prior notice. Information given in the catalogue is just for guidance only.