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सम्हारिका



इ पत्रिका

"EVERY MONTH

BETTER MONTH"

WE ARE SAIL-BSL













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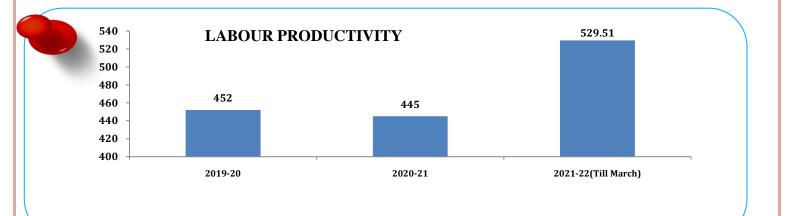
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BSL MANPOWER

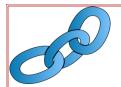
MANP	OWER (As on 0	1.03.2021)	
Exe	N-Ex	Total	Cont. Labour
1841	8599	10440	9013
MI	NES		
Exe	N-Ex	Total	Cont. Labour
257	1442	1699	-

LABOUI	R PRODUCTIVITY	
2020-21	2021-22(Target)	As on 01.03.2022
445.57	639.77	529.51











NSR & Contribution for the Month of Feb 2022

RANKING OF BSL PRODUCTS						
PRODUCT	NSR	VARIABLE COST (Rs./T)	CONTRIBUTION (Rs./T)			
HR COIL	61000	41856	19144			
HR PLATE	62400	42162	20238			
HR SHEET	61600	42162	19438			
CR COIL	64760	45604	19156			
CRM 3: CR COIL	65800	44514	21286			
CR SHEET	64760	48183	16577			
GP COIL/SHEET	71300	52215	19085			
GC SHEET	71300	54073	17227			

Table 1

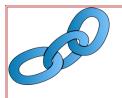
CONVERSION COST FOR THE MONTH OF FEB'22

BREAKUP OF CONVERSION COST							
PRODUCT	OPERATING COST (Rs./T)	OVERHEAD (Rs./T)	INT ON W.C (OWN) (Rs./T)	DEPRN. (OWN) (Rs./T)	INT ON CCS (OWN) (Rs./T)	TOTAL COST (Rs./T)	TOTAL COST (Rs./T)
HR COIL	1621	344	16	200	34	2216	50110
HR PLATE/SHEET	1550	329	4	9	2	1893	52251
CR COIL	1530	325	6	59	10	1930	65041
CRM 3:CR COIL	1266	269	5	1320	224	3082	60797
CR SHEETS	4087	867	3	145	25	5126	72992
GALVANISED COIL	10129	2149	41	293	50	12662	76530
GALVANISED SHEET	6758	1434	26	177	30	8426	85136

Table 2







BSL PERFORMANCE

IRON ZONE						
DESCRIPTION	APP ACTUAL		FULFILLMENT (%)			
	Till Feb 2022					
Oven Pushing(nos./day)	499	457	91			
Sinter	5570	5557	100			
B F Coke	2360000	2170047	92			
Hot Metal	4564	3854	84			

Table 3

STEEL ZONE						
DESCRIPTION	APP	ACTUAL	FULFILLMENT (%)			
	Till Feb 2022					
Crude Steel	4239	3461	82			
SMS(N) {IR+CC}	861	523	61			
CC Slab	3378	2937	87			
Table 4						

MILL ZONE						
DESCRIPTION	APP	ACTUAL	FULFILLMENT (%)			
	Till Feb 2022					
Ingot Rolled	75	114	152			
HR Coil	3961	3560	90			
HR Plate/Sheet	511	499	98			
CR Saleable	1517	1003	66			
CRM- I & II	723	419	58			
CRM-III	794	583	74			
Saleable Steel	3867	3493	90			

Table 5





1. Iron Ore Screening Unit inaugurated in BSL

Under the leadership of Director Incharge BSL Amarendu Prakash Iron ore screening unit to get +30 mm size fraction of Iron Ore Lump for use in SMS in Bokaro Steel Plant was inaugurated by Executive Director (Works) Atanu Bhowmick. CGM (Services) Sanjay Kumar, CGM (PPC&SC) Anil Kumar, CGM (RMHP) D Kumar, CGM(BF) MP Singh, CGM(SMS-NEW) A Kumar, CGM(CO&BPP) Rakesh Kumar, CGM(PF) A Sahu, CGM(Refractoriness) VP Upadhayay, CGM(CED) Shaligram Singh, CGM(Traffic) AK Jha, CGM (SMS-2) MR Gupta, CGM (MRD) R Dhawan, Unit Head (FSNL) S k Poolu, other Chief General Managers and senior officials were present on the occasion. There was leadership of DIC Amarendu Prakash and guidance of ED (Works) Mr. Bhowmik, screening unit was installed by FSNL to cater to the shortfall of scrap in SMS. The use of screened Iron Ore lump in SMS for Steel making will reduce the consumption of scrap for facilitating smooth production of Steel. GM (MRD) R Dutt & Dhananjay Kumar played a significant role in the execution of the whole project.

After the commissioning of Continuous Casting in SMS-New, production from Slabbing Mill at BSL was stopped resulting into shortage of scraps generated through Slabbing Mill route to the tune of 350 Tonnes/Day. To mitigate the problem of shortage of scraps in Steel Melting Shop (SMS), it was felt necessary to use Screened Iron Ore Lump in convertors of SMS as a substitute of scrap. Use of 1 Tonne of screened Iron ore lump replaces nearly 3 Tonne of scrap requirements.



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BSL ACTIVITIES



2. Newly constructed track inaugurated in BSL

The newly constructed track number-247 B&C by the Traffic Department of BSL was inaugurated by the Director-in-Charge Amarendu Prakash. On this occasion, Executive Director (Works) Atanu Bhowmik, Executive Director (Material Management and Additional Charge Personnel and Administration) VK Pandey along with Chief General Managers and other senior officers were present.Track No.-247 B&C was buried by scrap and mud for the last many years. The personnel of the traffic department removed the scrap and mud and made a new construction of this track under the guidance of Chief General Manager (Traffic) AK Jha.

Thus with the construction of track number-247 B and C, the loading time of granulated slag will be reduced within the stipulated time limit and due to less wagon detention, the dispatch of granulated slag will increase by 5 to 10 rakes per month. The granulated slag is transported through track number-247 B&C.







3. BSL Security Department's annual sports competition organized

The annual sports competition of the Security Department of BSL was organized on in the grounds of Trainees Hostel. The competition was inaugurated by VK Pandey, Executive Director (Material Management and Personnel & Administration), BSLCGM Inc (Town Administration) BS Popli, CGM Inc (Personnel) Pawan Kumar, CGM (Personnel) Hari Mohan Jha, CGM (HRD) Manish Jalota, CGM (Security) Manoj Kumar and other officers were present on the occasion. Initially Manoj Kumar welcomed the chief guest and other officials present and gave information about the competition. The competition started after the formal inauguration by the chief guest. A large number of personnel working in the BSL Security Department and Home Defense Corps personnel took part in the competition. In the competition, separate sports like 100 meter, 200 meter and 400 meter running, javelin throw, shot put etc were organized for men and women. Apart from this, Jalebi Race was also organized for the women participants.

At the conclusion of the program, the winners were awarded by BS Popli and Manoj Kumar. Senior Manager of Security Department SK Srivastava and Senior Manager of Sports Department S Rajak contributed significantly in coordinating the programme.



4.DIC BSL inaugurated the Electricity Sub-station

The Director-in-Charge of BSL, Amarendu Prakash inaugurated the new power sub-station in Sector-3E. During this occasion, Chief General Manager (Town Administration) BS Popli, General Manager (Town Administration-Electrical) Rajul Harkarni, General Manager (TA) D Madhukar, General Manager (TA-Water Supply) AK Avinash, along with Town administrations various officers and personnel were present. Under the guidelines of the Director-in-Charge, many new initiatives are being taken to

BOKARO STEEL PLANT | SAMHARIKA

BSL ACTIVITIES

improve the power supply system in the township area which was a big concern. In this episode, there is a plan to install 35 electrical sub-stations in the entire township, which started on February 15 from Sector-3E sub-station. With the replacement of this sub-station, the problem of low voltage in the sector will be removed, as well as the load on the existing transformers will also be reduced, due to which the problem of transformer switch burning and power cut will also be reduced and stable.

Senior officials of the city administration present on the occasion said that the work of HT feeder augmentation of the township would also start in the next four months, which would benefit the residents. The Director-in-Charge took information about the progress in other works from the officers of Township Electrical and directed them to expedite them. After the inauguration of the sub-station, the Director-in-Charge also interacted with the people present and discussed the works initiated for the betterment of township, maintenance of houses, repair of roads, stable electric supply, drainage system and public health and also updated the proposed works. He said that BSL management is committed for better maintenance of the city and providing better facilities to the residents and called upon the participation of the residents in this.



5. DIC BSL inaugurated the loading station of PCM

The Pitch Creosote Mixer (PCM) loading station in Coke Oven and BPP Department of BSL was inaugurated by Amarendu Prakash, Director-in-charge of BSL. On this occasion Executive Director (MM, P&A) VK Pandey, ActingED (Works) Sanjay Kumar, CGM Inc (Finance & Accounts) S. Rangani, CGM (Power) Ved Prakash, CGM (Coke Oven & BPP) Rakesh Kumar, Chief General Managers of various departments, other officers and personnel were present.

The PCM consumption in the RMP department of the plant is about 200 tonnes per day while its production is around 230 to 240 tonnes per day. To overcome the problem in storage of this additional PCM, it was decided to build PCM loading station, which was completed from the internal resources of the department. With the commissioning of the PCM loading station, on one hand the problem in storage of PCM will be removed,





simultaneously revenue will also be generated from sale of additional PCM in the open market.





6. Inauguration of new canteen in BSL's CRM-3

The new canteen controlled by Personnel (Operations-Welfare) in BSL's CRM-3 was inaugurated by Chief General Manager (CRM-3) Rajan Prasad. On this occasion, CGM Inc (Personnel) Pawan Kumar, GM (CRM-3) Sunil Kumar, GM (CRM-3) Prabhat Ranjan, GM (CRM-3) RK Vehra, GM Inc (Personnel) Sanjeev Sharan Singh and other officers including various personnel of CRM-3 Department and Personnel Department were present. With the opening of this canteen, the personnel working in CRM-1, 2 and 3 departments will get the facility of food and drink at reasonable rates. Canteen Inspector (Personnel Operations) Kumar Saurabhand Alam of CED Department played an

BSL ACTIVITIES

important role in the implementation of the new canteen.





7. New production record created in HRCF with Bridge inauguration in BSL

A new all-time shift record was recorded in plate production by producing 1875 tonnes under 'B' shift in HRCF (Hot Rolled Coil Finishing) Department of BSL. Earlier on 17.10.96 a record of production of 1410 tonnes was made in one shift. Sanjay Kumar, Acting Executive Director (Works), BSL congratulated the CGM (HRCF) RK Srivastava and his team for achieving this new production record as well as continuous improvement in plate sheet production and HR dispatch. He congratulated Ram Niwas, GM (Mechanical), GM (Operations) and other senior officers and employees of 'B' Shift Brigade for their efforts and achievement. Also the new roadway-bridge 3A was inaugurated by Sanjay Kumar, Acting ED (Works). During this occasion CGM (Maintenance) S Mukhopadhyay, CGM (PPC) Anil Kumar, CGM

(Electrical) Ved Prakash and other senior officers were present. This 100 ton Capacity Bridge will help in road dispatch of granulated slag, pig iron and other materials.





BSL ACTIVITIES

This way bridge has been constructed by the Instrumentation and Automation Department of BSL.



8. Inter-Steel Plant Cricket Championship

The Inter-Steel Plant Cricket Championship organized under the aegis of Steel Plants Sports Board (SPSB) was inaugurated by BSL Executive Director-in-Charge VK Pandey at BSL's Cricket Stadium in Sector-4. On the occasion, CGM Inc (Finance & Accounts) S. Rangani, CGM Inc (Town Services) BS Popli, CGM Inc (Personnel) Pawan Kumar, CGM (Personnel) HM Jha, other senior officers, Cricket players and cricket lovers were present. Sharing information COC BSL MK Dhan said a total of nine teams from Bhilai Steel Plant, Rourkela Steel Plant, Durgapur Steel Plant. ISP Burnpur. VISL Bhadravati. RINL Visakhapatnam, JSW Bellary and Tata Steel are participating in the championship including Bokaro Steel Plant. In the match played on 21st February, Bokaro Steel Plant defeated Rourkela Steel Plant by 9 wickets, JSW Bellary defeated RINL Visakhapatnam by 22 runs and Tata Steel defeated Bhilai Steel Plant by 74 runs. The final of the competition will be played on February 25.





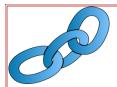


9. RINL Visakhapatnam and Tata Steel jointly declared winners

The closing ceremony of the Inter-Steel Plants Cricket Championship organized under the aegis of Steel Plants Sports Board (SPSB) was done at the Cricket Stadium of BSL, Sector-4 Bokaro. On this occasion, the chief guest was Amarendu Prakash, Director-in-charge of BSL, Executive Director (MM, P & A) VK Pandey, Acting ED (Works) Sanjay Kumar, CGM Inc (Finance and Accounts) S. Rangani, CGM (Town Administration) B S Popli, CGM Inc (Personnel) Pawan Kumar, CGM (Personnel) HM Jha and other senior officials, cricket players and cricket lovers were present. RINL Visakhapatnam and Tata Steel were jointly declared winners in the championship. The director-incharge honored the winning teams with shields.







HRD ACTIVITIES

1. Training program on "Pollution Control and Waste Management" organized in BSL

A two-day training program on "Pollution Control and Waste Management" for the executives of various departments of the plant was organized by the Human Resource Development Department of BSL in an online mode. The program was inaugurated by General Manager (ECD) NP Shrivastava and GM (MSV) Devashree Rani Toppo, while highlighting the program outline and stressed the need for this program for various departments of the plant. Addressing the participants, Mr. Srivastava highlighted the usefulness of the training program and appealed to take advantage of this program, calling it important for the plant in current scenario.

On the first day of the training program, General Manager (ECD) NP Srivastava and Manager (ECD) Ajit Kumar gave detailed information about environment and its main components of legal aspects, types of pollution in general etc. The participants from various departments of the plant were connected online during the training programme. The program was conducted by the Manager (HRD), GK Singh. The training program will continue till February 10.

2.Action Leadership

To enhance the leadership skills and prepare the frontline for taking up the future leadership responsibilities, a 3-day training programme on "Action Centered Leadership" was organized during 17-19th February 2022 in Conf 1, HRD Centre. A total of 14 Young Executives in the grade E1-E4 from BSL, Jharkhand Group of Mines and Collieries Division had participated in the programme.

Action Leadership is a time-tested 3-day structured program designed in collaboration with British Steel Consultants Ltd. and aims to help participants understand the role of an effective leader, skills of building and maintaining a winning team and utilizing the talents of individuals in the organization.For E1 to E4 this is the only in-house leadership training programme.

The faculty for the entire 3 day programme was Shri Vinod KumarGM (Projects) is a certified trainer from MTI Ranchi.



3.Environment Management in Industries with special reference to Circular Economy

A Special two day workshop on "Environment Management in Industries with special reference to circular Economy" is organised jointly by SAIL-Bokaro Steel Plant's ECD & HRD Deptt in collaboration with Recycling and Environment Industry Association of India









4.Welding Technology

A training program on "Welding Technology" was organized on 15-16.02.2022 for executives of different departments of the plant in the Conference-4 of Human Resource Development Department.

5.Ekikaran

The first Ekikaran program – An Orientation programme including plant familiarisation was organised by HRD department for the employees of Collieries and Mines division during 14.02.22 to 15.02.22. The programme was attended by 20 Executives. The participants were familiarized with the BSL overview steel making processes, Digital transformation initiatives in BSL and Introduction to SAP-ERP



6.Conveyor Belt Management System in Steel industry

The Online Training Programme on "Conveyor Belt Management System in Steel industry" was organised with the faculty support from Thejo, Chennai on 22nd Feb'22. The programme was attended by 25 Executives from the different shops and Central Maintenance.



HRD ACTIVITIES 7.MDP-I – Under the Umbrella of

ONE SAIL ONE HRD

A 3(Three) day programme of MDP-I in hybrid mode (On line + offline) was organised under the umbrella ' One SAIL One HRD' from 10th to 12th Feb'22. The objective of the programme was to prepare the middle level executives for taking up future leadership challenges. The programme mainly focused on (i) Role of Frontline Executives for overcoming Business Challenges (ii) Planning for Execution Excellence (iii) Group Dynamics and Team Building (iv) Motivation and Developing sub ordinates (v) Factors for Personal Effectiveness etc. The faculty support for the programme was Sri V Gupta, GM(Safety), Sri C S Kumar, AGM(CRM-III), Sri A Anand , Sr Manager(HRD), Sri R Kumar, Ex Mgr(HRD), Sri Animesh, DM(F&A), Ms Tanupriya, DM(Pers) etc. A total of approx 13 Executives from BSL and 05 Executives from other SAIL units attended the programme.



8.ISO 9001:2015 QMS, ISO 14001: 2015 EMS, ISO 45001:2018 OHSMS

A programme on "ISO 9001:2015 QMS, ISO 14001: 2015 EMS, ISO 45001:2018 OHSMS" was organized at HRD centre during 25th& 26th Feb'22. The basic objective of the programme was to (i) bring awareness on Quality Management system ISO 9001:2015 QMS (ii) bring awareness on Environment Management system ISO 14001: 2015 EMS & (iii) bring awareness on OHSMS 45001;2018. The programme was attended by 28 Non-Ex.









For any Safety Management Consulting Assignment, it is very important to start with understanding safety culture in the organisation. At BSL, this activity is named as "Element-1 Safety Maturity Survey (SMS)".

ASK-EHS designed Safety Maturity Survey to incorporate a comprehensive evaluation of all the factors affecting safety maturity within the organization including behavioral, cultural, wellbeing and systems elements. ASK -EHS utilized a semiquantitative safety maturity benchmarking tool to assess the status of safety processes and practices of organization.

ASK-EHS used different tools like SMS Mobile app, Structured interviews and focused group discussions encompassing various categories of Management and Workmen across the plant.

ASK EHS was expected to cover Senior Management 100%, Middle Management 80%, Junior Management 70%, own workers 20% and Contractual Workers 10%.

Categories	Contractual Target in %	SMS Activities-Total			
		Participants	Target	Achieved (%)	
Senior Management	100	54	52	104%	
Middle Management	80	752	883	85%	
Junior Management	70	1000	1278	78%	
Own Workers(BSL)	20	2238	7975	28%	
Contractual Workers(Non BSL)	10	3596	6672	54%	

Different sets of Customized Questionnaires were developed to conduct SMS for Senior Management, Middle Management, Junior Management, BSL own workers, Contract workers, Equipment operators, Loco Drivers in English / Hindi as relevant.

For monitoring the progress of Safety Maturity Survey, ASK-EHS also developed a SMS Dashboard.

ASK-EHS developed a SMS mobile app and shared it with BSL on 21st Jan-22 for carrying out online survey. The survey was available on BSL intranet and Kavach portal in addition to the mobile app. Through consistent efforts made by BSL and ASK-EHS team, 32% participation was achieved by the time the survey was officially closed on 4th March 2022.





The FGD (focused group discussions) was a highly successful event and much appreciated by the department HODs. Based on popular demand, FGDs are still being conducted, in addition to the 102 sessions, as per request received. Certificate of participation was given to each attendee. A separate Session was conducted for female workers as well.

ASK-EHS has conducted Safety Maturity Survey, across all categories for both BSL and Non-BSL workforce, with the hope that the perceptions and gaps that emerge from this activity will mark a significant step in this journey of safety culture transformation, namely, 'Kavach'. The survey report along with gap assessment report will be shared with BSL based on which further action will be taken as part of this drive.

Look out for the next issue to know the results!









ALPHABET OF STEEL



CHARGE

In steelmaking this is the collective term for the blast principal raw material inputs to а furnace (iron ore, coke, limestone), electric arc furnace and/or direct reduced (scrap iron) and basic oxygen furnace or steel converter (liquid pig iron, scrap)

DECARBURISATION

In steelmaking, decarburisation, or the reduction of carbon content, is one of the key rolesof the basic oxygen furnace process for converting iron into steel. It is achieved by blowingoxygen over molten iron where it combines with and removes carbon as carbon monoxideand carbon dioxide.But once steel has been cast and rolled, further decarburisation may occur at the surfaceduring subsequent heat treatment or rolling.

This is because when steel is hot, carbonreacts with oxygen resulting in a low carbon composition in the outer layers of the steel.

Loss of strength and ductility and surface cracking are typical effects, and this may beundesirable, depending on the intended applications for the metal.

Decarburisation can be prevented or inhibited by restricting the duration of heattreatment or processing the steel in an inert atmosphere.





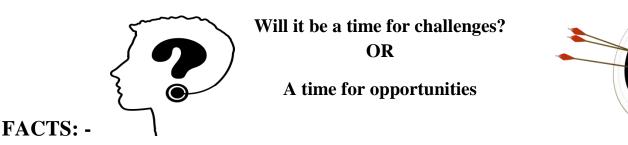


EVENT IMPACT- WAS PONDERING



EVENT - Russian Ukraine conflict [THE WAR]

Any war will have an impact on the global economy whether at a macro level or micro level, Will this war have an impact on the economy & in our steel industry?



- 1. Russia is the second largest steel exporter, exports around 13% of the steel Worldwide.
- 2. Ukraine had exported around 15.26 MT of steel in 2021 so, the two steel exporters are in war.
- 3. Indian steel industries import sizeable amount of spares from Russia and Ukraine.

The CRISIL research says

"In the event of worsening tensions and resultant supply disruptions. The deficit is expected to be filled by other export economies, including India"

This war is also opening an opportunity for steel exporting nations to plug the gap

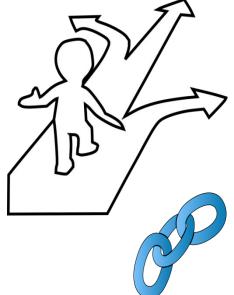
This war is also opening an opportunity for reducing dependency of spares for steel industry whose OEM are mainly Russian and Ukrainian companies. Through such type of uncertainties we may look and develop for alternatives to fulfill our spare requirement though Atamnirbhar Bharat. This will make us independent and reduce procurement lead time.

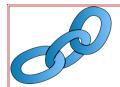
Do we start looking for and developing new vendor base for spares

Will we get opportunities to export to the European World?









- 1. https://worldsteel.org
- 2. <u>https://pixabay.com</u>
- 4. A TO Z of Steel







