

Key Performance Indicators for Blasting

Quadrant	S.No	KPI Name	KPI Definition	Measurement Formula	Rating Scale (1 to 5; where 1 is the lowest and 5 is the highest)
Financial	1	Engineering Days Consumption (Utilization)	Measures percentage of actual engineering days consumed for various reports & tasks in relation to estimated engineering days required for various reports & tasks in the given period	$(\text{Actual engineering days consumed for various reports and tasks} / \text{Estimated engineering days}) * 100$	1 - if actual engineering days consumed are 116% or more of the estimated engineering days 2 - if actual engineering days consumed are 111% to 115% of the estimated engineering days 3 - if actual engineering days consumed are 106% to 110% of the estimated engineering days 4 - if actual engineering days consumed are 101% to 105% of the estimated engineering days 5 - if actual engineering days consumed are 100% or lesser of the estimated engineering days
	2	Conducting Controlled Blasting and Vibration Study	Measures percentage of actual number Controlled Blasting & Vibration reports prepared as compared to allocated number of controlled Blasting & Vibration reports to be prepared	$(\text{Actual number of Controlled Blasting \& Vibration Report prepared} / \text{Allocated number of Controlled Blasting \& Vibration Report to be prepared}) * 100$	1 - if the actual number of report is 60% or lesser of the allocated number 2 - if the actual number of report is 61% to 70% of the allocated number 3 - if the actual number of report is 71% to 80% of the allocated number 4 - if the actual number of report is 81% to 90 of the allocated number 5 - if the actual number of report is 91% to 100% of the allocated number
	3	Conducting Fragmentation Study in Mines	Measures percentage of actual number of fragmentation study conducted in relation to allocated number of fragmentation study to be conducted	$(\text{Actual number of Fragmentation Study Conducted} / \text{Allocated number of Fragmentation Study to be Conducted}) * 100$	1 - if the actual number of study conducted are 60% or lesser of the allocated number 2 - if the actual number of study conducted are 61% to 70% of the allocated number 3 - if the actual number of study conducted are 71% to 80% of the allocated number 4 - if the actual number of study conducted are 81% to 90 of the allocated number 5 - if the actual number of study conducted are 91% to 100% of the allocated number
	4	Preparing Report after Conducting Random Sampling and Testing of Explosives and Accessories	Measures percentage of actual number of reports prepared as compared to targeted number of reports to be prepared	$(\text{Actual number of Reports prepared} / \text{Targeted number of Reports to be prepared}) * 100$	1 - if the actual number of report is 60% or lesser of the targeted number 2 - if the actual number of report is 61% to 70% of the targeted number 3 - if the actual number of report is 71% to 80% of the targeted number 4 - if the actual number of report is 81% to 90% of the targeted number 5 - if the actual number of report is 91% to 100% of the targeted number
	5	Determination of Powder Factor	Measures percentage of actual number of determination of powder factor as compared to allocated number	$(\text{Actual number of determination of powder factor} / \text{Allocated number of determination of powder factor}) * 100$	1 - if the actual number of determination of powder factor are 60% or lesser of the allocated number 2 - if the actual number of determination of powder factor are 61% to 70% of the allocated number 3 - if the actual number of determination of powder factor are 71% to 80% of the allocated number 4 - if the actual number of determination of powder factor are 81% to 90 of the allocated number 5 - if the actual number of determination of powder factor are 91% to 100% of the allocated number

	6	R&D Related to Blasting	Measures percentage of actual number of R&D milestones completed as compared to assigned number of R&D milestones to be completed	$(\text{Actual number of milestones completed} / \text{Assigned number of milestones to be completed}) * 100$	<p>1 - if the actual number of R&D milestones completed are 60% or lesser of the assigned number</p> <p>2 - if the actual number of R&D milestones completed are 61% to 70% of the assigned number</p> <p>3 - if the actual number of R&D milestones completed are 71% to 80% of the assigned number</p> <p>4 - if the actual number of R&D milestones completed are 81% to 90% of the assigned number</p> <p>5 - if the actual number of R&D milestones completed are 91% to 100% of the assigned number</p>
	7	New Products Testing (Explosives & Accessories) for Mines of Coal India	Measures percentage of actual number of products tested in relation to assigned number of new products to be tested	$(\text{Actual number of products tested} / \text{Assigned number of products to be tested}) * 100$	<p>1 - if the actual number products tested are 60% or lesser of the assigned number</p> <p>2 - if the actual number products tested are 61% to 70% of the assigned number</p> <p>3 - if the actual number products tested are 71% to 80% of the assigned number</p> <p>4 - if the actual number products tested are 81% to 90% of the assigned number</p> <p>5 - if the actual number products tested are 91% to 100% of the assigned number</p>
	8	Providing Consulting Services to Outside Agencies for the use of SME & SMS	Measures percentage of actual number of Consulting Services Provided in relation to assigned number of Consulting Services to be provided	$(\text{Actual number of services provided} / \text{Assigned number of services to be provided}) * 100$	<p>1 - if the actual number of service provided is 60% or lesser of the assigned number</p> <p>2 - if the actual number of service provided is 61% to 70% of the assigned number</p> <p>3 - if the actual number of service provided is 71% to 80% of the assigned number</p> <p>4 - if the actual number of service provided is 81% to 90% of the assigned number</p> <p>5 - if the actual number of service provided is 91% to 100% of the assigned number</p>
Customer	1	Completion of Unscheduled Jobs as Required	Measures percentage of unscheduled jobs completed on time in relation to total unscheduled jobs allocated during the period	$(\text{Number of unscheduled jobs completed on time} / \text{Total number of unscheduled jobs allocated}) * 100$	<p>1 - if the number of unscheduled jobs completed on time is 60% or lesser of the total number of unscheduled job</p> <p>2 - if the number of unscheduled jobs completed on time is 61% to 70% of the total number of unscheduled job</p> <p>3 - if the number of unscheduled jobs completed on time is 71% to 80% of the total number of unscheduled job</p> <p>4 - if the number of unscheduled jobs completed on time is 81% to 90% of the total number of unscheduled job</p> <p>5 - if the number of unscheduled jobs completed on time is 91% to 100% of the total number of unscheduled job</p>
	1	Norms Adherence	Measures percentage of number of norms not adhered to in relation to number of norms to be followed	$(\text{Number of non-adherence to norms} / \text{Number of norms to be followed}) * 100$	<p>1 - if 10% or more of the norms have not been adhered to</p> <p>2 - if 8% to 9% of the norms have not been adhered to</p> <p>3 - if 6% to 7% of the norms have not been adhered to</p> <p>4 - if 4% to 5% of the norms have not been adhered to</p> <p>5 - if 3% or lesser of the norms have not been adhered to</p>
	2	Information / Data Sharing	Measures percentage of time taken to send the required information or data to concerned departments in relation to time allocated for the same	$(\text{Time Taken} / \text{Allocated Time}) * 100$	<p>1 - if the time taken is 116% or more of the allocated time</p> <p>2 - if the time taken is 111% to 115 % of the allocated time</p> <p>3 - if the time taken is 106% to 110 % of the allocated time</p> <p>4 - if the time taken is 101% to 105 % of the allocated time</p> <p>5 - if the time taken is 100 % or lesser of the allocated time</p>

3	Resolving Technical or Functional Issues with in Department or with Interfacing Department	Measures percentage of number of technical issues or problems resolved as compared to total number of technical issues or problems that came up while executing scheduled or unscheduled job during the period	(Number of technical issues or problems resolved / Total number of technical issues or problems)*100	<p>1 - if the number of issues or problems resolved are 60% or lesser of the total number of issues or problems raised / came</p> <p>2 - if the number of issues or problems resolved are 61% to 70% of the total number of issues or problems raised / came</p> <p>3 - if the number of issues or problems resolved are 71% to 80% of the total number of issues or problems raised / came</p> <p>4 - if the number of issues or problems resolved are 81% to 90% of the total number of issues or problems raised / came</p> <p>5 - if the number of issues or problems resolved are 91% to 100% of the total number of issues or problems raised / came</p>
4	Achieving MoU score	Measures the timely completion of MoU related projects 5- If percentage is 100% 4- If percentage is between 90 %-99% 3- If percentage is between 80%-89% 2- If percentage is between 60%-79% 1- If percentage is less than 60%	(no. of MoU projects completed in time/ total no. of MoU projects) * 100	<p>5- If percentage is 100%</p> <p>4- If percentage is between 90 %-99%</p> <p>3- If percentage is between 80%-89%</p> <p>2- If percentage is between 60%-79%</p> <p>1- If percentage is less than 60%</p>
5	Achieving MoU score	Measures the MoU score achieved for the MoU related activities assigned to the executive 5- If achieved Excellent score for target 4- If achieved Very good score for target 3- If achieved Good score for target 2- If achieved Fair score for target 1- If achieved Poor score for target	As per rating scale	<p>5- If achieved Excellent score for target</p> <p>4- If achieved Very good score for target</p> <p>3- If achieved Good score for target</p> <p>2- If achieved Fair score for target</p> <p>1- If achieved Poor score for target</p>
6	New initiative	Measures the percentage of work completion on new initiatives planned in a year 5- If percentage is 100% 4- If percentage is between 90 %-99% 3- If percentage is between 80%-89% 2- If percentage is between 60%-79% 1- If percentage is less than 60%	Percentage equivalent of work completed	<p>5- If percentage is 100%</p> <p>4- If percentage is between 90 %-99%</p> <p>3- If percentage is between 80%-89%</p> <p>2- If percentage is between 60%-79%</p> <p>1- If percentage is less than 60%</p>
7	Initiatives for system improvement	Measures the percentage of system improvement work completed against the planned activities in a year 5- If percentage is 100% 4- If percentage is between 90 %-99% 3- If percentage is between 80%-89% 2- If percentage is between 60%-79% 1- If percentage is less than 60%	Percentage equivalent of work completed	<p>5- If percentage is 100%</p> <p>4- If percentage is between 90 %-99%</p> <p>3- If percentage is between 80%-89%</p> <p>2- If percentage is between 60%-79%</p> <p>1- If percentage is less than 60%</p>

8	ERP implementation	Measures the percentage of work completed for ERP implementation against the planned activities in a year 5- If percentage is 100% 4- If percentage is between 90 %-99% 3- If percentage is between 80%-89% 2- If percentage is between 60%-79% 1- If percentage is less than 60%	Percentage equivalent of work completed	5- If percentage is 100% 4- If percentage is between 90 %-99% 3- If percentage is between 80%-89% 2- If percentage is between 60%-79% 1- If percentage is less than 60%
9	Quality Management System	Measures the percentage of work completed for Quality Management System against the planned activities in a year 5- If percentage is 100% 4- If percentage is between 90 %-99% 3- If percentage is between 80%-89% 2- If percentage is between 60%-79% 1- If percentage is less than 60%	Percentage equivalent of work completed	5- If percentage is 100% 4- If percentage is between 90 %-99% 3- If percentage is between 80%-89% 2- If percentage is between 60%-79% 1- If percentage is less than 60%
1	New Ideas Generation	Measures percentage of number of new solutions provided and accepted by internal or external customers in relation to total number of solutions provided	(Number of new solutions provided and accepted by internal or external customers / Total number of solutions provided)*100	1 - if 3% or lesser solutions have new ideas 2 - if 4% to 6% solutions have new ideas 3 - if 7% to 9% solutions have new ideas 4 - if 10% to 12% solutions have new ideas 5 - if 13% or more solutions have new ideas
2	Scheduled & Unscheduled Jobs Output (YoY)	Measures percentage of volume or quantity of schedule & unscheduled jobs performed in current year in relation to quantity or volume of scheduled & unscheduled job performed in previous year	(Quantity or volume of schedule & unscheduled jobs performed in the current year / Quantity or volume of scheduled & unscheduled jobs performed in previous year)*100	1 - if the scheduled & unscheduled jobs output in current year are 70% or lesser of the previous / last year 2 - if the scheduled & unscheduled jobs output in current year are 71% to 80% of the previous / last year 3 - if the scheduled & unscheduled jobs output in current year are 81% to 90% of the previous / last year 4 - if the scheduled & unscheduled jobs output in current year are 91% to 100% of the previous / last year 5 - if the scheduled & unscheduled jobs output in current year are 101% or more of the previous / last year
3	Accepting New Type of Tasks	Measures percentage of new type of tasks accepted & performed as compared to total number of tasks allocated	(New type of tasks performed / Total number of tasks performed)*100	1 - if 4% or lesser new tasks accepted & performed 2 - if 5% to 8% new tasks accepted & performed 3 - if 9% to 12% new tasks accepted & performed 4 - if 13% to 16% new tasks accepted & performed 5 - if more than 16% new tasks accepted & performed
4	No. of trainings conducted on new concepts	Measures the no. of training conducted for employees of the department on new concepts against the no. of programmes planned. 5- If percentage is 100% 4- If percentage is between 90 %-99% 3- If percentage is between 80%-89% 2- If percentage is between 60%-79% 1- If percentage is less than 60%	(no. of trainings conducted/ total no. of programmes planned) * 100	5- If percentage is 100% 4- If percentage is between 90 %-99% 3- If percentage is between 80%-89% 2- If percentage is between 60%-79% 1- If percentage is less than 60%

5	No. of employees trained on new concepts	Measures the no. of employees covered under training conducted on new concepts against the no. of employees planned to be covered. 5- If percentage is 100% 4- If percentage is between 90 %-99% 3- If percentage is between 80%-89% 2- If percentage is between 60%-79% 1- If percentage is less than 60%	(no. of employees covered/ total no. of employees planned to be covered) * 100	5- If percentage is 100% 4- If percentage is between 90 %-99% 3- If percentage is between 80%-89% 2- If percentage is between 60%-79% 1- If percentage is less than 60%
6	Mentoring	Measures the no. of executives (mentees) covered under mentoring process against the target. 5- If percentage is 100% 4- If percentage is between 90 %-99% 3- If percentage is between 80%-89% 2- If percentage is between 60%-79% 1- If percentage is less than 60%	(no. of mentees covered/ total no. of target mentees) * 100	5- If percentage is 100% 4- If percentage is between 90 %-99% 3- If percentage is between 80%-89% 2- If percentage is between 60%-79% 1- If percentage is less than 60%
7	Mentoring	Measures the no. of executives (mentees) guided under mentoring scheme in a year. For guiding 5 mentees– 5 For guiding 4 mentees– 4 For guiding 3 mentees– 3 For guiding 2 mentees– 2 For guiding 1 mentees– 1	Total no. of mentees guided successfully in a year	For guiding 5 mentees– 5 For guiding 4 mentees– 4 For guiding 3 mentees– 3 For guiding 2 mentees– 2 For guiding 1 mentees– 1
8	Learning chat (L-Chat) sessions(<i>Executives are expected to conduct L-Chats with their under-reports and others in the department on their new learning after attending a training program</i>)	Measures the no. of Learning chat sessions conducted against no. of training attended 5- If percentage is 100% 4- If percentage is between 90 %-99% 3- If percentage is between 80%-89% 2- If percentage is between 60%-79% 1- If percentage is less than 60%	(no. of L-Chat sessions conducted/ no. of training programmes attended) * 100	5- If percentage is 100% 4- If percentage is between 90 %-99% 3- If percentage is between 80%-89% 2- If percentage is between 60%-79% 1- If percentage is less than 60%

9	Training hours	<p>Measures the no. of under-reports (sub-ordinates) completed the planned hours of training in a year against the total no. of under-reports</p> <p>5- If percentage is 100% 4- If percentage is between 90 %-99% 3- If percentage is between 80%-89% 2- If percentage is between 60%-79% 1- If percentage is less than 60%</p>	<p>(no. of under-reports completed the planned training hours/ total no. of under-reports) * 100</p>	<p>5- If percentage is 100% 4- If percentage is between 90 %-99% 3- If percentage is between 80%-89% 2- If percentage is between 60%-79% 1- If percentage is less than 60%</p>
10	<p>Internal Trainer Certification (ITC) <i>(The department should encourage developing a pool of internal trainers for the discipline for training programmes at MDIs, IICM etc.)</i></p>	<p>Measures the no. of under-reports who have obtained ITC in a year against the total no. of under-reports</p> <p>5- If percentage is 100% 4- If percentage is between 90 %-99% 3- If percentage is between 80%-89% 2- If percentage is between 60%-79% 1- If percentage is less than 60%</p>	<p>(no. of under-reports obtained ITC/ total no. of under-reports) * 100</p>	<p>5- If percentage is 100% 4- If percentage is between 90 %-99% 3- If percentage is between 80%-89% 2- If percentage is between 60%-79% 1- If percentage is less than 60%</p>
11	<p>Quality Circle (QC) <i>(Department is expected to form Quality Circles for process/ cost improvement and undertake QC projects on relevant themes. A QC project should be completed within 6 months)</i></p>	<p>Measures the no. of quality circle projects completed in a year against the planned no. of QC projects</p> <p>5- If percentage is 100% 4- If percentage is between 90 %-99% 3- If percentage is between 80%-89% 2- If percentage is between 60%-79% 1- If percentage is less than 60%</p>	<p>(No. of QC projects completed/ total no. QC projects planned) * 100</p>	<p>5- If percentage is 100% 4- If percentage is between 90 %-99% 3- If percentage is between 80%-89% 2- If percentage is between 60%-79% 1- If percentage is less than 60%</p>
12	Quality Circle (QC)	<p>Measures the no. of quality circle projects implemented in a year against the no. of QC projects completed.</p> <p>5- If percentage is 100% 4- If percentage is between 90 %-99% 3- If percentage is between 80%-89% 2- If percentage is between 60%-79% 1- If percentage is less than 60%</p>	<p>(No. of QC projects implemented/ total no. QC projects completed) * 100</p>	<p>5- If percentage is 100% 4- If percentage is between 90 %-99% 3- If percentage is between 80%-89% 2- If percentage is between 60%-79% 1- If percentage is less than 60%</p>

13	Developing best practices(<i>Department is expected to undertake continuous process improvement projects for improving efficiency, saving cost, reducing wastage & loss etc. A 'Process Improvement' will be judged as Best practice in the company through a mechanism of Best practice competition to be organized at company level</i>)	Measures the no. of processes developed/ improved as best practices. If atleast 1 process is improved as best practice and implemented - 5 If atleast 1 process is improved as best practice- 4 If atleast 2 processes significantly improved - 3 If atleast 1 process is significantly improved - 2 If atleast 1 process is improved marginally - 1	No. of processes developed/ improved as best practices.	If atleast 1 process is improved as best practice and implemented - 5 If atleast 1 process is improved as best practice- 4 If atleast 2 processes significantly improved - 3 If atleast 1 process is significantly improved - 2 If atleast 1 process is improved marginally - 1
14	Organizing conferences/ seminars/ workshops/ evening lectures	Measures the no. of learning programs organized on relevant themes of the discipline for knowledge/ skill updation If the no. of programs organized is 4 or more- 5 If the no. of programs organized is 3 - 4 If the no. of programs organized is 2 - 3 If the no. of programs organized is 1 - 2	No. of learning programs organized on relevant themes of the discipline for knowledge/ skill updation	If the no. of programs organized is 4 or more- 5 If the no. of programs organized is 3 - 4 If the no. of programs organized is 2 - 3 If the no. of programs organized is 1 - 2
15	Acredition	Measures the percentage of work completed for certification/ acredition against the activities planned for the phase. 5- If percentage is 100% 4- If percentage is between 90 %-99% 3- If percentage is between 80%-89% 2- If percentage is between 60%-79% 1- If percentage is less than 60%	(Number of initiatives implemented/ Total no. of initiatives planned) * 100	5- If percentage is 100% 4- If percentage is between 90 %-99% 3- If percentage is between 80%-89% 2- If percentage is between 60%-79% 1- If percentage is less than 60%