

Mill Operator - Theory

S.No.	NOS	PC	DifficultyLevel	Question	OptionA	OptionB	OptionC	OptionD	Answer
1	RSC/ N 0101	PC3	Easy	What is the range of typical variation in distance/gap between	2 to 20 mm	1 to 5 mm	1 to 10 mm	25 to 55 mm	A
2	RSC/ N 0101	PC4	Medium	To drop the mix batch at a higher dump temperature, the stock blender can be used to take some heat out of the batch and then add the curatives on the mill.	TRUE	FALSE			A
3	RSC/ N 0101	PC15	Easy	For making workers aware of the fire hazards while milling operation, which of the following sign can be displayed?					B
4	RSC/ N 0101	PC14	Medium	During the milling process, which of the following sign should be displayed for ensuring that everyone uses safety gloves during the process?					A
9	RSC / N 0102	PC5	Medium	While addition of fillers, the nip size should preferably be set to ___ mm	2	3	6	8	B
10	RSC / N 0102	PC6	Easy	During mastication operation, the rolling nip opening is set to 2 mm and roll temperature is maintained to 70+/- ___ degrees Celsius	1	5	2	10	B
11	RSC / N 0102	PC 18	Easy	In case there is fire involving electrical apparatus, which of the following grade of fire extinguisher should be used?	CLASS A	CLASS B	CLASS C	CLASS E	D
12	RSC / N 0102	PC6	Easy	During mastication operation, using a hand knife, make two ___ cuts from each side and allow the rubber to move through the nip quite a few times until a smooth rolling bank is formed on the nip	3/4	1/2	3/5	1/4	A
19	RSC/ N 0103	PC1	Difficult	During the sheet out operation, pass the rolled batch endwise through the mill nip ___ times as a homogenization step.	2	6	3	4	B
20	RSC/ N 0103	PC3	Medium	Which of the following is a cleaning operation requiring total disassembly for cleaning and inspection?	Manual Cleaning	Mechanical Cleaning	Clean-out-of-Place	Thermal Sanitization	A
21	RSC/ N 0103	PC4	Difficult	Which of the following sign represents a bin where poisonous waste should be placed for disposal?					A
22	RSC/ N 0103	PC5	Easy	Which of the following refers to a document or set of documents that serve as a basis for the batch documentation?	master record	master formula	quarantine document	in-process control document	A
23	RSC/ N 0103	PC6	Difficult	Which of the following document need not be included in the sampling instructions?	the method of sampling and the sampling plan	the equipment to be used	rejection criteria	instructions for any required subdivision of the sample	C
24	RSC/ N 0103	PC 7	Easy	As a storage guideline, which of the following sign indicates that hook cannot be used for storage and handling?					A
26	RSC/ N 5001	PC1	Medium	For cleaning of hardwood floors, which of the following material can be used for cleaning suitably?	Water and vinegar	Soap-based cleaners	Microfiber pad	Wax cleaner	C
27	RSC/ N 5001	PC2	Easy	Which of the following function is not utilized by a good housekeeping program to avoid emergency situations?	Cleanup during shift	Maintenance of PPE	Unused material removal	Waste Disposal	B
28	RSC/ N 5001	PC4	Medium	What should be the pH value of cleaning agent used for marble floors?	pH neutral	pH basic	pH acidic	pH value not matters	A
34	RSC/ N 5001	PC16	Difficult	Which of the following is the best place to store waste	Litter bag	Work floor	Table of equipment	Top of the equipment	A
37	RSC/ N 5002	PC1	Easy	All of the process control data should be documented	before production	after production	during production control	after batch disposal	C
38	RSC/ N 5002	PC3	Difficult	In case of any deviation from the quality assurance process in the rubber sheet manufacturing, it should be _____	reported, investigated and recorded	reported and recorded	investigated	recorded	A
39	RSC/ N 5002	PC4	Difficult	The application of information to scan an organization's environment is:	external communication	information overload	sensing	internal communication	C

40	RSC/ N 5002	PC5	Easy	To improve the performance of a rubber milling process, which of the following is most relevant information to be reported?	Control and feedback	Input	Output	Processing	A
46	RSC/ N 5003	PC1	Easy	 <p>Once a rubber product (tire/non-tire) receives the following seal (as shown in the image) from QC and inspection, it means:</p>	Failed the quality check	Passed the quality check	Needs the quality check to be done again	Has lifetime guarantee	B
47	RSC/ N 5003	PC2	Easy	 <p>Which of the following record can be taken during quality inspection by the following equipment?</p>	Length/Breadth	Mass/Weight	Tensile strength	Density	A
48	RSC/ N 5003	PC4	Difficult	If you observe gauge variation in the products, then which of the following is not responsible for such defect?	Incorrect crowning of rolls	Excessive wearing of bearings	Roll temperature too high	Improper operation of roll bending	C
50	RSC/ N 5003	PC3	Medium	Why is it essential to ensure during quality check that two sheets of rubber do not have any air between them?	To avoid anti-vulcanization effects	To avoid forming of bubbles	To avoid excessive pressing	To avoid wear and tear	B
53	RSC/ N 5004	PC1	Medium	Costs that are incurred to find manufactured product which does not meet specifications are called _____	prevention costs	external failure costs	appraisal costs	internal failure costs	C
54	RSC/ N 5004	PC2	Medium	If a product defect is discovered or suspected in a batch, consideration should be given to whether other batches should be checked in order to determine whether they are also affected.	TRUE	FALSE			A
55	RSC/ N 5004	PC3	Easy	During checking the starting materials in the storage, the labels may not bear which of the following information?	the designated name of the product and the internal code reference where applicable	the status of the contents	where appropriate, an expiry date or a date beyond which retesting is necessary	sample size	D
56	RSC/ N 5004	PC6	Medium	In case the rubber sheet being manufactured is low in volume but high in cost, which of the following is the right inspection method for defects?	zero inspection	little inspection	intensive inspection	100% inspection	C
58	RSC/ N 5004	PC14	Difficult	In order to represent the fraction of defective items in a sample, which of the following control chart can be used?	Range chart	Mean chart	p-chart	c-chart	C

**Mill Operator - Practical cum Viva**

S.No.	NOS	PC	Question	OptionA	OptionB	OptionC	Correct Answer
RSC/ N0101		PC1-PC6	Demonstrate the steps involved in ensuring equipment readiness for the mixing mill operation	Good	Satisfactory	Poor	<ol style="list-style-type: none"> <li>1. Ensuring functioning of safety features of mixing mill (e.g. safety pad, safety bar) and other accessories</li> <li>2. Ensuring that the mixing mill is clean</li> <li>3. Setting parameters for the equipment (mixing cycle time, roll temperature and nip gap) , as per company's SOP</li> <li>4. Keeping all accessories (like cooling water, hydraulic system, temperature control unit (TCU), lubrication system) and stock blender (if available) ready</li> <li>5. Keeping all hand tools like mixing knife, cooling rack etc. ready</li> </ol>
RSC/ N0101		PC6-PC9	Demonstrate the steps to be taken or ensuring that the raw material is appropriate for the mixing mill operation	Good	Satisfactory	Poor	<ol style="list-style-type: none"> <li>1. Ensuring availability of pre-weighed, approved rubber and other ingredients to be fed as per recipe and batch size</li> <li>2. Ensuring that raw material to be fed is approved by laboratory as per SOP</li> <li>3. Matching the batch code of each raw material with the batch code on the job schedule given by the planning department</li> <li>4. Ensuring that all raw materials have been assembled/organized (in correct sequence, as per SOP) to be fed into mixing mill</li> </ol>
RSC/ N0101		PC1-PC9	Demonstrate the knowledge about necessary resources to be provided before starting the mixing mill operation	Good	Satisfactory	Poor	<p>All necessary resources to be provided, include:</p> <ul style="list-style-type: none"> <li>(i) appropriately qualified and trained personnel;</li> <li>(ii) adequate premises and space;</li> <li>(iii) suitable equipment and services;</li> <li>(iv) appropriate materials, containers and labels;</li> <li>(v) approved procedures and instructions;</li> <li>(vi) suitable storage and transport;</li> <li>(vii) adequate personnel, laboratories and equipment for in-process controls;</li> </ul>
RSC/ N0101		PC1-PC9	Demonstrate the procedure of checking labels on the starting materials in the storage area	Good	Satisfactory	Poor	<p>Starting materials in the storage area should be appropriately labelled.</p> <p>Labels should bear at least the following information:</p> <ul style="list-style-type: none"> <li>(a) the designated name of the product and the internal code reference where applicable;</li> <li>(b) the batch number given by the supplier and, on receipt, the control or batch number given by the manufacturer, if any, documented so as to ensure traceability;</li> <li>(c) the status of the contents (e.g. on quarantine, on test, released, rejected, returned, recalled);</li> <li>(d) where appropriate, an expiry date or a date beyond which retesting is necessary</li> </ul>
RSC/ N0102		PC1-PC12	Demonstrate the steps to be involved for carrying out the mastication operation	Good	Satisfactory	Poor	<ol style="list-style-type: none"> <li>1. Set the roll nip opening to 2 mm.</li> <li>2. Adjust and maintain roll temperature at 70 ± 5 degrees C.</li> <li>3. Add rubber into the mill nip and band, as a continuous sheet, onto the front roll.</li> <li>4. Using a hand knife, make two ¼-cuts from each side and allow the rubber to move through the nip quite a few times until a smooth rolling bank is formed on the nip.</li> <li>4. Now the rubber is sufficiently masticated and thus becomes softer at a reduced viscosity.</li> </ol>
RSC/ N5004		PC1-PC24	Demonstrate the knowledge about basic steps to be taken for the purpose of problem identification and escalation	Good	Satisfactory	Poor	<ol style="list-style-type: none"> <li>1. Identifying problems across Raw materials, Compounds, Product, and Equipment</li> <li>2. Identifying solutions to problems</li> <li>3. Taking corrective action</li> <li>4. Escalating unresolved identified problems</li> </ol>