

SRI	ISO 9001: 2015 Quality Management System Quality Procedure Manual	
Document No: SRI-QPM 07 (11)	DSI Tyres	Revision No :02
Date Issued:03/04/2017 Revision date:02/10/2023		Page No : 1 of 4
Title : Procedure for Tube Manufacturing		

7.11 PROCEDURE FOR TUBE PRODUCTION

7.11.1 Seamless Tube Production.

Flow	Activity	Responsibility	Ref
<div style="border: 1px solid black; padding: 5px; text-align: center; font-weight: bold;">RECEIVING MATERIAL</div>	1. Examine production plan	SPM/SAPM/Pro Ex/SUP	PC-PLAN 02 IT-FORM-02
	2. Check compound received for quantity and quality (Laboratory approval)	"	
	3. Check other material received from stores	"	PC-PLAN-02 IFS
<div style="border: 1px solid black; padding: 5px; text-align: center; font-weight: bold;">STRAIN EXTRUDER</div>	1. Carryout strain extrusion	OPERATOR	TU-WI-001
	1. Masticate sieved compound in mill	OPERATOR	TU-WI-001
	2. Maintain milling conditions.	"	"
<div style="border: 1px solid black; padding: 5px; text-align: center; font-weight: bold;">TUBE EXTRUSION</div>	3. Maintain extrusion conditions.	"	"
	4. Valve applying / Gum applying	"	TU-WI-001/ 007 TU-WI-001
	5. Cut tube to required length with tolerance for shrinkage.	"	"
	6. Load trolley and let stand for shrink completely.	"	"
	1. Sizing to the required length	OPERATOR	TU-WI-002/003
<div style="border: 1px solid black; padding: 5px; text-align: center; font-weight: bold;">SPLICING</div>	2. Splice green tube and joint ends.	"	"
	3. Traceability no punching	"	TU-WI-008
	4. Stock in splicing trolleys	"	TU-WI-002/003
	1. Cure 01 no selected tube by representing each lot	O/SUP	TU-WI-004
<div style="border: 1px solid black; padding: 5px; text-align: center; font-weight: bold;">SAMPLING INSPECTION TESTING</div>	2. Check joint strength. (1 st test)	"	TU-WI-009
	3. If the strength is satisfactory, continue the production process	SPM/SAPM/Pro Ex/SUP	
	4. If the joint strength is not satisfactory, set splicer setting and re – Check (2 nd test /3 rd test)	"	"
	If the test results are satisfactory, continue the production process	"	"
	If the test result are negative, green tubes are subjected to recycling	"	"
	5. Issue IMI form for compound problems	"	"

If MR signature is absent this will not be a controlled document.	Signature of Management Representative	
	Date	

<h1 style="margin: 0;">SRI</h1>	ISO 9001: 2015 Quality Management System Quality Procedure Manual	
Document No: SRI-QPM 07 (11) Date Issued:03/04/2017 Revision date:02/10/2023		Revision No :02 Page No : 2 of 4
Title : Procedure for Tube Manufacturing		

Flow	Activity	Responsibility	Ref
<div style="border: 1px solid black; padding: 5px; text-align: center; width: fit-content;"> AUTO VULCANIZING & COUSTOMER BASED TEST </div>	1. Place spliced green tube on a tray.	OPERATOR	TU-WI-004
	2. Vulcanize using chamber.	„	„
	3. Test pull strength.	„	TU-WI-009
<div style="border: 1px solid black; padding: 5px; text-align: center; width: fit-content;"> MOULDING </div>	1. Place green tube on pre-forming mould and inflate.	OPERATOR	TU-WI-004
	2. Vulcanize tube inside under steam or air pressure.	„	„
<div style="border: 1px solid black; padding: 5px; text-align: center; width: fit-content;"> HANDING OVER </div>	1. Send tubes to grading section for tube grading and final inspection	SPM/SAPM/Pro Ex/SUP	TU-WI-004/015 IFS

If MR signature is absent this will not be a controlled document.	Signature of Management Representative	
	Date	

SRI	ISO 9001: 2015 Quality Management System Quality Procedure Manual	
Document No: SRI-QPM 07 (11)	DSI Tyres	Revision No :02
Date Issued:03/04/2017 Revision date:02/10/2023		Page No : 3 of 4
Title : Procedure for Tube Manufacturing		

7.11.2 Un assemble tube production& Joint Preparation

Flow	Activity	Responsibility	Ref
<div>PLANNING</div>	1. Examine the production	SPM/SAPM/Pro Ex/SUP	PC-PLAN-02
	1. Check rubber compound received for: <ul style="list-style-type: none"> Quantity Quality (<i>Laboratory approval</i>) 	SPM/SAPM/Pro Ex/SUP	PC-PLAN-02 IFS
<div>RECEIVING MATERIAL</div>	2. Check other material received from the stores	”	PC-PLAN-02 IFS
	1. Carryout compound in mill	OPERATOR	TU-WI-001
<div>STRAIN EXTRUSION</div>	1. Masticate sieved compound in mill	OPERATOR	TU-WI-001
	2. Maintain milling conditions.	”	”
<div>TUBE EXTRUSION</div>	3. Maintain extrusion conditions.	”	”
	4. Cut tube to required length with a tolerance for shrinkage.	”	”
	5. Load to trays and let stand to shrink completely	”	”
<div>MANDREL LING, VULCANIZING, DE-MANDRELLING</div>	1. Insert tube to the mandrel	OPERATOR	TU-WI-014
	2. Remove the air between tube and mandrel	”	”
	3. Vulcanize in chamber	”	”
	4. Remove tube from mandrel	”	”

If MR signature is absent this will not be a controlled document.	Signature of Management Representative	
	Date	

Title : Procedure for Tube Manufacturing

Flow	Activity	Responsibility	Ref
ASSEMBLY	1. Carryout assembling	OPERATOR	TU-WI-013
	1. Apply solvent at joint	OPERATOR	TU-WI-013
	2. Press hand roller to remove creases & trapped air bubbles.	”	”
VULCANIZING	3. Vulcanize joint in joint press machine	”	TU-WI-013
	4. Check press stations.	”	”
	5. Record test results.	”	”
	6. Remove vulcanized tube and keep in box with relevant details	”	TU-WI-013
	1. Collect sample	O/PA/SUP	TU-WI-009
SAMPLING, DESTRUCTIVE & NON DESTRUCTIVE TEST	2. Carryout non destructive test	”	”
	3. Record test results	”	”
	4. Carryout destructive test	”	”
	5. Record test results.	”	”
	1. If the test results are satisfactory approve the process	SPM/PE/APM /Pro Ex/PA/ SUP	TU-WI-009
ACCEPTANCE	2. If the test results are not satisfactory	”	
	Keep the lot under ”ON HOLD”	”	
	Collect sample 2 nd test. Test results are 100% satisfactory, approved the lot if not reject		
HANDING OVER	1. Send tubes to grading section for tube grading and final inspection	SPM/Pro Ex/ PA/ SUP/O	TU-WI-013/015 IFS

If MR signature is absent this will not be a controlled document.

Signature of Management Representative

Date