

TCL MSCN Registration Products:

S. No.	Product Name
1	Synthetic Camouflage Nets (SCN)
2	Multi Spectral Synthetic Camouflage Nets (MSCN)
3	Multi Spectral Synthetic Camouflage Fabrics

Technical particulars details as found to be satisfactory during physical visit of the Firm by Capacity Verification Team of the OEF Hazratpur.

Manufacturing Process:

S.No	Process
1	Raw Material Grinding: Grind raw materials for camouflage paint using a Triple Roll Mill (Micronizer).
2	Grind Fineness Check: Verify grind fineness using a Grindometer.
3	Paint Mixing: Mix grinded raw materials with solvent using a Paint Mixer.
4	Viscosity Check: Measure paint viscosity using a Viscometer.
5	Test Swatch Creation: Apply paint to a swatch using a Bar Coater.
6	Drying Process: Dry coated swatch in a Hot Air Oven.
7	IR Reflectance Testing: Measure IR reflectance up to 1400nm using a UV2600i Spectrophotometer.
8	Thermal Transmission Testing: Evaluate thermal transmission using a FLIR Thermal Imaging Camera.
9	Radar Attenuation Testing: Test radar attenuation at DRDO Laboratory (test report to be provided).
10	Fabric Cutting: Cut coated fabric into customized shapes using a Camouflage Shrimp Cut Machine.
11	MSCN Fabrication: Assemble MSCN using Sewing Machines.
12	Packaging Fabrication: Create packaging bags using Sewing Machines.
13	Final Product: MSCN are ready for dispatch.

Testing Process:

S.No	Process
1	IR Reflectance Testing: Measure IR reflectance up to 1400nm using a UV2600i Spectrophotometer.
2	Thermal Transmission Testing: Evaluate thermal transmission using a FLIR Thermal Imaging Camera.
3	Radar Attenuation Testing: Test radar attenuation at DRDO Laboratory (test report is to be provided).
4	Steel Scale 2 Feets & 2 Meters , Measuring Tapes 10 & 50 Meters are required to be calibrated by NABL accredited labs)

[Signature]
13/1/2025

Plant & Machinery Required for MSCN

Monthly Production Capacity (MPC) Calculation with Plant and Machinery.			
APPLIED ITEM FOR REGISTRATION WITH MPC	SI. No	Name of Items	MPC (Qnty)
	1	Synthetic Camouflage Nets (SCN)	50 Nos
	2	Multi Spectral Synthetic Camouflage Nets (MSCN)	40 Nos
	3	Multi Spectral Synthetic Camouflage Fabrics	1500 Mts
SI.No	Name of Plant and Machinery and Accessories.		Quantity
01	Camouflage Net Shrimp Cutting Machine (Industrial)		01 nos
02	Camouflage Colour/Paint Mixer Making Machine (Industrial)		01 nos
03	Camouflage Paint Micronizer, Triple Roll Mill (Industrial)		01 nos
04	Camouflage Paint Foot Mounting Motor		01 nos
05	Camouflage Paint Grindometer (Hegman Gauge)		01 nos
06	Camouflage Paint Bar Coater		01 nos
07	Illuminated Magnifier		10 × 1
08	Gloss Meter		05 nos
09	Camouflage Big Bar Coater		01 nos
10	Hot Air Oven		05 nos
11	Industrial Sewing Machine		01 nos
12	UPS 5KV Online		01 nos
13	Fabric Cutting Machine		01 nos
14	Digital Multimeter		01 nos
15	Textile Eyeglass		01 nos
16	Viscometer (Liquid Flow Meter)		01 nos
17	Pocket Microscope		01 nos
18	UV 2600i Spectrophotometer		01 nos
19	FLIR Thermal Imaging Camera		01 nos
20	Laboratory Equipment. (Stirrer, Beakers, Cylinders, Blade, Glass Test Tubes, Test Tube Stands, Flasks, Measuring Cylinders, Droppers & Gloves etc.)		

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13/11/2014

Packaging Steps for MSCN Net:

- 1. Careful Folding of the Net:**
The net is carefully folded to ensure it maintains its integrity and avoids any damage to its material or structure.
- 2. Waterproof Protection:**
The net is placed in a **waterproof bag** to safeguard it from moisture and environmental factors, ensuring it remains in optimal condition during storage and transportation.
- 3. Additional Cushioning with Bubble Wrap:**
For added protection, the net is **wrapped in bubble wrap**, providing an extra layer of cushioning to prevent any potential damage from external pressure or handling.
- 4. Final Packaging in Outer ST Bag:**
The net is then securely wrapped in a **final outer ST (storage) bag**, which offers additional protection and ensures the net is fully sealed and protected during transit.

Instructions for MSCN Net :

- **Protective Storage Bags:** Use durable and waterproof bags made from non-abrasive material.
- **Fold Carefully:** Neatly fold the net in a manner that minimizes creases or pressure on the fabric. Avoid excessive folding or tight rolling, which could damage the material. If necessary, use tissue paper to separate layers and prevent compression.
- **Place in Storage Bag:** Place the folded or rolled-up net into the protective storage bag. Make sure the bag is sealed properly to prevent dirt, dust, and moisture from entering.

As per MoU and Required P&M for the Manufacturing of MSCN with Testing facility as per approval of Legal authority (DGQA) to be followed, if any.

As per applicable Drawing and as per MoU and Required P&M for the Manufacturing of MSCN is required to follow with Technical particulars details of OEF Hazratpur.

General Manager

AWM/QA 13/11/2023
QCO/OEF Hazratpur

JWM/QA
DO/QA(OEFHz)