COLOR COATED STEEL
LARGEST FLAT STEEL MANUFACTURER OF PAKISTAN
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COLOR COATED STEEL

ISL’s Continuous Color Coating facility produces color coated steel, using a Wet Paint Coating Technology. The 84,000 MT state-of-the-art facility processes and coats a wide range of substrates like cold rolled, galvanized, galvalume, aluminum and stainless steel, in any imaginable color.

The high quality color coating enhances the corrosion resistance of substrates and adds to their aesthetic appeal. The color coated steel produced at ISL is stain-resistant, corrosion-resistant and scratch-resistant which makes it ideal for various commercial and industrial applications.

**THICKNESS**
0.20 mm – 1.50 mm

**GRADES**
As per JIS G3312 and equivalent standards.

**MAXIMUM WIDTH**
1,250 mm
MANUFACTURING PROCESS

MANUFACTURING STANDARDS
Our products are manufactured as per JIS G3312 and equivalent standards related to commercial and structural grades in sheets and coils.
PAINT SYSTEMS

ISL uses Polyester (PE), Polyvinylidene Difluoride (PVDF) and Polyamide paint systems.

PE PAINT SYSTEM
PE paint system is economical and is recommended for materials exposed to normal atmospheric conditions.

POLYVINYLIDENE DIFLUORIDE (PVDF) PAINT SYSTEM
Polyvinylidene Difluoride PVDF paint is used on materials exposed to severe atmospheric conditions due to its stable corrosion and UV resistance.

POLYAMIDE PAINT SYSTEM
Being UV durable, oxidation and scratch-resistant; the Polyamide paint system in combination with high-build primers, is used on materials exposed to extremely corrosive environments.

MATERIAL COMPOSITION

STANDARD PRODUCT: Top side finish coating, reverse side primer plus backer coat
PRODUCTION FACILITIES

TWO COAT - TWO BAKE SYSTEM

ISL's color coating line applies uniform color thickness and highly reproducible colors and gloss levels, thanks to the Two coat - Two bake system that enables application of primer and top coat in the same run. Different color coats can be applied to the front and back simultaneously.

SPECIFICATIONS

<table>
<thead>
<tr>
<th>GENERAL</th>
<th></th>
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<tbody>
<tr>
<td>Thickness (mm)</td>
<td>0.20 - 1.50</td>
</tr>
<tr>
<td>Width (mm)</td>
<td>300 - 1,250</td>
</tr>
<tr>
<td>Coil weight (MT)</td>
<td>1.5 - 10</td>
</tr>
<tr>
<td>Coil ID (mm)</td>
<td>508</td>
</tr>
<tr>
<td>Total coating thickness (micron)</td>
<td>30 - 100 (including metallic coat, top, back &amp; primer)</td>
</tr>
<tr>
<td>Substrates</td>
<td>Galvanized steel, Galvalume and Aluminium</td>
</tr>
<tr>
<td>Finishes</td>
<td>Smooth, Matt, High Gloss and Grain</td>
</tr>
<tr>
<td>Specifications</td>
<td>EN 10169, Equivalent of ASTM A-755 and JIS G 3312</td>
</tr>
<tr>
<td>Base material</td>
<td>Galvanized Steel: as per ASTM A-653/JIS G 3302/EN 10327 Galvalume: as per ASTM A-792 Aluminium: as per ASTM B-209</td>
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</tbody>
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# QUALITY ASSURANCE TESTS

<table>
<thead>
<tr>
<th>PROPERTIES</th>
<th>TEST</th>
<th>TESTING STANDARDS</th>
<th>POLYESTER PAINT</th>
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<tr>
<td><strong>COLOR COATED COILS AND SHEETS</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dry film thickness</td>
<td>Coating thickness</td>
<td>-</td>
<td>EN 13523 - 1</td>
</tr>
<tr>
<td>Gloss</td>
<td>Specular gloss at 60°</td>
<td>13.2.3</td>
<td>EN 13523 - 2</td>
</tr>
<tr>
<td>Scratch hardness</td>
<td>Pencil hardness</td>
<td>13.2.3</td>
<td>EN 13523 - 4</td>
</tr>
<tr>
<td>Impact resistance</td>
<td>Reverse impact test</td>
<td>13.2.4</td>
<td>EN 13523 - 5</td>
</tr>
<tr>
<td>Adhesion quality</td>
<td>Cupping test</td>
<td>13.2.5</td>
<td>EN 13523 - 6</td>
</tr>
<tr>
<td>Flexibility</td>
<td>T-bend test</td>
<td>13.2.2</td>
<td>EN 13523 - 7</td>
</tr>
<tr>
<td>Corrosion resistance</td>
<td>Salt spray (fog) test</td>
<td>13.1.3</td>
<td>EN 13523 - 8</td>
</tr>
<tr>
<td>Solvent resistance</td>
<td>M.E.K. rubbing test</td>
<td>-</td>
<td>EN 13523 - 11</td>
</tr>
<tr>
<td>Adhesion</td>
<td>Cross hatch cutter with standard adhesion tape</td>
<td>13.2.2</td>
<td>EN ISO 2409</td>
</tr>
<tr>
<td>Measurement of color difference</td>
<td>Data color spectrometer</td>
<td>-</td>
<td>-</td>
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# Tests for False Ceiling and Roller Shutter Applications

<table>
<thead>
<tr>
<th>Test Standard As Per ECCA</th>
<th>False Ceiling Application</th>
<th>Roller Shutter Application</th>
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<tbody>
<tr>
<td>Coating thickness (Top)</td>
<td>20 microns +/- 2</td>
<td>20 microns +/- 2</td>
</tr>
<tr>
<td>Coating thickness (Bottom)</td>
<td>5 microns +/- 2</td>
<td>5 microns +/- 2</td>
</tr>
<tr>
<td>Gloss at 60</td>
<td>10 to 90%</td>
<td>20 to 35%</td>
</tr>
<tr>
<td>Pencil hardness</td>
<td>F-H</td>
<td>F-H</td>
</tr>
<tr>
<td>Impact (kg.cm)</td>
<td>32</td>
<td>32</td>
</tr>
<tr>
<td>Erichsen (mm)</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Cross hatch</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td>Radius bend</td>
<td>1T</td>
<td>1T</td>
</tr>
<tr>
<td>Solvent resistance</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Humidity</td>
<td>Good</td>
<td>Excellent</td>
</tr>
<tr>
<td>Salt spray</td>
<td>Good</td>
<td>Excellent</td>
</tr>
<tr>
<td>Virtual inspection of color difference</td>
<td>Good</td>
<td>Good</td>
</tr>
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APPLICcATIONS

AGRICULTURE
(Grain silos, sprayers, pans, feeding troughs)

DOMESTIC USE
(Trunks, tubs, buckets, storage bins, water tanks)

ELECTRICAL APPLIANCES

FURNITURE AND FIXTURES

FALSE CEILING

CONSTRUCTION

COLD STORAGEs AND UNITS

MEP APPLICATIONS
(Ducting, drums/barrels, containers, thermal cladding, air-conditioning ducts, railway coaches and others)

DOMESTIC USE

AGRICULTURE

COLD STORAGEs AND UNITS

MEP APPLICATIONS

DOMESTIC USE

AGRICULTURE

COLD STORAGEs AND UNITS

MEP APPLICATIONS

DOMESTIC USE

AGRICULTURE

COLD STORAGEs AND UNITS

MEP APPLICATIONS
WHY ISL?

**AVAILABILITY**
ISL’s efficient inventory management system ensures that running items are available ex-stock.

**GLOBAL FOOTPRINT**
With close proximity to the country’s sea port, ISL has an ideal strategic location that provides an efficient access to regional and international markets.

**NATION-WIDE SALES NETWORK**
A vast nationwide dealership network caters to all major cities of Pakistan.

**CUSTOMIZATION**
ISL offer various value added products and services as per customer requirements. Ranging from special grade steel products to services like custom cutting and slitting.

**PRODUCT QUALITY**
ISL’s products are manufactured using high-quality raw material sourced from world’s leading tier-1 mills. The steel produced in ISL’s cutting edge facility completely conforms to the global standards of steel manufacturing.

**PRECISE DIMENSIONAL TOLERANCE**
Minimal deviation in mechanical properties due to state-of-the-art production and quality control systems.

**ENDURANCE**
ISL’s color coated steel is durable, corrosion-resistant and endures extreme weather conditions.

**SUPERIOR AESTHETICS**
Wide range of colors and profiles are available which can be chosen according to the preference, usage and purpose.

**AFTER SALES SUPPORT**
ISL being a customer-centric company, ensures peace of mind to its customers with its comprehensive after sales support and swift handling of complaints and queries.

**PACKING STANDARDS**
Exceptional packaging standards ensure that ISL products reach their destinations in a prime and "mill fresh" condition.
VALUE ADDED SERVICES

CUT-TO-LENGTH
ISL has the capacity to provide cut-to-length material depending on customer requirements.

THICKNESS RANGE
0.15 mm to 2.50 mm

COIL WIDTH
1,250 mm max.

COIL WEIGHT
25 tons max.

CUTTING WIDTH
min. 400 mm, max. 1,250 mm

CUTTING LENGTH
min. 300 mm, max. 5,000 mm

PALLET WEIGHT
2.5 MT max.

TOLERANCE OF CUTTING LENGTH
+/- 1 mm max.
SLITTING SPECIFICATIONS

ISL’s service center has the capability to provide slitted coils as specified by the customers.

**THICKNESS RANGE**

0.15 mm – 2.60 mm

**COIL WIDTH**

1,250 mm max.

**COIL WEIGHT**

25 tons max.

**INTERNAL DIAMETER**

508 mm

**EXTERNAL DIAMETER**

1,700 mm max.

**SLIT WIDTH TOLERANCE**

+/- 0.1 mm

**MINIMUM SLITTED WIDTH**

25 mm
PROFILE SPECIFICATIONS

Features:

Light Weight: ISL’s color coated profiles can easily be installed or dismantled.
Fine Finish: These sheets are uniformly coated to offer superior finish and aesthetics.
Heat Insulation: The color coating on these sheets have strong heat insulating properties.
Water Resistant: With water resistant properties, these sheets are rust-proof.
Weather Resistant: Without getting damaged, color coated steel can bear extreme weather conditions.
High Strength: Better tensile strength enable these sheets to bear heavy loads.
Attractive Appearance: ISL’s color coated profiles are available in attractive range of colors that makes them appealing in look.
Durability: ISL’s color coated profiles are highly durable and do not require any additional protective coating; this makes them an economical building material.

Applications:
Storage buildings or warehouses, exhibition halls, gymnasiums, industrial buildings, shopping malls, glasshouses, household roofing, commercial buildings etc.

ISL offer these types of profiled sheets:

**SINUSOIDAL**
- Coil Width: 914/1,000/1,219 mm
- Effective Width: 760/846/1,064 mm
- Radius: 20 mm
- Depth: 16 mm
- Pitch: 65.9 mm
- Thickness: 0.3 mm to 0.60 mm

**CLIP LOCK**
- Coil width: 1,219 mm
- Effective Width: 954 mm
- Depth: 42 mm
- Pitch: 315 mm
- Thickness: 0.40 mm to 0.60 mm

**SCREW DOWN**
- Coil width: 1,219 mm
- Effective Width: 1,000 mm
- Depth: 30 mm
- Pitch: 250 mm
- Thickness: 0.30 mm to 0.70 mm
TRANSPORT AND HANDLING PRECAUTIONS

LIFTING DEVICES
Always use proper lifting devices like C-hook or parallel hooks, magnetic lifters, nylon slings etc. to lift, load and unload coils and sheet packets.

RUBBER SHEETS
When transporting coils in trucks, use rubber sheets beneath the coils or an exclusive transport stand.

SKIDS
While stacking the coils on floor, ensure that they are placed on proper skids to avoid formation of dents.

HANDLING WITH SLINGS
Nylon slings are preferred. Use rubber pads on coils where the sling comes in contact with them.

SECURE LASHING
While transporting in containers, coils must be lashed adequately and securely to avoid damages to the products.

SECURE STACKING
While transporting, ensure that the stacked sheets are firmly secured down, to avoid them slipping off due to vibrations and movements.

FORKLIFT
Do not push cut-sheets or roll the coils with a forklift, since this could cause scratching.

SLINGS & ROPES
Secure coils and sheet packets with slings/chains/ropes while transporting in trucks. Use rubber pads between these fasteners and steel products.

MOVING & SHIFTING
While using lifter, always carry sheets in a packed condition to prevent them from slipping or getting scratched.