



KVF Quad Corporation - Powder Coating System

Class A = Superior cosmetics/finish **Class C** = Average cosmetics/finish
Class B = High cosmetics/finish **Class D** = No finish requirements

KVF-PCS.1

Class: A, B, or C

Performance: Superior durability, longevity, gloss and color

Process:

- Abrasive Blast
- Hand Sand (Class A)
- Wash
- Primer
- Top coat

Good For: High cosmetics, expensive weldments, outdoor furniture, automobile parts

Cost: \$\$\$\$*

Salt Spray Hours: 1000+**

KVF-PCS.2

Class: A, B, or C

Performance: High durability, longevity, gloss and color

Process:

- Abrasive Blast and/or Wash
- Primer
- Top coat

Good For: High impact items, outdoor furniture, car/motorcycle parts, refurbished outdoor equipment

Cost: \$\$

Salt Spray Hours: 700+

KVF-PCS.3

Class: B, C, or D

Performance: Above average durability, longevity, gloss and color

Process:

- Abrasive Blast
- Wash
- Top coat

Good For: Indoor only items, furniture, antiques

Cost: \$\$-\$

Salt Spray Hours: 500+

KVF-PCS.4

Class: C or D

Performance: Average durability, longevity, gloss and color

Process:

- Abrasive Blast
- Top coat

Good For: Ground engaging, rust proofing, indoor only items, pitted/old metal surfaces

Cost: \$

Salt Spray Hours: 250+

*Cost is provided through quotation during estimation process.

**Salt Spray Hours are based on internal testing within a controlled environment. There are no guarantees on lifespan of powder coatings on parts produced by KVF Quad Corporation.

See KVF Quad Corporation's "Terms and Conditions" for further information regarding customer and vendor responsibilities.

KVF Quad Corporation—Powder Coating System Standards

Purpose: Provide KVF Quad's customers with information about substrate preparation, coatings, and how they correlate with coating appearance and average coating lifespan.

Acceptable Viewing Conditions: Part should be positioned in the final customer viewing orientation—Evaluator shall view from a 1-meter or 3-foot distance at any orientation necessary to inspect paint quality.

Topcoat Imperfections

Defect	Class A Part or Class A Surface	Class B Part or Class B Surface / Area	Class C Part or Class C Surface / Area	Class D Part or Class D Surface / Area
Boil Out, Kick Out, Out Gas	Steel: None allowed	Steel: None allowed	Steel: 2<5mm wide	Allowed
	Composites: Max 2<3mm wide No Bunching	Composites: Max 8<3mm wide 25<1.5mm diameter No Bunching	Composites: Max 50mm long, or 1mm thick or 25mm circle	
Bubbles (No Bunching)	Steel: 1 acceptable if distorted area < 1.5mm in diameter	Steel: 1 individual or grouping of small bubbles with a total defect area per 300mm ²	Steel: 3 individual or grouping of small bubbles with a total defect area per 300mm ²	Allowed
	Composites: 3<3mm diameter 15<1.5mm diameter	Composites: 8<3mm diameter 25<1.5mm diameter	Composites: Allowed - as long as the part is covered with paint	
Chipping (as received / no bunching)	Maximum Qty 6<1.0mm diameter	Maximum Qty 6<1.0mm diameter	Maximum Qty 9<1.5mm diameter	Allowed
Craters / Solvent Pop	Steel: Max Qty 6 <1.5mm in diameter – No bunching	Steel: Max Qty 12 <1.5mm in diameter – No Bunching	Allowed No Bunching	Allowed if the part is covered with paint
	Composite: 3<3mm diameter 15 <1.5mm diameter No bunching	Composite: 8 <3mm diameter 25<1.5mm Diameter No bunching		

Topcoat Imperfections				
Dirt / Foreign Material (no bunching)	Steel: Max Qty 6 <1.5mm in diameter	Steel: Max Qty 12 <1.5mm in diameter	Allowed	Allowed
	Composite: 3 <3mm diameter 15 <1.5mm diameter	Composite: 8 <3mm diameter 25 <1.5mm diameter		
Dust	Allowed and not visible as defined	<0.25mm allowed, no bunching and not visible as defined	<0.50mm allowed, no bunching and not visible as defined	Allowed
Drips / Runs / Sags	None Allowed	None Allowed on Surface. Allowed on edges and holes. Must not interfere with fit function. No more than 1 defect 6mm x 25mm on hole and 50mm on an edge.	2 defects per surface if < 1mm thick by 7mm wide by 50mm long; or no more than 10% of viewing area with dimensions.	Allowed if no interference with mating parts
Over spray	None Allowed	Minimal amount on back side allowed when back side is not painted	Allowed - Color visually matches	Allowed
Dry spray	None Allowed	Minimal amount on back side allowed when back side is not painted	Allowed Color visually matches and is uniform	Allowed
Gloss (only on smooth substrate / does not apply to tube steel)	Shall meet performance specification KVF-PCS-1	Shall meet performance specification KVF-PCS-2	Shall meet performance specification KVF-PCS-3	Not Applicable
Hair/ Lint/ Fibers	None Allowed	2 pieces acceptable per visual surface if distorted area is <1mm x 4mm	Allowed if the part is covered with paint	Allowed
Orange Peel	Orange peel rating 5-9 on visual ACT 16125 panel standards	Orange peel rating 5-9 on visual ACT 16125 panel standards	Orange peel rating 2-9 on visual ACT 16125 panel standards	Allowed
Paint Spit / Splatter	<1.5mm in diameter, bunching not allowed	<1.5mm in diameter, 5 qty allowed in 250mm x 250mm	Allowed	Allowed

Topcoat Imperfections				
Paint Thickness - / Light Paint	Shall meet performance specification KVF-PCS-1	Shall meet performance specification KVF-PCS-2	Shall meet performance specification KVF-PCS-3	Shall meet performance specification KVF-PCS-4
Pinholes / Fish Eyes/Blisters/ Solvent Pop (no bunching)	Steel: Qty 6 max, Acceptable if <1.5mm in diameter	Steel: Acceptable if < 1.5mm in diameter	Steel: Acceptable if <3mm in diameter	Allowed Blisters: Acceptable if ≤10mm in diameter
	Composite: 3 <3mm diameter 15 <1.5mm diameter	Composite: 8 <3mm diameter 25 <1.5mm diameter	Composite: 8 <3mm diameter 25 <1.5mm diameter	
Polishing Marks, Scuffs	None Allowed	None Allowed	Allowed	Allowed
Paint Scratches, Sanding Marks (On paint)	None Allowed	2<50mm long and not felt with fingernail	5<100mm long x 2mm wide	Allowed
Shadowing (Not visible after final assembly)	None Allowed	None Allowed	Allowed	Allowed
Streaks	None Allowed	None Allowed	Allowed <76mm	Allowed
Touch Up Evidence	Professional - no globs, color match, blended, etc.	Professional - no globs, color match, blended, etc.	Allowed	Allowed
Weld Silica	None allowed	None allowed	None Allowed	Allowed
Water Marks	None allowed	None allowed	Allowed - as long as it cannot be seen from >1m away	Allowed
Wrinkle	None allowed	None allowed	2 defects per surface if <1mm thick by 7mm wide by 50mm long	Allowed