Application Guidelines Manual

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1. Introduction

This manual provides best-practice guidance for selecting and applying Sanhui's industrial abrasives in a range of surface preparation, polishing, and finishing operations.

2. General Safety Recommendations

- Always wear appropriate PPE: safety goggles, dust masks, gloves.
- Ensure work areas are well-ventilated to reduce airborne particulate exposure.
- · Refer to SDS before using any abrasive material.

3. Grinding & Lapping

Recommended Abrasives: Black SiC, Green SiC, White Fused Alumina

- Coarse grits (F16–F60): Heavy stock removal
- Medium grits (F80-F180): Shaping and leveling
- Fine grits (F220–F800): Surface finishing

4. Blasting Applications

Recommended Abrasives: Brown Fused Alumina, Black Silicon Carbide

- Use angular grains for roughening surfaces before coating.
- Control blasting pressure to prevent over-etching softer metals.

5. Polishing Applications

Recommended Abrasives: Calcined Alumina, White Fused Alumina (F800+)

- Apply with polishing cloth or pads.
- Keep surface wet to reduce heat and dust generation.

6. Grit Selection Reference Table

| Grit Size | Recommended Application | Abrasive Type |
|------------------|---|------------------------------------|
| F16 – F36 | Heavy cutting, descaling | Brown Fused Alumina |
| F46 – F80 | Blasting and aggressive deburring | Black Silicon Carbide |
| F100 – F180 | General-purpose grinding and shaping | White Fused Alumina |
| F220 – F800 | Fine lapping and surface finishing | Green SiC / White Fused Alumina |
| F1000 – F2000 | Precision polishing and micro-finishing | Calcined Alumina |

7. Application Case Study

Case: Surface Preparation of Automotive Chassis Parts

Client: Tier-1 automotive supplier

Objective: Improve paint adhesion and reduce coating defects

Solution: Implemented brown fused alumina (F60) with controlled blasting pattern

- Adhesion strength improved by 21%
- Coating defect rate reduced from 6.3% to 2.1%
- Productivity increased by 12% due to reduced rework

8. Contact Technical Support

For personalized assistance or to request application-specific abrasive recommendations, contact:

Email: info@sanhuiabrasives.com | Website: www.sanhuiabrasives.com