SURFACE PREPARATION

CHILLED IRON GRIT BLASTING

DSF 3.2.6

Definition:

Chilled iron grit blasting (Shot blasting) is a dry high pressure blasting process using a sharp, angular, metallic (iron carbide) abrasive. This abrasive is produced from carefully selected alloy-free iron scrap that is re-carbonized in a hot blast furnace. The shot obtained by this process is then crushed into grit, a white iron structure which is graded into various grain (G) sizes, that shatters on impact rather than wearing round.

CHILLED IRON	
Ref No.	Size (mm)
G05	0.125-0.3
G07	0.18-0.42
G11	0.30-0.71
G17	0.42-1.0
G28	0.7-1.2
G39	1.0-1.4
G46	1.2-1.7
G55	1.4-2.0
G66	1.7-2.4

The fresh edges exposed by this process combined with a high degree of hardness result in a faster cutting/cleaning action suitable for descaling, derusting, deburring and roughening of surfaces mainly on steel substrates.

Chilled Iron Grit is used in blast rooms with abrasive reclaim systems and in portable pressure blast equipment. The aggressive surface deformation combined with the ferrous content of the grit suggests that this process should **not** be used on aluminium & stainless steel.

Properties:

- Reusable, fast, **aggressive** treatment for paint, oil & rubber removal and de-burring; providing a key for subsequent surface finishes.
- Suitable for steel substrates. .

ASM (DEK) Typical Applications:

Preferred grit size: 0.42 mm – 1.0 mm (G17) unless otherwise stated on drawing.
To be used as a surface finish on all new & refurbished Screen Frames to provide an adhesive key for the mesh covering process.