## **DUST COLLECTOR SELECTION GUIDE**

Referenced from: Industrial Ventilation: A Manual of Recommended Practice - 21st Edition

American Conference of Government Industrial Hygienists

KEY: O - Often, S - Seldom, N - Never

CERAMICS  Raw Product Handling   light   fine   O   O   O   Fettling   light   fine to medium   S   O   S   Refractory Sizing   heavy   coarse   S   O   N   Glaze & Vitreous Enamel Spray   moderate   medium   O   O   N    CHEMICALS	OPERATION	CONCENTRATION	PARTICLE	WET	FABRIC	CYCLONE
Raw Product Handling light fine O O O Fettling light fine to medium S O S S O S S O N N Glaze & Vitreous Enamel Spray moderate medium O O N N CHEMICALS  CHEMICALS  Material Handling light to moderate fine to medium O O O O O O O O O O O O O O O O O O O			SIZES	COLLECTOR	COLLECTOR	
Fettling light fine to medium S O S Refractory Sizing heavy coarse S O N N Glaze & Vitreous Enamel Spray moderate medium O O N N CHEMICALS  Material Handling light to moderate fine to medium O O O O Crushing & Grinding moderate to heavy fine to coarse S O O O O O O O O O O O O O O O O O O				_		
Refractory Sizing heavy coarse S O N Glaze & Vitreous Enamel Spray moderate medium O O N N CHEMICALS		-				
Glaze & Vitreous Enamel Spray moderate medium 0 0 N  CHEMICALS  Material Handling light to moderate fine to medium 0 0 0 0  Crushing & Grinding moderate to heavy fine to coarse 0 0 0  Pneumatic Conveying very heavy fine to coarse 5 0 0  Roasters, Kilns, Coolers heavy mid-coarse 0 0 0  COAL MINING AND POWER PLANT  Material Handling moderate fine 5 0 5  Dedusting, Air Cleaning heavy medium to coarse 0 0 0  Ely ASH  Coal Burning - Chain Grate light fine 5 0 5  Coal Burning - Stoker Fired moderate fine 5 0 5  Coal Burning - Pulverized Fuel heavy fine to coarse 0 0 5  Sand Handling moderate fine 0 0 S  FOUNDRY  Shakeout light to moderate fine 0 0 S  Sand Handling moderate fine 0 0 S  Found Burning - Stoker Fired moderate fine 0 0 S  Found Burning - Fulverized Fuel heavy fine 0 0 S  Found Burning - Pulverized Fuel heavy fine 0 0 S  Found Burning - Fulverized Fuel heavy fine 0 0 S  Found Burning - Fulverized Fuel heavy fine 0 0 S  Found Burning - Fulverized Fuel heavy fine 0 0 S  Found Burning - Fulverized Fuel heavy fine 0 0 S  Found Burning - Fulverized Fuel heavy fine 0 0 S  Found Burning - Fulverized Fuel heavy fine 0 0 S  Found Burning - Fulverized Fuel heavy fine 0 0 S  Found Burning - Fulverized Fuel heavy fine 0 0 S  Found Burning - Fulverized Fuel fine 0 0 S  Found Burning - Fulverized Fuel fine 0 0 S  Found Burning - Fulverized Fuel fine 0 0 S  Found Burning - Fulverized Fuel fine 0 0 S  Found Burning - Fulverized Fuel fine 0 O S  Found Burning - Fulverized Fuel fine 0 O S  Found Burning - Fulverized Fuel fine 0 O S  Found Burning - Fulverized Fuel fine 0 O S  Found Burning - Fulverized Fuel fine 0 O S  Found Burning - Fulverized Fuel fine 0 O S  Found Burning - Fulverized Fuel fine 0 O S  Found Burning - Fulverized Fuel fine 0 O S  Found Burning - Fulverized Fuel fine 0 O S  Found Burning - Fulverized Fuel fine 0 O S  Found Burning - Fulverized Fuel fine 0 O S  Found Burning - Fulverized Fuel fine 0 O S  Found Burning - Fulverized Fuel fine found Fulverized Fulverized Fulverized Fulverized Fulverized Fulver			fine to medium	_		_
CHEMICALS  Material Handling	, ,					N
Material Handling   light to moderate   fine to medium   O   O   O   Crushing & Grinding   moderate to heavy   fine to coarse   O   O   O   Pneumatic Conveying   very heavy   fine to coarse   S   O   O   Pneumatic Conveying   very heavy   fine to coarse   O   O   O   Pneumatic Conveying   very heavy   fine to coarse   O   O   O   Pneumatic Conveying   very heavy   fine to coarse   O   O   O   Pneumatic Conveying   very heavy   fine to coarse   O   O   O   Pneumatic Conveying   moderate   fine   O   O   O   Pneumatic Conveying   moderate   fine   S   O   O   Pneumatic Conveying   moderate   fine   S   O   S   Pneumatic Conveying   moderate   fine   O   S   N   Pneumatic Conveying   moderate   fine to coarse   S   O   S   Pneumatic Conveying   N   Pneumatic Coarse   O   O   S   Pneumatic Coarse   O   O   N   Pneumatic Coarse   O   O   O   Pneumatic Coarse	Glaze & Vitreous Enamel Spray	moderate	medium	0	0	N
Crushing & Grinding moderate to heavy fine to coarse O O O O Pneumatic Conveying very heavy fine to coarse S O O O Roasters, Kilns, Coolers heavy mid-coarse O O O O O O O O O O O O O O O O O O O	CHEMICALS					
Pneumatic Conveying very heavy fine to coarse S O O O Roasters, Kilns, Coolers heavy mid-coarse O O O O O O O O O O O O O O O O O O O	Material Handling	light to moderate	fine to medium	0	0	0
Roasters, Kilns, Coolers heavy mid-coarse O O O O  COAL MINING AND POWER PLANT  Material Handling moderate fine S O S  Dedustring, Air Cleaning heavy medium to coarse O O S  Dedusting, Air Cleaning heavy medium to coarse O S N  FLY ASH  Coal Burning - Chain Grate light fine S O S  Coal Burning - Pulverized Fuel heavy fine S O S  Wood Burning - Pulverized Fuel heavy fine S O S  Sand Handling moderate fine O S S  FOUNDRY  Shakeout light to moderate fine O S S  Sand Handling moderate fine O S S  Sand Handling moderate fine O O S  Found Burning - Pulverized Fuel heavy fine S O S  Sand Handling moderate fine O O S  Found Burning - Pulverized Fuel heavy fine S O S  Found Burning - Pulverized Fuel heavy fine S O S  Found Burning N  Sand Handling moderate fine O O S  Sand Handling moderate fine to medium O O N  Tumbling Mills heavy medium to coarse O O N  Formative Cleaning moderate to heavy fine to medium O O N  Formative Cleaning moderate medium S O O S  Found Burning S O O O  Formative Cleaning moderate medium S O O O  Feed Mill moderate medium S O O O  METAL MELTING  Steel Blast Furnace heavy varied O S N  Steel Clopen Hearth moderate fine to coarse O S N  Ferrous Cupola moderate varied O O N  Ferrous Reverberatory varied fine S O N	Crushing & Grinding	moderate to heavy	fine to coarse	0	0	0
Material Handling moderate medium O O O S Bunker Ventilation moderate fine S O S Dedusting, Air Cleaning heavy medium to coarse O O S Drying moderate fine O S N  FLY ASH Coal Burning - Chain Grate light fine S O S Coal Burning - Stoker Fired moderate fine to coarse S O S Coal Burning - Pulverized Fuel heavy fine S O S Wood Burning Varies coarse O O S  FOUNDRY Shakeout light to moderate fine O O S Sand Handling moderate fine to medium O O N  Tumbling Mills heavy medium to coarse O O N Abrasive Cleaning moderate to heavy fine to medium O O N  GRAIN ELEVATOR, FLOUR & FEED MILLS Grain Handling light medium S O O S Flour Dust moderate medium S O O S Flour Dust moderate medium S O O S Flour Dust moderate medium S O O O Feed Mill moderate fine to coarse O S N Feer I ight fine S O N Feer O S N F	Pneumatic Conveying	very heavy	fine to coarse	S	0	0
Material Handling moderate medium 0 0 0 0 Delunker Ventilation moderate fine 5 0 S Dedusting, Air Cleaning heavy medium to coarse 0 0 S Drying moderate fine 0 S N Drying moderate fine 0 S N S Drying moderate fine 0 S N S Drying moderate fine 0 S N S N S N S N S N S N S N S N S N S	Roasters, Kilns, Coolers	heavy	mid-coarse	0	0	0
Bunker Ventilation moderate fine S O S Dedusting, Air Cleaning heavy medium to coarse O O S Drying moderate fine O S N  FLY ASH Coal Burning - Chain Grate light fine S O S Coal Burning - Stoker Fired moderate fine to coarse S O S Coal Burning - Pulverized Fuel heavy fine S O S Wood Burning Varies Coarse O O S  FOUNDRY Shakeout light to moderate fine to medium O O S Sand Handling moderate fine to medium O O N  Tumbling Mills heavy medium to coarse O N  Abrasive Cleaning moderate to heavy fine to medium O O N  GRAIN ELEVATOR, FLOUR & FEED MILLS Grain Handling light medium S O O Grain Dryers light coarse S O O Feed Mill moderate medium S O O Feed Mill moderate medium S O O Feed Mill fine Moderate medium S O O Feed Mill fine moderate medium S O O Feed Mill fine moderate fine to coarse S O O O Feed Mill fine moderate medium S O O Feed Mill fine moderate medium S O O Feed Mill fine moderate fine to coarse S O O O Feed Mill fine moderate fine to coarse S O O O Feed Mill fine moderate medium S O O O Feed Mill fine S O O O Feed Mill fine S O N Steel Electric Furnace light fine S O N Ferrous Cupola moderate varied O O N Ferrous Cupola moderate varied O O N N Non-ferrous Reverberatory varied fine S O N	COAL MINING AND POWER PLANT		<b>*</b> . 0			
Dedusting, Air Cleaning   Heavy   Medium to coarse   O   O   S	Material Handling	moderate	medium	0	0	0
Drying   moderate   fine   O   S   N	Bunker Ventilation	moderate	fine	S	0	S
Drying   moderate   fine   O   S   N	Dedusting, Air Cleaning	heavy	medium to coarse	0	0	S
Coal Burning - Chain Grate light fine S O S Coal Burning - Stoker Fired moderate fine to coarse S O S Coal Burning - Pulverized Fuel heavy fine S O S Wood Burning Varies coarse O O S  FOUNDRY Shakeout light to moderate fine O O S Sand Handling moderate fine to medium O O N Tumbling Mills heavy medium to coarse O N Abrasive Cleaning moderate to heavy fine to medium O O N  GRAIN ELEVATOR, FLOUR & FEED MILLS Grain Handling light medium S O S Flour Dust moderate medium S O O Feed Mill moderate medium S O O  METAL MELTING Steel Blast Furnace heavy varied O S N Steel Open Hearth moderate fine to coarse O S N Steel Electric Furnace light fine S O N Ferrous Cupola moderate varied O N N N N N N N N N N N N N N N N N N N		moderate	fine	0	S	N
Coal Burning - Stoker Fired moderate fine to coarse S O S Coal Burning - Pulverized Fuel heavy fine S O S Wood Burning varies coarse O O S  FOUNDRY Shakeout light to moderate fine O O S Sand Handling moderate fine to medium O O N Tumbling Mills heavy medium to coarse O N Abrasive Cleaning moderate to heavy fine to medium O N  GRAIN ELEVATOR, FLOUR & FEED MILLS Grain Handling light medium S O O Grain Dryers light coarse S O S Flour Dust moderate medium S O O Feed Mill moderate medium S O O  METAL MELTING Steel Blast Furnace heavy varied O S N Steel Open Hearth moderate fine to coarse O S N Steel Electric Furnace light fine S O N Ferrous Cupola moderate varied O N N Non-ferrous Reverberatory varied fine S O N	FLY ASH					
Coal Burning - Stoker Fired     moderate     fine to coarse     S     O     S       Coal Burning - Pulverized Fuel     heavy     fine     S     O     S       Wood Burning     varies     coarse     O     O     S       FOUNDRY     Shakeout     light to moderate     fine     O     O     S       Sand Handling     moderate     fine to medium     O     O     N       Tumbling Mills     heavy     medium to coarse     O     O     N       Abrasive Cleaning     moderate to heavy     fine to medium     O     O     N       GRAIN ELEVATOR, FLOUR & FEED MILLS     Ight     medium     S     O     O       Grain Handling     light     medium     S     O     O       Grain Dryers     light     coarse     S     O     S       Flour Dust     moderate     medium     S     O     O       Feed Mill     moderate     medium     S     O     O       METAL MELTING     Steel Blast Furnace     heavy     varied     O     S     N       Steel Open Hearth     moderate     fine to coarse     O     S     N       Steel Electric Furnace     light     fine     S <t< td=""><td>Coal Burning - Chain Grate</td><td>light</td><td>fine</td><td>S</td><td>0</td><td>S</td></t<>	Coal Burning - Chain Grate	light	fine	S	0	S
Coal Burning - Pulverized Fuel heavy fine S O S Wood Burning varies coarse O O S  FOUNDRY Shakeout light to moderate fine O O S Sand Handling moderate fine to medium O O N Tumbling Mills heavy medium to coarse O O N Abrasive Cleaning moderate to heavy fine to medium O O N  GRAIN ELEVATOR, FLOUR & FEED MILLS Grain Handling light medium S O O Grain Dryers light coarse S O S Flour Dust moderate medium S O O Feed Mill moderate medium S O O  METAL MELTING Steel Blast Furnace heavy varied O S N Steel Open Hearth moderate fine to coarse O S N Steel Electric Furnace light fine S O N Ferrous Cupola moderate varied O N N Non-ferrous Reverberatory varied fine S O N		moderate	fine to coarse	S	0	S
Wood Burning     Varies     coarse     O     S       FOUNDRY     Iight to moderate     fine     O     O     S       Sand Handling     moderate     fine to medium     O     O     N       Tumbling Mills     heavy     medium to coarse     O     O     N       Abrasive Cleaning     moderate to heavy     fine to medium     O     O     N       GRAIN ELEVATOR, FLOUR & FEED MILLS     Grain Handling     Iight     medium     S     O     O       Grain Dryers     light     coarse     S     O     S       Flour Dust     moderate     medium     S     O     O       Feed Mill     moderate     medium     S     O     O       METAL MELTING     Steel Blast Furnace     heavy     varied     O     S     N       Steel Open Hearth     moderate     fine to coarse     O     S     N       Steel Electric Furnace     light     fine     S     O     N       Ferrous Cupola     moderate     varied     O     N       Non-ferrous Reverberatory     varied     fine     S     O     N	Coal Burning - Pulverized Fuel	heavy	fine	S	0	S
Shakeout light to moderate fine O O S Sand Handling moderate fine to medium O O N Tumbling Mills heavy medium to coarse O O N Abrasive Cleaning moderate to heavy fine to medium O O N  GRAIN ELEVATOR, FLOUR & FEED MILLS Grain Handling light medium S O O Grain Dryers light coarse S O S Flour Dust moderate medium S O O Feed Mill moderate medium S O O  Feed Mill fine S O O  METAL MELTING Steel Blast Furnace heavy varied O S N Steel Open Hearth moderate fine to coarse O S N Steel Electric Furnace light fine S O N Ferrous Cupola moderate varied O N N Non-ferrous Reverberatory varied fine S O N		varies	coarse	0	0	S
Sand Handling moderate fine to medium 0 0 N Tumbling Mills heavy medium to coarse 0 N Abrasive Cleaning moderate to heavy fine to medium 0 N  GRAIN ELEVATOR, FLOUR & FEED MILLS Grain Handling light medium S O O Grain Dryers light coarse S O S Flour Dust moderate medium S O O Feed Mill moderate medium S O O  METAL MELTING Steel Blast Furnace heavy varied O S N Steel Open Hearth moderate fine to coarse O S N Steel Electric Furnace light fine S O N Ferrous Cupola moderate varied O N N Non-ferrous Reverberatory varied fine S O N	FOUNDRY					
Tumbling Mills heavy medium to coarse O O N Abrasive Cleaning moderate to heavy fine to medium O O N  GRAIN ELEVATOR, FLOUR & FEED MILLS Grain Handling light medium S O O Grain Dryers light coarse S O S Flour Dust moderate medium S O O Feed Mill moderate medium S O O  METAL MELTING Steel Blast Furnace heavy varied O S N Steel Open Hearth moderate fine to coarse O S Steel Electric Furnace light fine S O N Ferrous Cupola moderate varied O N N Non-ferrous Reverberatory varied fine S O N	Shakeout	light to moderate	fine	0	0	S
Tumbling Mills heavy medium to coarse O O N Abrasive Cleaning moderate to heavy fine to medium O N  GRAIN ELEVATOR, FLOUR & FEED MILLS Grain Handling light medium S O O Grain Dryers light coarse S O S Flour Dust moderate medium S O O Feed Mill moderate medium S O O  METAL MELTING Steel Blast Furnace heavy varied O S N Steel Open Hearth moderate fine to coarse O S Steel Electric Furnace light fine S O N Ferrous Cupola moderate varied O N N Non-ferrous Reverberatory varied fine S O N	Sand Handling		fine to medium	0	0	N
Abrasive Cleaning moderate to heavy fine to medium O O N  GRAIN ELEVATOR, FLOUR & FEED MILLS  Grain Handling light medium S O O Grain Dryers light coarse S O S Flour Dust moderate medium S O O Feed Mill moderate medium S O O  METAL MELTING  Steel Blast Furnace heavy varied O S N  Steel Open Hearth moderate fine to coarse O S N  Steel Electric Furnace light fine S O N  Ferrous Cupola moderate varied O N  Non-ferrous Reverberatory varied fine S O N		heavy	medium to coarse	0	0	N
Grain Handling  Grain Dryers  Iight  Coarse  S  O  S  Flour Dust  Feed Mill  Moderate  Medium  S  O  O  S  METAL MELTING  Steel Blast Furnace  heavy  Varied  Moderate  Moderate	Abrasive Cleaning	moderate to heavy	fine to medium	0	0	N
Grain Handling  Grain Dryers  Iight  Coarse  S  O  S  Flour Dust  Feed Mill  Moderate  Medium  S  O  O  S  METAL MELTING  Steel Blast Furnace  heavy  Varied  Moderate  Moderate	GRAIN ELEVATOR, FLOUR & FEED MILLS					
Grain Dryers light coarse S O S Flour Dust moderate medium S O O Feed Mill moderate medium S O O  METAL MELTING Steel Blast Furnace heavy varied O S N Steel Open Hearth moderate fine to coarse O S N Steel Electric Furnace light fine S O N Ferrous Cupola moderate varied O N Non-ferrous Reverberatory varied fine S O N		light	medium	S	0	0
Flour Dust moderate medium S O O Feed Mill moderate medium S O O  METAL MELTING Steel Blast Furnace heavy varied O S N Steel Open Hearth moderate fine to coarse O S N Steel Electric Furnace light fine S O N Ferrous Cupola moderate varied O N Non-ferrous Reverberatory varied fine S O N			coarse	S	0	S
Feed Mill     moderate     medium     S     O     O       METAL MELTING     Steel Blast Furnace     heavy     varied     O     S     N       Steel Open Hearth     moderate     fine to coarse     O     S     N       Steel Electric Furnace     light     fine     S     O     N       Ferrous Cupola     moderate     varied     O     N       Non-ferrous Reverberatory     varied     fine     S     O     N	·	•	medium	S	0	0
Steel Blast FurnaceheavyvariedOSNSteel Open Hearthmoderatefine to coarseOSNSteel Electric FurnacelightfineSONFerrous CupolamoderatevariedOONNon-ferrous ReverberatoryvariedfineSON	Feed Mill					0
Steel Blast FurnaceheavyvariedOSNSteel Open Hearthmoderatefine to coarseOSNSteel Electric FurnacelightfineSONFerrous CupolamoderatevariedOONNon-ferrous ReverberatoryvariedfineSON	METAL MELTING					
Steel Open Hearthmoderatefine to coarseOSNSteel Electric FurnacelightfineSONFerrous CupolamoderatevariedOONNon-ferrous ReverberatoryvariedfineSON	Steel Blast Furnace	heavy	varied	0	S	N
Steel Electric FurnacelightfineSONFerrous CupolamoderatevariedOONNon-ferrous ReverberatoryvariedfineSON	Steel Open Hearth					
Ferrous Cupola moderate varied O O N Non-ferrous Reverberatory varied fine S O N	·					
Non-ferrous Reverberatory varied fine S O N		-				
'	·					
Non-terrous Crucible   light   fine   S   O   N	Non-ferrous Crucible	light	fine	S	0	N

OPERATION	CONCENTRATION	PARTICLE SIZES	WET COLLECTOR	FABRIC COLLECTOR	OTHER
METAL MINING AND ROCK PRODUCTS	1	T .		г г	
Material Handling	moderate	fine to medium	0	0	N
Dryers, Kilns	moderate	medium to coarse	0	0	N
Cement Rock Dryer	moderate	fine to medium	S	S	N
Cement Kiln	heavy	fine to medium	N	0	N
Cement Grinding	moderate	fine	N	0	N
Cement Clinker Cooler	moderate	coarse	N	0	N
METAL WORKING					
Production Grinding, Scratch Brushing, Abrasive Cutoff	light	coarse	S	О	0
Portable and Swing Frame	light	medium	S	0	S
Sanding	light to medium	fine	0	S	S
Buffing	light	varied	S	0	S
Tool Room	light	fine	0	S	S
Cast Iron Machining	moderate	varied 🗼	0	0	0
PHARMACEUTICAL AND FOOD PRODUCTS		40			
Mixers, Grinders, Weighing, Blending, Bagging, Packaging	light	medium	0	o	0
Coating Pans	varied	fine to medium	0	0	N
PLASTICS					
Raw Material Processing	varied	varied	S	0	0
Plastic Finishing	light to moderate	varied	S	0	S
RUBBER PRODUCTS		* 7			
Mixers	moderate	fine	0	0	S
Batchout Rolls	light	fine	0	S	S
Talc Dusting and Dedusting	moderate	medium	S	0	S
Grinding	moderate	coarse	0	0	0
WOODWORKING					
Woodworking Machines	moderate	varied	S	0	0
Sanding	moderate	fine	S	0	0
Sanding	Hioaciate		_		•