

3M 10 micron diamond stone									10
					Pro 1,500 Grit				9.8
				1,200					9.5
		F600				1,500 Grit Water Stone			9.2
9 micron belt	900						Extra-Fine		9
				2,000					8.5
		P2500							8.4
				1,500					8
						2,000 Grit Water Stone			7.5
					Pro & Glass 2,000 Grit				7.35
	1,000		2,500				Ceramic		7
				2,000					6.7
		F800							6.5
6 Micron belt						4,000 Grit Water Stone			6
				3,000					5.7
				2,500					5.5
5 micron SiC paper	1,200	F1000							5
				3,000					4
					Glass 4,000 Grit				3.68
3 Micron belt, Tormek compd(~)	1,500	F1200		4,000		8,000 Grit Water Stone	Extra-Extra-Fine		3
					Pro 5,000 Grit				2.94
		F1500		6,000					2
					Pro & Glass 8,000 Grit				1.84
		F2000		8,000		Pro 12,000 Grit			1.2
1 Micron belt, Linde C(\$)	2,000								1
					Pro 15,000 Grit				0.98
					Glass 16,000 Grit				0.92
Linde B(\$)						15,000 Grit Water Stone			0.5
					Pro & Glass 30,000 Grit				0.49
Linde A(\$)									0.3

25.4 Microns = 1 Thousandth of a US Inch (0.001") - 1 Micron = 3.9 Hundred Thousandths of a US Inch (0.0000393700787") - 0.254 Microns = 1 Milionth of a US Inch (0.000001")

It is impossible to make **exact** comparisons between all the different abrasives because different standards are used for average, minimum and maximum size, the percentage allowed outside those limits, and the distribution of sizes within those limits, but this list is the closest comparison available since all entries are compared to microns by their respective manufacturers.

~ Tormek compound contains a variety of grains of various size, the smallest down to 0.7 micron. The average effective size is 3 micron.
^ Crystolon is Norton Abrasives tm for Silicon Carbide stones
India is Norton Abrasives tm for Aluminum Oxide stones
\$ Raybrite and Linde compounds are aluminum oxide powders
Old JIS standard is measured via sedimentation tube - Used until 1973
New JIS standard measured via electrical resistance - Used since 1973
Shapton sizes are from their web site www.shaptonstones.com
DMT sizes from their web site www.dmtsharp.com
All Norton sizes taken from "Norton Abrasives Grit Table"
Trizact Numbers from "3M Superabrasive & Microfinishing Product Application Guide"
ANSI Numbers from Washington Mills "ANSI GRIT SIZE CONVERSION CHART" in average Microns
FEPA Numbers from LECO Corporation grit comparison "Sheet 15"
FEPA Variance is based on a published variance rate of 75% at listed size with 25% variance within specified limits.
FEPA & Old JIS Variance Numbers from Schmitz Metallographiebedarf "Korngrößenvergleich" - Thanks to Olivia of SRP Forums!
New Japanese Industrial Standard Variance Chart from Naniwa High-purity abrasive powders Comparison Sheet - Thanks to JimR of SRP Forums!

FEPA Coated Abrasives Variance Chart (Microns)	P series
P240	58.5±2.0
P280	52.2±2.0
P320	46.2±1.5
P360	40.5±1.5
P400	35.0±1.5
P500	30.2±1.5
P600	25.8±1.0
P800	21.8±1.0
P1000	18.3±1.0
P1200	15.3±1.0
P1500	12.6±1.0
P2000	10.3±0.8
P2500	8.4±0.5

FEPA Bonded Abrasives Variance Chart (Microns)	F series
F230	55.7±3.0
F240	47.5±2.0
F280	39.9±1.5
F320	32.8±1.5
F360	26.7±1.5
F400	21.4±1.0
F500	17.1±1.0
F600	13.7±1.0
F800	11.0±1.0
F1000	9.1±0.8
F1200	7.6±0.5
F1500	2.0±0.4
F2000	1.2±0.3

Old Japanese Industrial Standard Variance Chart	Microns
240	60±4
280	52±3
320	46±2.5
360	40±2
400	34±2
500	28±2
600	24±1.5
700	21±1.3
800	18±1
1000	15.5±1
1200	13±1
1500	10.5±1
2000	8.5±0.7
2500	7±0.7
3000	5.7±0.5

Some Japanese Water Stone Related Kanji:
六十型 = Type 60
キング = King brand
砥石 = Toishi whetstone
スエヒロ = Suehiro brand
天然砥石 = Natural Whetstone
最高級品 = High grade product
ベスタ = Besuta / Bester brand
京都特産 = Kyoto special product
酔拳 = Suishin Brand "Drunken Heart"
北山 = Kitayama / North Mountain brand
嵐山 = Arashiyama / Storm Mountain brand
ナニワ = Naniwa Kenma brand (エビ = ebi / shrimp trademark)
シャプトン = Shaputon / Shapton brand (刃の黒幕 = kuromaku / professional grade)

New Japanese Industrial Standard Variance Chart	Max Size	3% Max	50% Average	94% Minimum
240	127	103	57±3	40
280	112	87	48±3	33
320	98	74	40±2.5	27
360	86	66	35±2	23
400	75	58	30±2	20
500	63	50	25±2	16
600	53	43	20±1.5	13
700	45	37	17±1.3	11
800	38	31	14±1	9
1000	32	27	11.5±1	7
1200	27	23	9.5±0.8	5.5
1500	23	20	8±0.6	4.5
2000	19	17	6.7±0.6	4
2500	16	14	5.5±0.5	3
3000	13	11	4±0.5	2
4000	11	8	3±0.4	1.3
6000	8	5	2±0.4	0.8
8000	6	3.5	1.2±0.3	0.6 (75% Minimum)