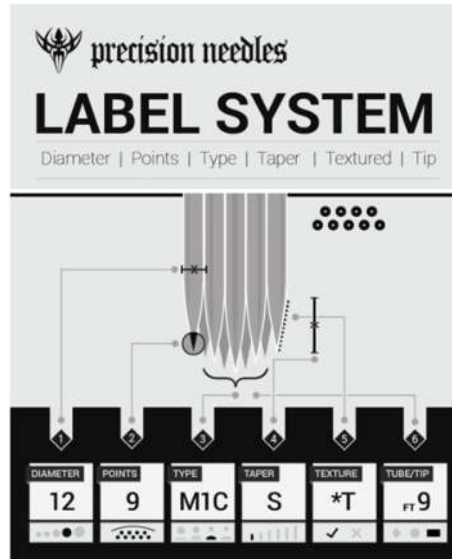
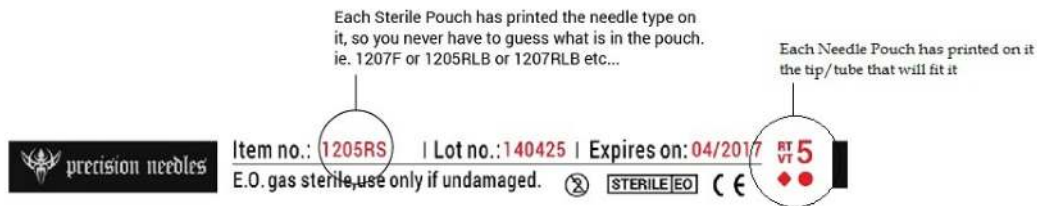


Precision Needles Technical Manual

This technical manual explains in detail how Precision Needles are labeled in order to learn about the many configurations that are offered. This document identifies six parts of the Precision Label System: Diameter, Points, Type, Taper, Texture, and Tube/Tip.



How to Read Precision Needle Labels?



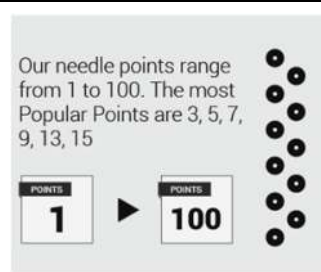
In this example, you will see that each tattoo needle comes sterilized by EO gas individually packaged and labeled. The individual packaging indicates the needle type, tip/tube compatibility, lot no., expiration date, and sterilization method used. The following chart aids in reading the packaging:

Diameter	Points	Type	Taper	Texture	Tube/Tip
Needle Thickness	Number of Needles	Type of Needle	Needle Taper	Finishing	Tube/Tip Compatibility
#13: 0.40mm #12: 0.35mm #10: 0.30mm #08: 0.25mm #06: 0.20mm	Ranges from 1 to 100, most popular are: 3, 5, 7, 9, 13, 15	RS: Round Shader RL: Round Liner RLXT: Super Tight Round Liner RLXP: Extra Super Tight Round Liner F: Flat M1: Magnum M1C: Curved Magnum M2: Stacked Magnum	S: Standard LT: Long Taper DLT: Double Long Taper ELT: Extra Long Taper SLT: Super Long Taper ESLT: Extra Super Long Taper	*T: Textured	VT: Diamond Tip RT: Round Tip FT: Flat Tip

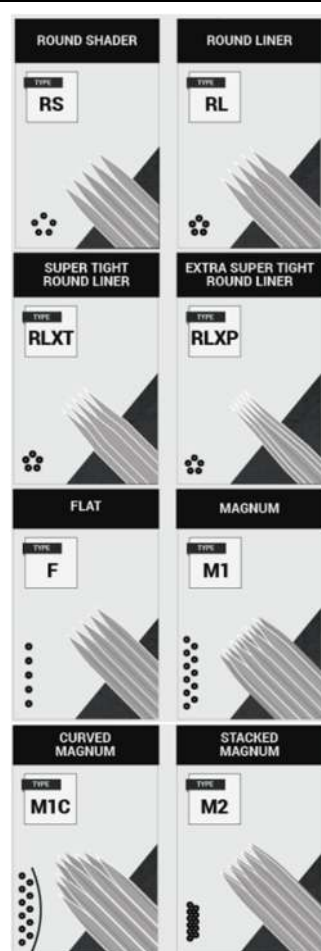
Diameter:

Our Precision Tattoo Needles are available in 5 diameter options, as listed below. The higher the number, the wider the diameter will be. The wider diameter of the needles in a group, the heavier/faster ink will flow through them. The thinner the diameter, the slower and more controlled the ink flow will be.

- #13 - 0.40mm in diameter and offer the fastest ink flow--perfect for filling in large areas
- #12 - 0.35mm diameter, and they're the most popular size tattoo needle overall
- #10 - 0.30mm diameter and they're the most popular size for lining work
- #8 - 0.25mm in diameter, and they offer a finer, more controlled ink flow
- #6 - 0.20mm diameter and offer the most control and finest ink flow

Points:

"Points" refer to the number of needles in a grouping. We offer everything from 1 to 100 needles, or points, in a group. The most popular tattoo needle groupings purchased contain 3, 5, 7, 9, 13, or 15 points.

Needle Grouping:**Round Shader (RS):**

- Loose grouping of medium or long taper needles
- Used for small area filling in color, blending, and shading a tattoo after the outline has been done
- Medium Taper RS typically used for color work, allowing more needle contact with skin to inject more pigment
- Long Taper RS typically used for black & grey work, allowing more time on skin with less trauma

Round Liner (RL):

- Tight grouping of medium or long taper needles
- Used to create outline of the a tattoo
- Medium taper typically used for bold, fat lines, allowing more needle contact with skin to inject more pigment
- Long tapers typically used for thin lines, allowing more time on the skin with less trauma

Tight Round Liner (RLXT & RLXP):

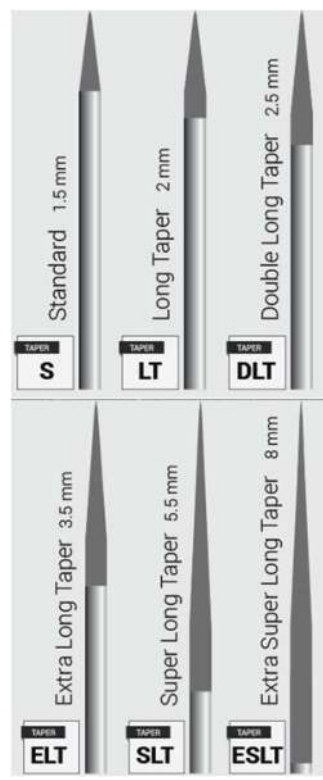
- Very thin and tight grouping of extra-long taper needles
- Used for very detailed work and fine lines
- Extra-long taper allows less contact with the skin to provide even sharper and more refined lines
- **RLXT:** Used for creating finer lines and working in tighter spaces
- **RLXP:** Used for doing the finest line work

Flat (F):

- Generally 3-9 needles soldered side-by-side with no spacing
- Used to achieve tonal gradations, for shading, blending and detailed work

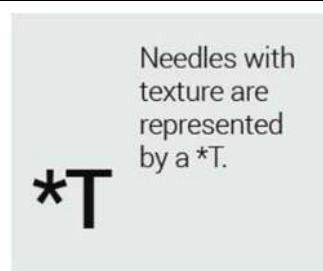
Magnum (M1, M1C, M2):

- Generally two rows of needles spaced intermittently in a flat shape
- Used for filling, blending and shading a tattoo after outline is done
- Medium taper typically used for color, allowing more needle contact with skin to inject more pigment
- Long taper typically used for black & grey work, allowing more time on skin with less trauma
- **M1:** Typically used for filling large spaces, blending and shading
- **M1C:** Gentler on the skin, so they can better fill, blend and shade delicate areas
- **M2:** Allows filling in, blending and/or shading larger areas more quickly than standard magnums

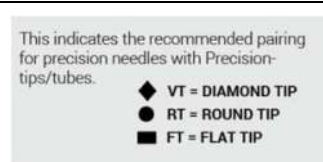
Needle Taper:

The length of the taper on each tattoo needle in a grouping also impacts ink flow and control. We offer 6 taper length options which provide progressively higher levels of control while yielding finer streams of ink:

- **S**: Standard Taper (1.5mm)
- **LT**: Long Taper (2mm)
- **DLT**: Double Long Taper (2.5mm)
- **ELT**: Extra Long Taper (3.5mm)
- **SLT**: Super Long Taper (5.5mm)
- **ESLT**: Extra Super Long Taper (8mm)

Texture:

Textured indicates the entire taper of the needle is not polished and the ink will be able to hold more ink as a result. If the needle is textured it will be denoted by *T. If it is polished (i.e. not Textured) it will not be denoted by any script.

Tube/Tip Compatibility:

Round needles are compatible with Diamond (VT) and Round (RT) tips. Flat and Magnum needles are compatible with Flat (FT) tips. Scroll to Page 5 to find the Needle and Tip Compatibility chart to find which tube/tip is compatible with your Needle.

Needle Recommendation Guide:*Black & Grey by Carl Grace**Horror Tattoo by Paul Acker**Traditional Tattoo by B. Feldman**Realistic Tattoo by Rich Pineda*

There are many different styles and genres of tattoos. Your selection of needle configuration has to do with many factors including:

- Your style of tattooing
- Your preference
- Who you've learned from (your mentors opinions and style)
- Your general experience
- Things you have read and heard from other artists

We have classified a variety of tattoo genres, including Black & Grey, Horror, Old School/Traditional, and Realistic as you can see on the left. There are other classes and genres including New School, Japanese, Watercolor, to name a few.

Each of these artists uses different ink, needle configurations, machines with a few cross overs and not one of the supplies they use is the determining factor in the final outcome of the tattoo; it is a combination of their skill and the supplies they use. Each has gone through different brands, styles, machines, etc. to find the ones that work for them and then they stick to them and evolve over time as they learn from experience, their mentors, and other leaders in the industry.

In general no matter the type of tattoo, you will follow these guidelines:

- Use a Round Liner (RL), Super Tight Round Liner (RLXT), or Extra Super Tight Round Liner (RLXP) for lining your tattoo. The tightness of the liner (how close the needles are spaced together) you need will depend on the detail and fineness you are looking for in your lines.
- Use Round Shader (RS), Magnum (M1, M1C, or M2), or Flat (F) for shading, coloring, and blending. The needle type you choose will depend on personal preference and experience.
- Round Shader Needles (RS):
 - RS: Use to fill in small areas with color, shade, and blend after the outline has been done.
 - Medium Taper RS: Use for color work
 - Long Taper RS: Use for Black & Grey Work
- Flat Needles (F):
 - Used for tonal gradations, shading, blending and detailed work
- Magnum Needles (M1, M1C, M2):
 - M1: Used to fill in large spaces, blend and shade
 - M1C: Used to fill, blend and shade delicate areas
 - M2: Used to fill, blend and shade larger areas more quickly than standard magnums

No matter the type of tattoo, you will likely have to use a variety of needles. You will learn as you grow as an artist that your preferences in needle types may change over time based on your experience with different tattoos and your discussions with different artists about their techniques.

Here are a few suggestions to get started:

- **Black & Grey:** Round Liner (RL), Magnum (M1), Round Shader (RS)
- **Horror:** Round Liner (RL), Magnum (M1), Round Shader (RS)
- **Old School/Traditional:** Round Liner (RL), Magnum (M1), Round Shader (RS)
- **Realism:** Round Liner (RL), Super Tight Round Liner (RLXP), Magnum (M1), Flat (F), Round Shader (RS)
- **New School:** Round Liner (RL), Magnum (M1)
- **Japanese:** Round Liner (RL), Magnum (M1), Round Shader (RS)



Round & Diamond Tube/Tip & Needle Diameter RL, RS, RLXT, RLXP

Inside diameter for Precision tube/tips ▶

RT
VT 3

1.2mm

RT
VT 5

1.4mm

RT
VT 7

1.5mm

RT
VT 9

1.7mm

RT
VT 11

1.8mm

RT
VT 14

2.0mm

RT
VT 18

2.2mm

Locate the Diameter, Points and Type of your round needles below to see the needle configuration's diameter and the best tube/tip to pair with it.

Needle Configuration Diameter and Tube/Tip Pairing for Precision Needles ▼

DIAMETER 12 Determine your tube/tip for #12 needles .35 Diameter needles			
POINTS	TYPE	Approximate diameter of needle configuration	TUBE/TIP
01	RL	1.05 - 1.15mm	RT VT 3
03	RL	1.05 - 1.15mm	RT VT 3
03	RLXT RLXP	1.05 - 1.15mm	RT VT 3
04	RL RS	1.15 - 1.25mm	RT VT 5
05	RL RS	1.25 - 1.35mm	RT VT 5
05	RLXT RLXP	1.25 - 1.35mm	RT VT 5
07	RL RS	1.35 - 1.45mm	RT VT 7
07	RLXT RLXP	1.35 - 1.45mm	RT VT 7
08	RL RS	1.45 - 1.55mm	RT VT 9
09	RL RS	1.55 - 1.65mm	RT VT 9
09	RLXT RLXP	1.55 - 1.65mm	RT VT 9
11	RL RS	1.65 - 1.75mm	RT VT 11
14	RL RS	1.85 - 1.95mm	RT VT 14
18	RL RS	2.05 - 2.15mm	RT VT 18
42	RS	2.60 - 2.70mm	RT VT 42
100	RS	4.10 - 4.20mm	RT VT 100

DIAMETER 10 Determine your tube/tip for #10 needles .30 Diameter needles			
POINTS	TYPE	Approximate diameter of needle configuration	TUBE/TIP
01	RL	.85 - .90mm	RT VT 3
03	RL	.85 - .90mm	RT VT 3
04	RL	.99 - 1.04mm	RT VT 3
05	RL RS	1.08 - 1.13mm	RT VT 3
07	RL RS	1.15 - 1.20mm	RT VT 5
08	RL RS	1.22 - 1.27mm	RT VT 5
09	RL RS	1.30 - 1.35mm	RT VT 5
11	RL RS	1.40 - 1.45mm	RT VT 7
14	RL RS	1.47 - 1.52mm	RT VT 9
18	RL RS	1.75 - 1.80mm	RT VT 14

DIAMETER 8 Determine your tube/tip for #8 needles .25 Diameter needles			
POINTS	TYPE	Approximate diameter of needle configuration	TUBE/TIP
01	RL	.65 - .69mm	RT VT 3
03	RL	.65 - .69mm	RT VT 3
04	RL	.72 - .76mm	RT VT 3
05	RL RS	.79 - .83mm	RT VT 3
07	RL RS	.87 - .91mm	RT VT 3
08	RL RS	.93 - .97mm	RT VT 3
09	RL RS	1.00 - 1.04mm	RT VT 3
11	RL RS	1.22 - 1.26mm	RT VT 5
14	RL RS	1.39 - 1.43mm	RT VT 7
18	RL RS	1.61 - 1.65mm	RT VT 9



Flat Tube/Tip & Needle Width F, M1, M1C, M2

Approximate width of needle configuration ▶

FT 5

1.80 - 2.20mm

FT 7

2.50 - 2.70mm

FT 9

3.20 - 3.40mm

FT 11

3.90 - 4.2mm

FT 13

4.60 - 5.0mm

Locate the Diameter, Points and Type of your flat needles below to see the needle configuration's width and the best tube/tip to pair with it.

Needle Configuration Width and Tube/Tip Pairing for Precision Needles ▼

DIAMETER 12 Determine your tube/tip for #12 needles .35 Diameter needles			
POINTS	TYPE	Approximate width of needle configuration	TUBE/TIP
04	F	1.40 - 1.55mm	FT 5
05	M2	1.05 - 1.20mm	FT 5
05	F M1 M1C	1.75 - 1.90mm	FT 5
06	F	2.10 - 2.25mm	FT 7
07	m2	1.40 - 1.55mm	FT 5
07	F M1 M1C	2.45 - 2.60mm	FT 7
08	F	2.80 - 2.95mm	FT 9
09	M2	1.75 - 1.90mm	FT 5
09	F M1 M1C	3.15 - 3.30mm	FT 9
11	M2	2.10 - 2.25mm	FT 7
11	M1 M1C	3.90 - 4.05mm	FT 11
13	M2	2.45 - 2.60mm	FT 7
13	M1 M1C	4.60 - 4.80mm	FT 13
15	M2	2.80 - 2.95mm	FT 9
15	M1 M1C	5.30 - 5.50mm	FT 15
17	M2	3.15 - 3.30mm	FT 9
17	M1 M1C	6.00 - 6.20mm	FT 17
19	M1 M1C	6.70 - 6.90mm	FT 19
21	M2	3.90 - 4.05mm	FT 11
21	M1 M1C	7.40 - 7.60mm	FT 21
23	M1 M1C	8.10 - 8.30mm	FT 23
29	M2	5.30 - 5.50mm	FT 15
35	M1 M1C	12.30 - 12.50mm	FT 35
39	M1 M1C	13.70 - 13.90mm	FT 39
49	M1 M1C	17.20 - 17.40mm	FT 49

DIAMETER 10 Determine your tube/tip for #10 needles .30 Diameter needles			
POINTS	TYPE	Approximate width of needle configuration	TUBE/TIP
04	F	1.20 - 1.33mm	FT 5
05	F M1 M1C	1.50 - 1.63mm	FT 5
06	F	1.80 - 1.93mm	FT 5
07	F M1 M1C	2.10 - 2.23mm	FT 7
08	F	2.40 - 2.53mm	FT 7
09	M2	1.50 - 1.63mm	FT 5
09	F M1 M1C	2.70 - 2.83mm	FT 9
11	M1 M1C	3.30 - 3.43mm	FT 11
13	M2	2.10 - 2.23mm	FT 7
13	M1 M1C	3.90 - 4.03mm	FT 11
15	M1 M1C	4.50 - 4.63mm	FT 13
17	M2	2.70 - 2.83mm	FT 9
17	M1C	5.10 - 5.23mm	FT 15
21	M2	3.30 - 3.43mm	FT 11
25	M2	3.90 - 4.03mm	FT 11
29	M2	4.50 - 4.63mm	FT 13

DIAMETER 8 Determine your tube/tip for #8 needles .25 Diameter needles			
POINTS	TYPE	Approximate width of needle configuration	TUBE/TIP
4	F	1.00 - 1.11mm	FT 5
5	F M1 M1C	1.25 - 1.36mm	FT 5
6	F	1.50 - 1.61mm	FT 5
7	F	1.75 - 1.86mm	FT 5
7	M1C	1.75 - 1.86mm	FT 5
8	F	2.00 - 2.11mm	FT 5
9	M2	1.25 - 1.36mm	FT 5
9	F M1 M1C	2.25 - 2.36mm	FT 7
11	M1 M1C	2.75 - 2.86mm	FT 9
13	M2	1.75 - 1.86mm	FT 5
13	M1 M1C	3.25 - 3.36mm	FT 9
15	M1 M1C	3.75 - 3.86mm	FT 11
17	M2	2.25 - 2.36mm	FT 7
17	M1 M1C	4.25 - 4.36mm	FT 13
21	M2	2.75 - 2.86mm	FT 9
25	M2	3.25 - 3.36mm	FT 9
29	M2	3.75 - 3.86mm	FT 11

NEEDLE AND TIP COMPATIBILITY

Pair your Precision needles with Precision tube sets or tips by matching the symbols on our packages, or use this chart to determine the diameter of your Precision needle or tube/tip.

◆ VT = DIAMOND TIP

● RT = ROUND TIP

■ FT = FLAT TIP



CLASSIC

Utilitarian, economical tubes with slim beehive grips for pen-like control



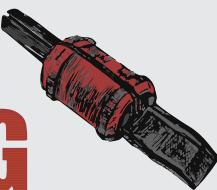
VICTORY

Sturdy, molded-plastic tubes & grips with no-slip, relaxed-grip silicone bands



VISION

Clear tube & tip for total visibility & wide, air-cushioned rubber comfort grips



SUPER MAG

Wide, open-top tubes & channelled grips for max ink flow & needle configurations



PREsynergy

Interchangeable tips and grips for ultimate customization.

precision needles



PIERCED TOOLS



PainfulPleasures.com