





Technology evolution trends

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2	Add improving substance
3	Mono-bi-poly : Similar objects
4	Mono-bi-poly : Heterogeneous objects
5	Segmentation of substances and objects
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8	Dynamization
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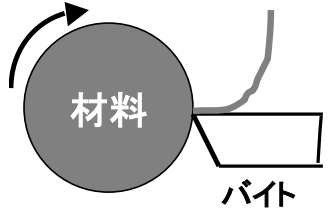
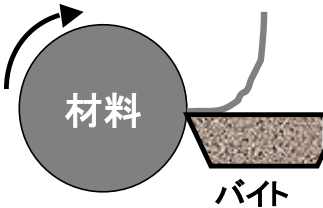
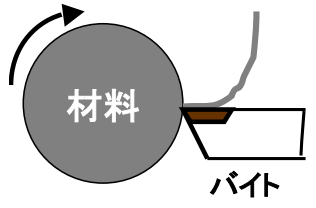
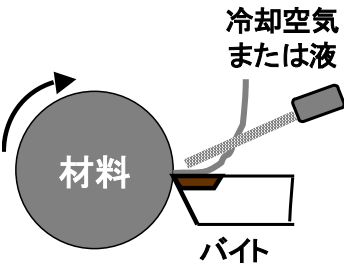
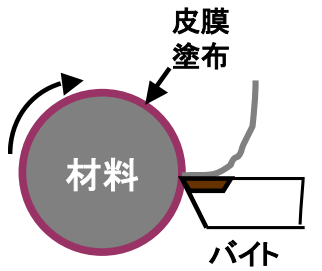
1. Add new substance

This is an example of setting two objects on a tire and a road. Here, in "Adding Between Objects", the caterpillar was placed between the tire and the road.

				
<p>Tires and roads Two objects</p>	<p>Spike tire Add to the inside</p>	<p>Tire chain Add to the outside</p>	<p>Spray abrasive Add to the environment</p>	<p>Caterpillar Add between objects</p>





2. Add improving substance

This is an example in which "two objects" are set as the work "material" and "bite" for lathe processing.

				
<p>Two objects</p>	<p>Sintered alloy bite Add to the inside</p>	<p>Addition of cemented carbide Add to the outside</p>	<p>Spray coolant Add to the environment</p>	<p>Apply film Add between objects</p>





3. Mono-bi-poly : Similar objects

This is an example of setting for speakers in an audio system.

			
Monaural Mono (single) system	Stereo By (double) system	Stereo + subwoofer Poly (multiplex) system	Surround stereo Composite poly system



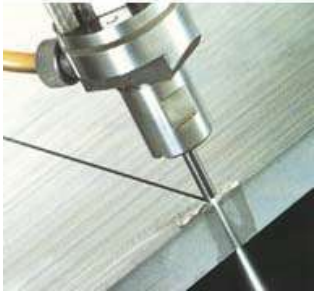


4. Mono-bi-poly : Heterogeneous objects

This is an example of setting a pencil as an object.

			
Solid color pencil Mono (single) system	Bicolor pencil By (double) system	Multicolored pencil Poly (multiplex) system	Pencil + eraser Composite poly system





5. Segmentation of substances and objects

This is an example set for the processing method.

				
Band saw solid	Polishing disc processing Powder	Water jet liquid	Gas fusing Gas, plasma	Laser processing Electromagnetic field

6. Space segmentation

This is an example set for the form of chocolate.

			
Solid chocolate Monolithic system	Another ingredient in the cavity System with cavities	Multiple ingredients in the cavity System with multiple cavities	Foamed chocolate Porous system

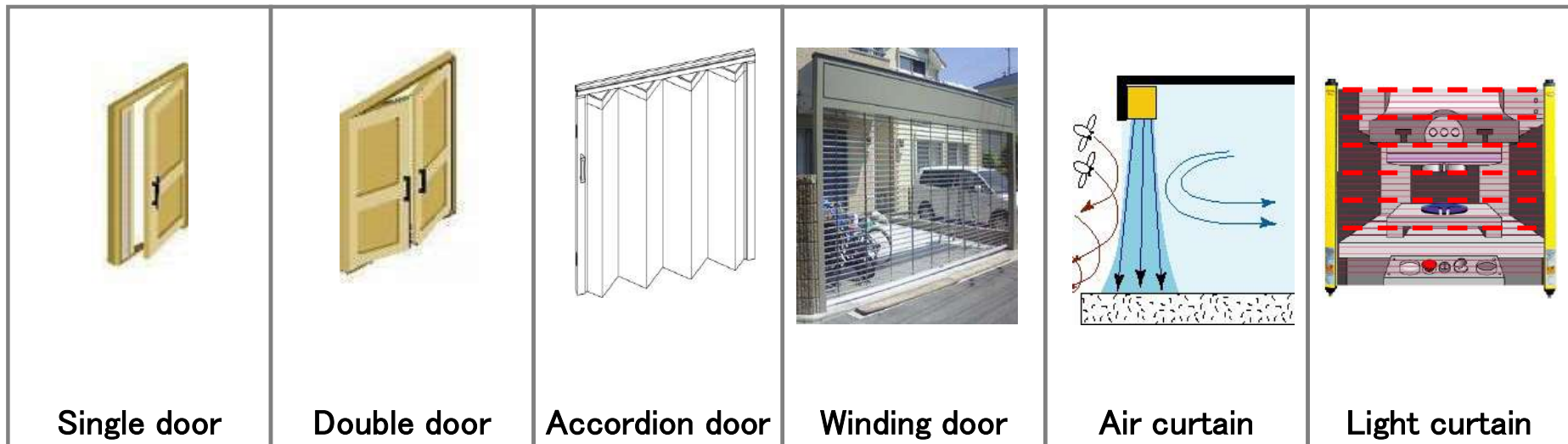
7. Surface segmentation

This is an example of setting the surface of the tire. Here, the “adhesive tire” is used for racing cars and the like because it prevents slipping when the surface is coated with raw rubber.



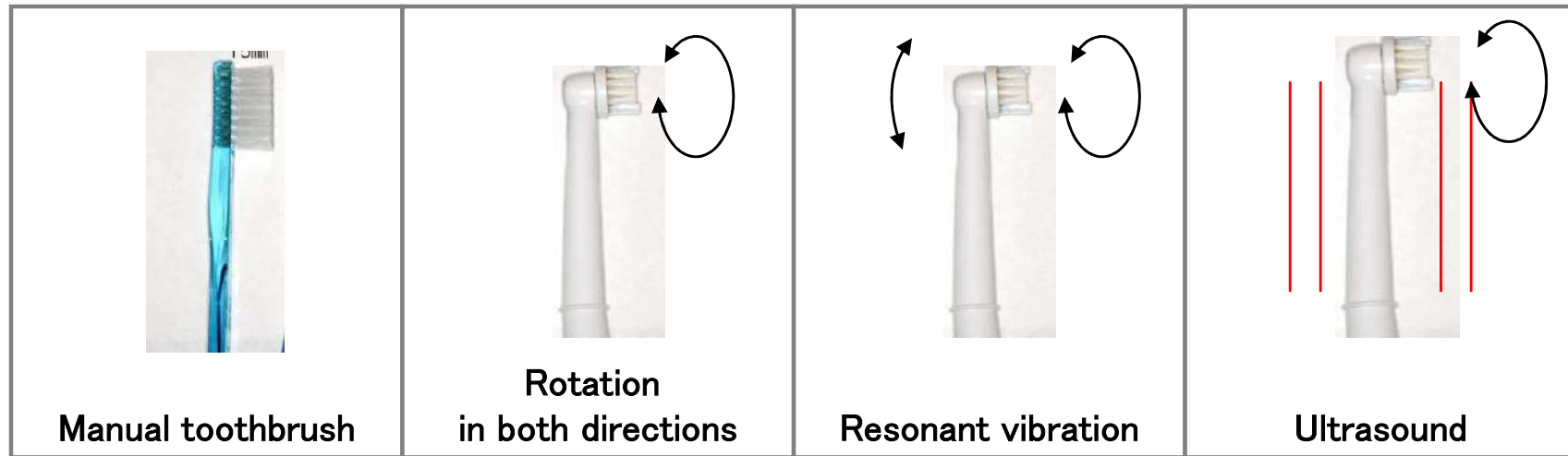
8. Dynamization

This is an example of setting for a door. Here, the “light curtain” is used as a safety measure used in a press machine or the like.



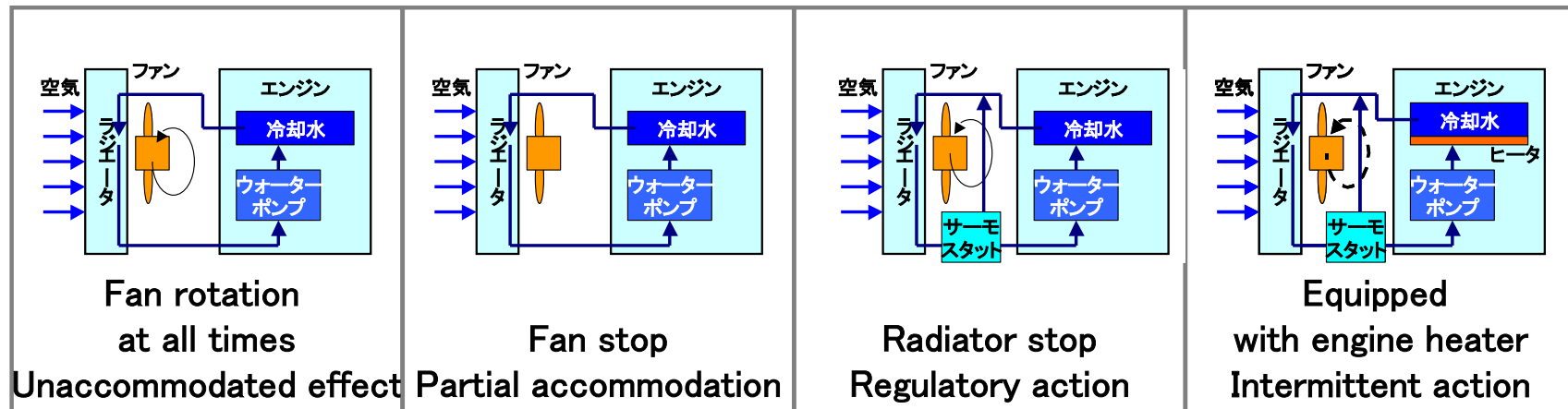
9. Harmony of rhythm

This is an example of setting for a toothbrush. Here, in addition to rotation in both directions, resonance vibration and ultrasonic waves are added.



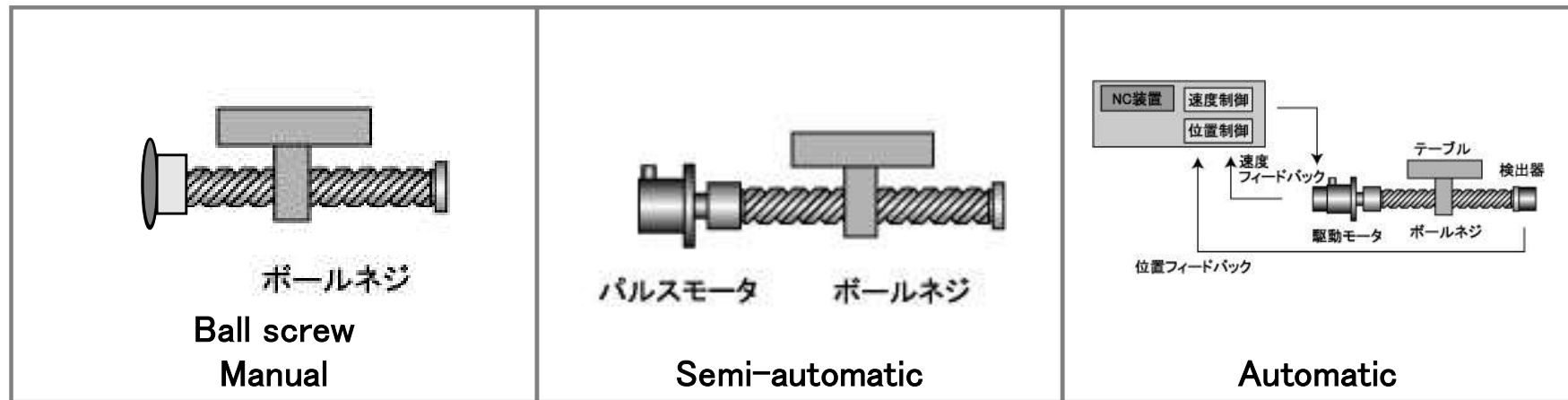
10. Harmony of action

This is an example of setting for car radiators and fans. Here, the meaning of mounting the "engine heater" is to warm up at a low temperature.



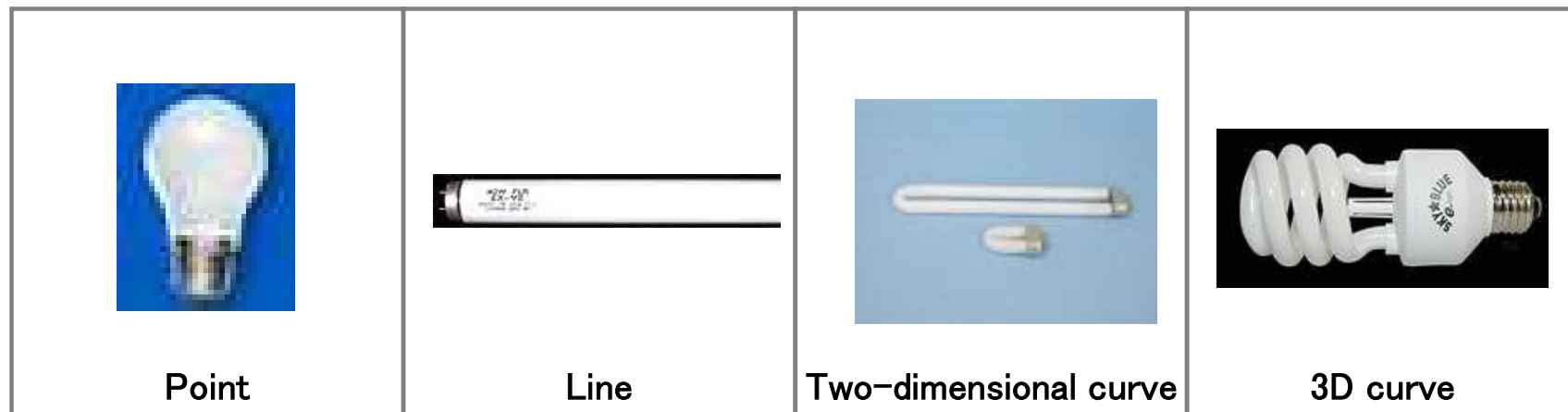
11. Controllability

This is an example of setting the drive system of a mechanical system.



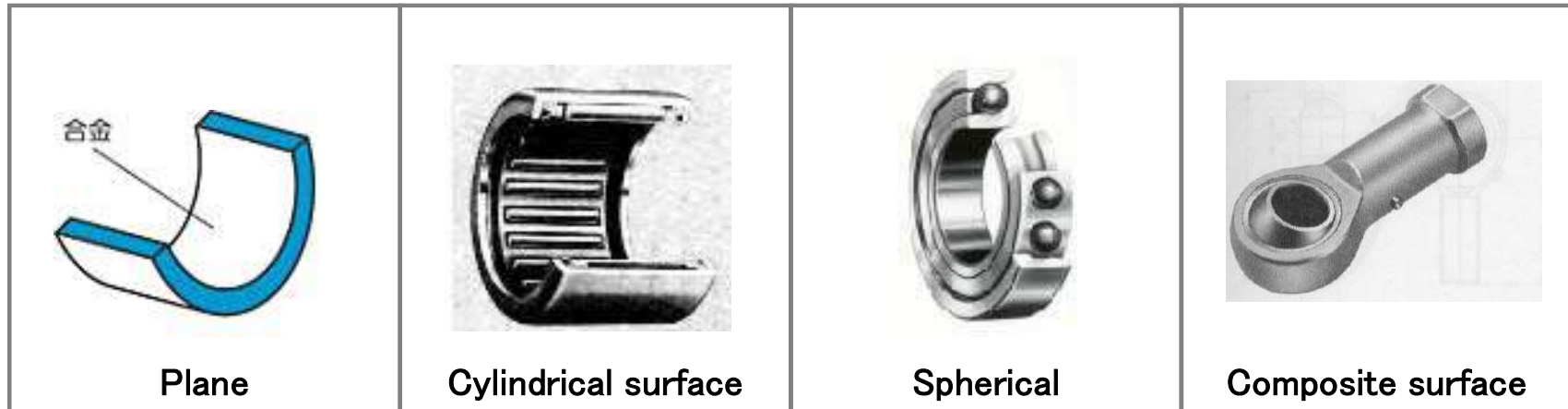
12. Geometric evolution of linear constructions

This is an example of setting a lighting fixture.



13. Geometric evolution of solid

This is an example of setting for bearings. Here, the "composite surface" has both a bearing function for rotation of the shaft and a bearing function capable of absorbing meandering of the entire shaft.



14. Trimming

This is an example of setting the mouse of a personal computer. First, some parts of the "mouse" are trimmed to become a "trackball", the ball itself is trimmed to become a "touch panel", and finally the touch panel is also trimmed.

