



## SILKY TECHNICAL BACKGROUNDS

*“Once I saw saws sawing, but those saws I saw sawing did not saw like my Silky saw saws”  
(Old Japanese saying)*

### PRODUCTION

1. Introduction:
  - The Steel: Metal SAE1095C high carbon steel  
SK4 in Silky Catalogue is the Japanese norm
  - Soft metal: is more pleasant to saw with, because you have more resistance in the wood, but wears out easier (less carbon)
  - Hard metal: is less pleasant to saw with, because it has less resistance in the wood – the saw always wants to get out of the wood instead of biting itself in to it, but wears out less easily (more carbon)
  - The steel Silky uses is quite soft as a basic material  
= is a unique point of Silky saws  
result: Silky saws are much more flexible than other saws, because the harder the steel the easier it breaks.
2. The normal production process of a saw (competition):
  - 2.1. Basic metal : is usually hard in order not to make wear out the saw too fast
  - 2.2. Stamping: every new model of saw requires a new stamp
  - 2.3. Setting of the teeth: the teeth of the saw are being bowed a fraction of a millimetre
  - 2.4. Assembling the handle
3. The Silky production process
  - 3.1. The machines of the Silky factory in Japan are unique and are protected property
  - 3.2. Basic metal is softer, so more flexible (less breaking) and more pleasant to saw with.
  - 3.3. Cut out by Laser: There is no stamp required, so Silky has a larger flexibility into the development of new saws
  - 3.4. Hard Chrome Plating: The blade is put into a chrome bath: so it becomes rust free and very hard
  - 3.5. Mirror Polishing: Is done very accurately. The finer the polishing, the more expensive the saw. You can easily do the test by scratching the blade with your nail. Every little line you feel is in fact a midget breaking
  - 3.6. Filing the teeth: The hard chrome layer is removed, so the soft basic metal is in the open again.
  - 3.7. Impulse hardening: Makes the teeth wear-free: the teeth stay sharp about three times longer than non-hardened teeth. This results in a Silky saw that saws easily, because the basic metal of the teeth is soft, but the teeth are hardened so they stay sharp!
4. Conclusion:

Silky is the best saw in the world because it has had so many treatments !!!

### IN GENERAL

- Pulling saws = Japanese technique, there is no competition from Europe and America
- Teeth in one row (not set) destroy 50% less wood cells what makes sawing more easily and that causes a clean cutting wound so the wood (the tree, plant or bush) can recover more swiftly.

### MORE SPECIFICALLY

1. Teeth pitch: Fine (13) pitch and Coarse (8) pitch:
  - 1.1. Fine pitch for dry wood or wood with little water in the cells such as apple or oak.
  - 1.2. Coarse pitch for fresh (green) wood, large wood cells.
  - 1.3. The teeth of a blade with fine pitch will easily fill themselves with wood dust and for that reason they will not give such a fine cut in dry wood. The teeth of a blade with a coarse pitch will rasp and give more vibrations.

2. Blade length
  - 2.1. Defines the so-called 'stroke' while sawing
  - 2.2. Saw advice: if you saw a branch of 10 cm, than you need a 20 cm blade (1/2)
3. Angle between blade and handle
  - 3.1. The bigger the angle between blade and handle, the better the saw is suited for sawing up high
  - 3.2. For sawing very high – we advice the saws with a curved blade (Ibuki, Zubat): The angle is important to avoid breaking
4. Straight or curved blade
5. Material of the handle: rubber, steel, wood or aluminium
  - 5.1. Rubber
  - 5.2. Wood: soft and rustic
  - 5.3. Aluminium: - Lighter than steel  
- Better absorption of vibrations (Oyakata, compare with Gomboy)
6. Different types of toothings
  - 6.1. Miraim: most saws: very fine and smooth cut
  - 6.2. 4-Retsume: Hayauchi, Masaru and Ibuki: fine cut, but much faster
  - 6.3. Tobiasari: Zübat: very fine and smooth cut, adapted for curved blades

**SILKY DISTINCTS ITSELF FROM THE COMPETITORS** by (Unique Selling Points or USPs):

1. The best handles: rubber handle  
Feels warm in all kinds of weather  
Does not slip  
Holes in the handles for cooling and weight
2. The best blades: Impulse hardened teeth stay sharp three times as long as the others/  
the form of the blade is convex/ blades are polished and chromed  
No other manufacturer has this way of producing
3. The best range: Largest range available in the market, and the policy to launch new saws every year. Many blades can also be used on poles, or fit other handles.

Additional USPs:

4. EMI design: EMI is a very well known design bureau in Japan
5. Silky = Silky  
Silky will not be distributed by a private label. Silky wants to promote it's own name and will not deliver others.

**MAINTENANCE**

1. You do not have to set the teeth: The teeth are cut out by laser and hardened, if you try to set them, they will break off!
2. You do not have to file the teeth: Your file will be sharpened faster than the saw
3. Clean the blade with a tree resin solvent: If not the tree resin will obstruct the sawing (some people might want to try to file the saw, in stead of cleaning it)
4. Do not stock in wet conditions – the blade might corrode. Telescopic saws could block.

**BREAKING**

1. Breaking can only occur on the push stroke, never while pulling, especially if the moment is enlarged by not having the blade, the wrist and the fore-arm in one line.
2. Teeth could break due to vibrations, caused by wild sawing.

**SALES POTENTIAL**

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|-------------------------------|---|
| 1. Forestry                   | 2. green maintenance companies, communities |
| 3. gardener/ garden nurseries | 4. private persons                          |
| 5. fruit culture              | 6. hunters                                  |
| 7. construction and industry  | 8. furniture manufacturers                  |