## PENMED Engineer's Hand Files

Manufactured from T12 CH-Moly alloy tool steel, hardened and tempered. BS498:1990 and American Federal Standard GGGF325B.
Flat

Hand

| Round |  |  |  |  | Maxisy |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Half Round | Shape |  | \% |  | yymyex |
|  |  | Intelligen maximum redu | design for ontrol and ed fatigue |  |  |
| Overall Length |  | Smooth Order Code KEN-030 | Second Order Code KEN-030 | Bastard Order Code KEN-030 | $\begin{gathered} \text { Price/1 } \\ \text { THB } \\ \hline \end{gathered}$ |
| $\underset{\left(6^{\prime \prime}\right)}{150 \mathrm{~mm}}$ | Hand | -2060K | -2070K | -2080K | 216.00 |
|  | Flat | -2160K | -2170K | -2180K | 216.00 |
|  | Round | -2260K | -2270K | --80 | 228.00 |
|  | Half Round | -2360K | -2370K | -2380K | 261.00 |
|  | Square |  | -2470K | -2480K | 216.00 |
| $\underset{\left(8^{\prime \prime}\right)}{200 \mathrm{~mm}}$ | Hand | -4060K | -4070K | -4080K | 239.00 |
|  | Flat | -4160K | -4170K | -4180K | 239.00 |
|  | Round | -4260K | -4270K | - | 239.00 |
|  | Half Round | -4360K | -4370K | -4380K | 286.00 |
|  | Square | - | -4470K | - | 308.00 |
| $\underset{\left(10^{\prime \prime}\right)}{250 \mathrm{~mm}}$ | Hand | -6060K | -6070K | -6080K | 308.00 |
|  | Flat | -6160K | -6170K | -6180K | 319.00 |
|  | Round | -6260K | -6270K | - | 319.00 |
|  | Half Round Square | -6360 K <br> - | -6370K | -6380K | 387.00 354.00 |

## Triangular 'Three-cut' Files with

 Handles


## Engineer's File Sets

Contains Hand, Flat, Round and Half Round files. In a woven wallet for easy storage.


## KENMED ${ }^{\text {Industrial Quality }}$ аипи

Available in a comprehensive range of shapes and sizes. BS 498: 1990 and American Federal Standard GGG-f-325b.


Double Cut
Two sets of diagonal rows of teeth used with heavier pressure than single cut remove material faster from the workpiece.

Hand - Parallel edges, one edge uncut. For flat filing, corner filing and deburring. Multi-purpose and for other work where a 'safe' or uncut edge is needed. Double cut.
Flat - Edges taper towards front.
Applications as for hand files. Preferred where taper allows access into tight corners and angles. For general work on iron, steel, etc.
Round - Diameter tapers towards point. Suitable for internal and external concave surfaces.

Half-Round - Edges and surfaces taper towards point. Dual application; suitable for concave surfaces and flat filing. For rapid removal of metal.

Square - Parallel edges, surfaces taper towards point. For groove, rectangular hole and internal corner filing. Preferable to a Flat File because of its heavier section.

Three Square - Equilateral section ( $60^{\circ}$ angles).
Tapered towards point. For filing acute angles, internal corners and flat filing, clearing out square corners.

Knife - Two equal surfaces, tapered to knife point. For filing and deburring narrow grooves, slits and gear-teeth. Used principally by tool and die makers on work having acute angles.

Warding - Parallel surfaces, edges tapered to a point. For narrow grooves, keyways, slots etc. Warding Files are used by locksmiths in repairing or filing ward notches in keys. Also suited for use in narrow spaces. All sides double cut.

Pillar - Parallel edges, surfaces tapered towards end. Narrow version of hand file. For use where access is restricted. These files are designed for millwrights and mechanics for use in enlarging key-ways, slots, etc., close to the shoulder.

## Single Cut

Single set of parallel diagonal rows of teeth. Often used with light pressure to produce a smooth surface finish or put a keen edge on knives, shears and saws.


Double Ended Saw - Edges taper towards point.
For filing and sharpening saws. Points are left uncut. Instead of having a tang, both ends are tapered. They are used for
sharpening saws having a $60^{\circ}$ angle. The teeth are cut from each end towards the centre.

Taper Saw - Edges taper towards point. For filing and sharpening hand saws. Points are left uncut. Taper Saw Files are used for filing every type of handsaw which have $60^{\circ}$ angle teeth. These files are single cut with edges that are set and cut for filing the gullet between the saw teeth.

Mill Saw - Available with one or two round edges. Parallel edges, both edges cut for filing and sharpening saws.


