

### TYPE: TANGENT “V” TYPE

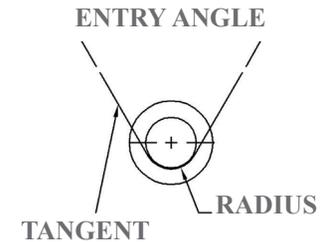
Sharp edge is ground to an arc whose radius approximates AWG wire size. The entry angle lines meet the arc at a tangent point. This type of blade, when closed, presents a diamond shaped edge profile.

**Advantages:** By adjusting cutter head shut height, ( if insulation material and wall thickness allow ), you can process adjacent wire sizes with the same blade, or you could compensate for off-center wire extrusions.

**Disadvantages:** Inadequate for processing thin wall and / or hard insulation, such as cross-link or fiberglass jackets.



“ TA-V ”

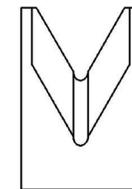


### TYPE: TRU-RADIUS TYPE

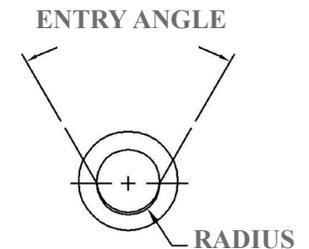
Sharp edge is ground to a half circle whose radius approximates AWG wire size. The entry angle lines intersect the half circle at the quadrant points. This type of blade, when closed, presents a true circle profile.

**Advantages:** This type of blade is excellent for precise and clean jacket removal because it combines the scissor-like shearing action of the by-pass blade with the exact hole profile matching a conductor gauge. Excellent for thin wall cross-link PVC and most rubbery or elastic insulations ( thin or thick wall ).

**Disadvantages:** Shut height cannot be modified to process adjacent wire sizes. Off-center wire condition has to be considered when choosing blade size.



“ TR-V ”

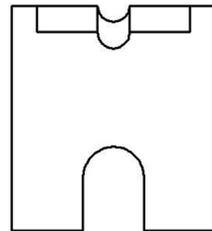


### TYPE: COLLINEAR RADIUS TYPE

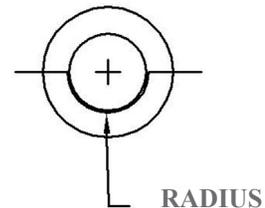
Sharp edge is ground to a half circle whose radius approximates AWG wire size. Shearing edge is ground to a straight edge. This type of blade, when closed to proper shut height, forms a perfect circle profile.

**Advantages:** This type of blade is excellent for precise and clean jacket removal because it exactly matches conductor gauge. Excellent for thin-wall cross-link PVC and most applications where precise jacket removal around the conductor is required, especially with layered coverings such as fiber over plastic, plastic over shields, etc.

**Disadvantages:** Shut height cannot be modified to process adjacent wire sizes. Off-center wire condition has to be considered when choosing blade size.



“ CL-R ”

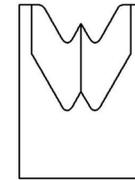


### TYPE: DOUBLE “V” TYPE TWIN TANGENT “V” TYPE BLADES

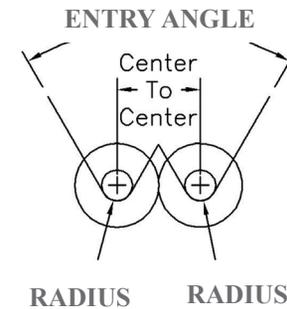
Designed for processing twin parallel cord wires such as SPT-2 power cords and some audio wires. Also useful for processing two wires in one machine feed stroke, especially in early models of wire processing machines of the mechanical cam design.

Advantages: See type TA-V

Disadvantages: See type TA-V. Also, along with the wire gauge, you should provide the dimension as measured from the center of one wire to the center of the adjacent wire. This dimension (C-C) determines how far apart the two “V” grinds are set. Because all twin wires are not created equal, you will find situations where a twin blade, ( even though it could be the right AWG size ), would not work on a wire with a significantly different (C-C) dimension.



“ V-V ”

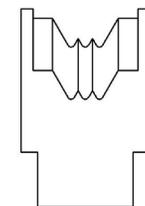


### TYPE: TRIPLE “V” TYPE

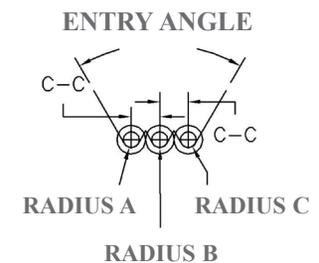
Designed for processing triple cord parallel wires such as SPT-3 power cords. Also useful for processing three wires in one machine feed stroke, especially in early models of wire processing machines of the mechanical cam design.

Advantages: See type TA-V

Disadvantages: See type TA-V. Also, differences in wire gauges within the same parallel wire should be considered when selecting this type of blade, especially in power cords where ground wires are processed at uneven end lengths ( step cuts and stagger cuts ). These blades are manufactured individually based on the uniqueness of each wire and your process requirements.



“ W-V ”

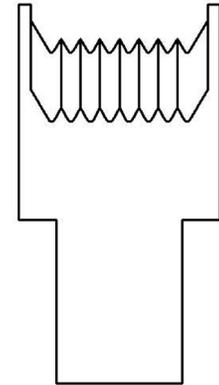


### TYPE: MULTI “V” TYPE

Designed for processing multiple cord parallel wires also known as ribbon cables or wires.

**Advantages:** By adjusting cutter head shut height, ( if insulation material and wall thickness allow ), you can process adjacent wire sizes with the same blade, or you could compensate for off-center wire extrusions.

**Disadvantages:** Inadequate for processing thin wall and / or hard insulation, such as cross-link or fiberglass jackets.

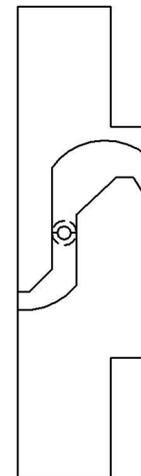


“ M-V ”

### TYPE: PRECISION COLLINEAR RADIUS BLADE

The die-type blade has a fixed shut height. The cutting edge is precisely drilled to an exact radius dimension for the conductor diameter. The insulation wall is contained in a counter-bore drilled around cutting edge.

This type of blade is the most exactly matched blade to the wire specification, giving a very precise insulation removal. This is excellent for removal of extremely thin insulation walls or where the outer jacket is oval shaped, and is also very useful for processing solid conductor insulated wire. Normally this is the blade of choice for **SJT**, **SVT**, **SJO**, coaxial cable outer jacket removal, and many round multi-conductor wires. Die blades are manufactured to the exact wire specifications. Blades can be produced for most any wire.

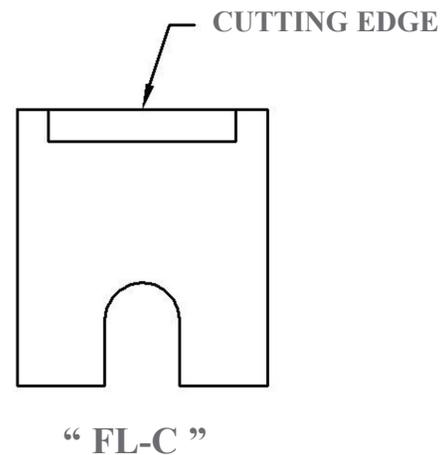


“ DIE ”

### CLASS: FLAT COLLINEAR ANGLE

Sharp edge is ground to a flat collinear angle.

**Characteristics:** Sharp edges cut either by compression or shear ( in-line blades or by-pass blades ). This class of blade was designed to allow positive control for cutter head closing ( in-line blade setups ) for advanced design pneumatic cutter head machines of the previous generation. It also allows precision processing of specific wire sizes with inherent blade longevity. This class of blades effectively trades off lack of wire size universality with proficient insulation type universality, ( with the exception of rubbery or loose weave fiber insulation ).

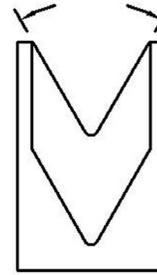


### CLASS: NARROW ENTRY ANGLE

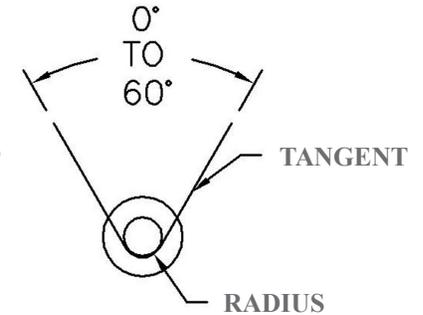
Sharp edge is ground at an angle that results in a “V” opening of up to 60 degrees.

Characteristics: Narrow entry angle assists in wire gathering towards the operating radius. Also tends to help cut insulation closer to conductor size without touching it. Slicing action is better due to narrow angle. The narrow angle however, limits the blade universality. In other words, one set of blades has to be used for one specific wire size or a subsequent one at most. It is the blade class of choice for older generation equipment with fixed strokes, either mechanical or pneumatic type.

0° TO 60°



“NE-A”

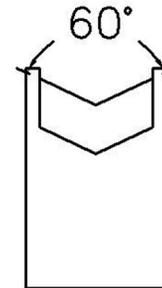


### CLASS: WIDE ENTRY ANGLE

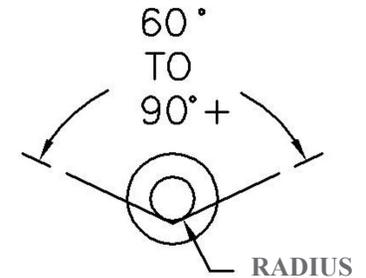
Sharp edge is ground at an angle that results in a “V” opening from 60 degrees to above 90 degrees.

Characteristics: Wide angle is not as effective for gathering wire towards the operating radius. However, it allows for a wider range of wire gauges to be processed without blade change. It is the blade class of choice for newer generation equipment with programmable cutter heads. Please note, however, that its effectiveness is marginal for thin-wall cross-linked insulation. It is excellent for standard wall PVC insulated wire processing.

GREATER THAN



“WE-A”



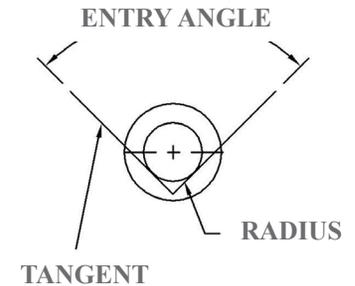
### CLASS: UNIVERSAL ENTRY ANGLE

Sharp edge is ground to an angle that results in a “V” opening of exactly 90 degrees.

Characteristics: 90-degree angle is widely accepted as the best entry angle to use for processing a wide range of wire sizes using the same blade setup. Most of the time, this class of blade incorporates a sharp edge ground to a very small or non-existent radius. It works sufficiently for most standard wall insulation, but is marginal for thin-wall, cross-linked PVC, very rubbery insulation, woven fiber or thin-walled multi-conductors.

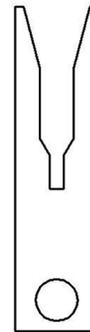


“ UN-A ”



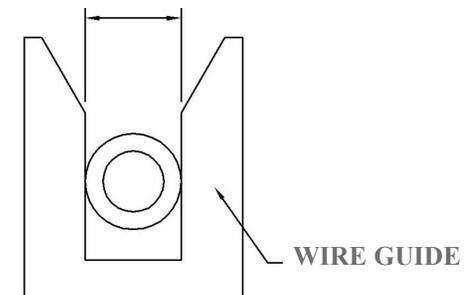
### CLASS: WIRE GUIDED ANGLE

Characteristics: Any blade that requires assistance of auxiliary wire guides receives this classification.



“ WG-A ”

OUTER DIAMETER



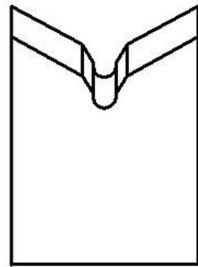
### CLASS: AU-NE-A NARROW ENTRY ANGLE WITH AUXILARY GRIND

### CLASS: AU-WE-A WIDE ENTRY ANGLE WITH AUXILARY GRIND

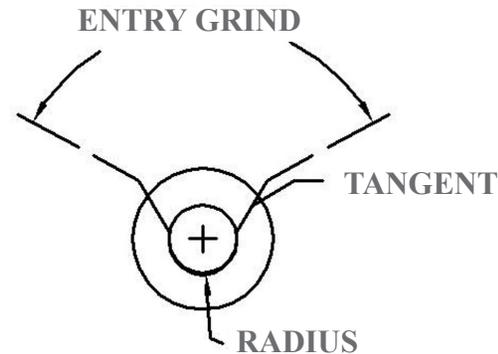
### CLASS: AU-UN-A UNIVERSAL ENTRY ANGLE WITH AUXILARY GRIND

**Characteristics:** A wider angle is ground on top of the normal entry angle. Most of the time, this second auxiliary grind is performed for added clearance and / or for better gathering of the wire. This grind is not sharp and does not cut into the insulation normally.

Regardless of the angle used for the auxiliary entry angle, the main sharp entry angle is really going to determine the blade process capability.



COMPOUND ENTRY  
ANGLE

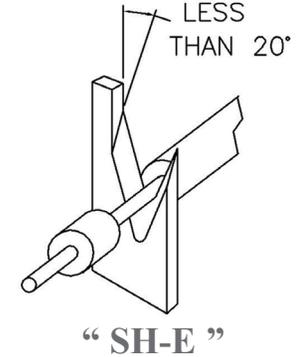


### EDGE: SHARP ANGLE OF ATTACK

Cutting edge is narrow, less than 20 degrees.

**Advantages:** It provides the cleanest penetration into the insulation. The plastic compression factor is low, reducing tearing off of slug. Excellent for very elastic or rubbery insulation.

**Disadvantages:** Inadequate for processing hard or fiber-coated insulation. It is also more susceptible to premature wear or chipping.

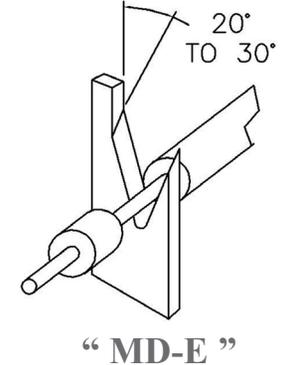


### EDGE: MEDIUM SHARPNESS ANGLE OF ATTACK

Cutting edge is narrow, between 20 and 30 degrees.

**Advantages:** It provides good penetration into the insulation. The plastic compression factor is medium, slug tearing is very low, especially in thermo plastics like PVC. Durability is higher than sharp edge blades.

**Disadvantages:** Marginal for processing hard or fiber coated insulation.



### EDGE: BLUNT ANGLE OF ATTACK

Cutting edge is wider, above 30 degrees.

**Advantages:** It provides good penetration into the insulation. The plastic compression factor is high. Tearing off of slug is higher as well. Good for most thermo plastics, also very good for processing harder insulation and fiber coatings. Durability is considerably higher than medium or sharp edges.

**Disadvantages:** Inadequate for processing very elastic or rubbery insulation or for multi-conductor cables with a soft or loose core.

