

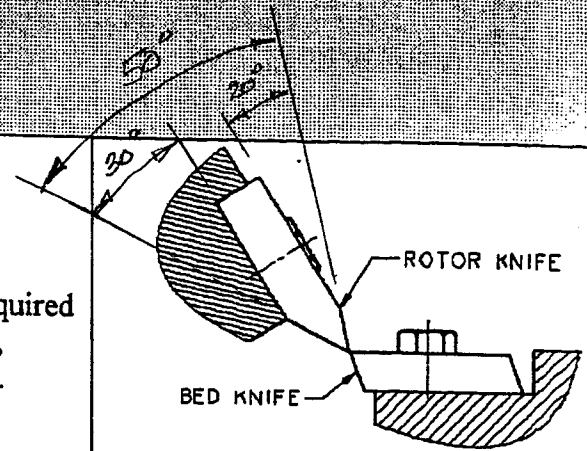
# Cumberland Engineering

## Optional Granulator Knife Cross Sectional Geometry

### High Shear Knife Design

(May also be known as "short cord" design)

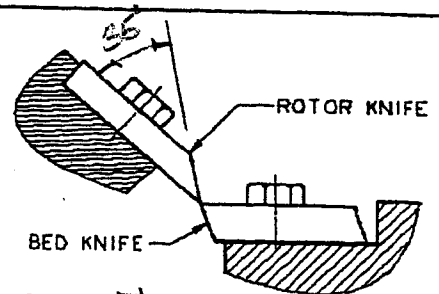
Maximizes cutting strength where high impact cutting forces are required for tough materials. Typical applications include thick section pipe, profiles, moldings, sheet, and light purgings up to 2" wall thickness.



### Steep-Angle Knife, Keen Edge

Maximizes cutting function where less tip strength is needed for higher energy absorbing elastic materials.

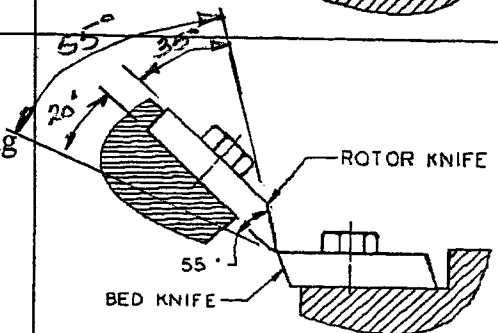
Typical applications include thermoforming skeleton/scrap, sheet, film and fiber PE and rubber type materials with elastic properties.



### Steep-Angle Knife, 55 Degree Landed

Combined cutting function coupled with additional strength at the cutting edge for medium energy absorbing, high impact materials.

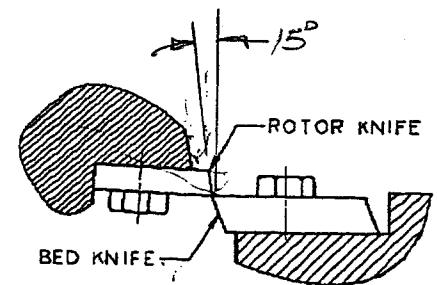
Typical applications include large bulky thin wall molded parts, sprues and runners, thermoformed parts and skeleton sheet, up to 3/8" wall thickness.



### Radial Knife Design

Maximizes strength for high force wedge fracturing of the toughest high impact materials. Usually underslung mounted in rotor providing additional strength.

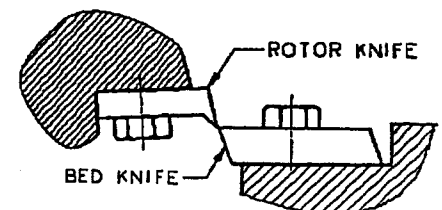
Mature technology, not always the most efficient/effective cutting technology. Currently typical applications are limited to wire/metal granulating requirements.

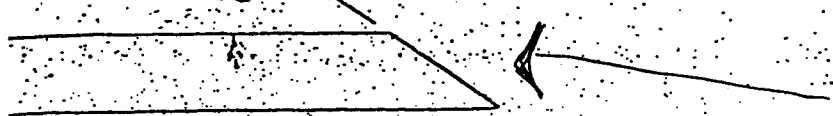


### Hooked Knife Design

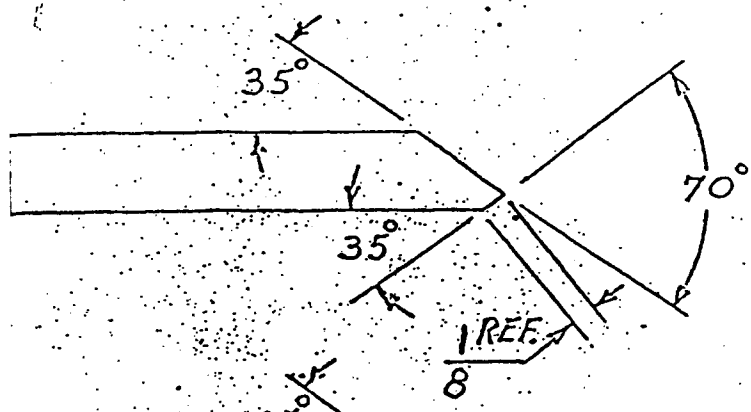
Combines the strength of the Radial knife mounting with the cutting action of a Steep-Angle knife.

Typical applications include blow molded or injection molded hollow light/thin wall parts that need to be encouraged or pulled into the cutting action.

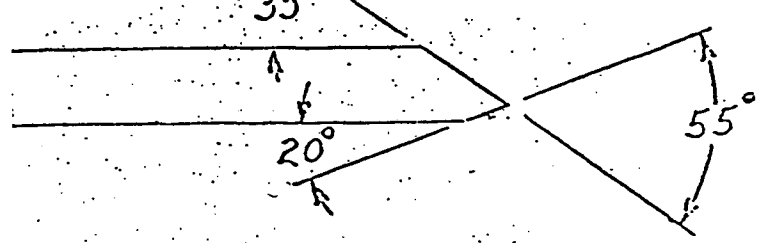




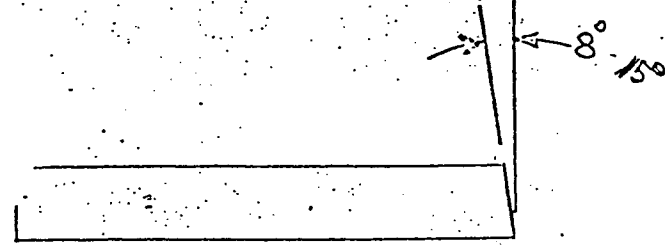
STEEP ANGLE (ROTOR)  
KEEN EDGE



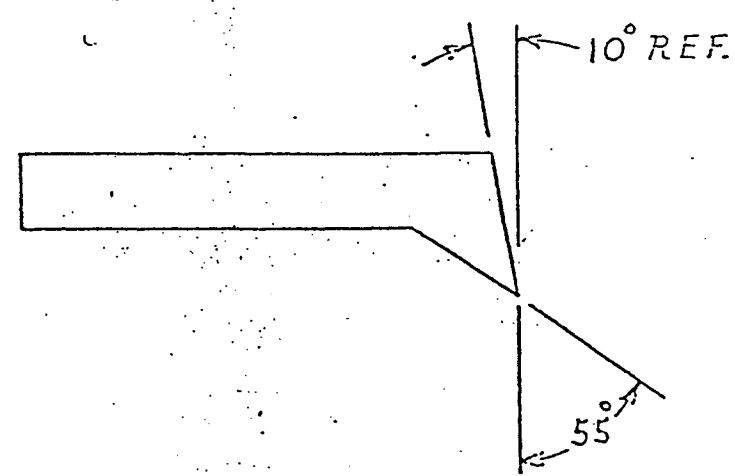
STEEP ANGLE (ROTOR)  
STD. 1/8 LAND  
*discussed*



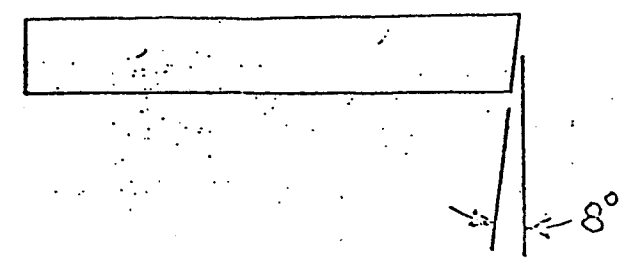
STEEP ANGLE (ROTOR)  
STD. 55°  
*Cooler  
less chipping*



STD. RADIAL (ROTOR)



HOOK TYPE (ROTOR)  
(RADIAL + HOOK)



STD. (BED)