

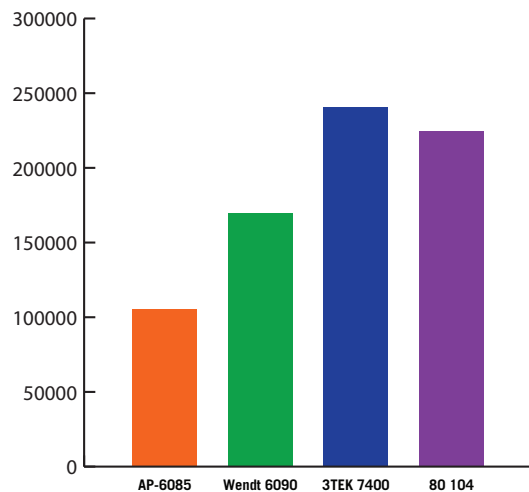
# TEK TOPICS

#2

## WHY IS THE AMOUNT OF KINETIC ENERGY IMPORTANT?

The simple answer is the higher the Kinetic Energy, the easier the machine can shred and liberate the scrap. The easier the rotor and hammers can shred the material, the faster it densifies and moves through the machine. Also, the shorter time the scrap remains in the shredder, the cooler the scrap is upon emerging. A shredder's KE is like a heart rate, as it's a crucial insight to the machine's design and likely longevity.

KINETIC ENERGY IN LBS. FT.<sup>2</sup>/SECOND



**KINETIC ENERGY & HAMMER SPEED COMPARISON: AMERICAN PULVERIZER, WENDT, 3TEK, TYPICAL 80 104**

|   | AP-6085 | Wendt 6090 | 3TEK 7400 | 80 104  |
|---|---------|------------|-----------|---------|
| <b>HAMMER SPEED</b>                             |         |            |           |         |
| Hammer Diameter: tip to tip in inches           | 60      | 63         | 74        | 80      |
| Input Rotor Speed in RPM                        | 650     | 650        | 720       | 600     |
| Hammer Speed in MPH                             | 116     | 133.4      | 158.5     | 142.8   |
| <b>KINETIC ENERGY</b>                           |         |            |           |         |
| Hammer Weight in lbs.                           | 235     | 230        | 287       | 330     |
| Kinetic Energy in lbs. ft. <sup>2</sup> /second | 105,699 | 169,528    | 240,926   | 224,838 |

At 3TEK, we think differently. We believe the scrap industry is ready for a change in where it processes scrap. Everything we do is aimed at providing affordable, reliable processing and sorting equipment to the smaller yard.

