



Pennsylvania Crusher[®] TKK Koal-King[®] Granulator



When Quality Crushing Equipment is
Required for Low Capacities!

Applications:

The Pennsylvania Crusher TTK Koal-King® Ring-Type Granulator is one of the most widely used granulators worldwide, trusted for the reduction of coal, limestone, gypsum, and other friable materials in power generation, mining, cement, and other applications.

Engineered specifically for power plant service and secondary crushing at the mine, the TTK is designed to produce a granular product with fewer fines than conventional crushers. It is particularly effective in preparing pulverizer feed at central power stations, reducing unwashed, high-ash, high-moisture coals of 6 inches and under—often with large percentages of 2-inch and under material—at capacities up to 3,600 tons per hour.

The Koal-King® excels where many machines struggle, handling wet, fine, and dirty materials that tend to cause plugging and build-up. Its slow, positive rolling action applies concentrated pressure to shatter and crack the feed, producing a consistent granular product with minimal extreme fines. This makes it especially effective at processing rock and stone admixtures common in today's power stations.

Beyond robust crushing capability, the TTK Koal-King® offers significant service and maintenance advantages. Its maximum access simplifies routine maintenance, while delivering sustained cost savings and dependable operation throughout its extended service life.



Superior Technology:

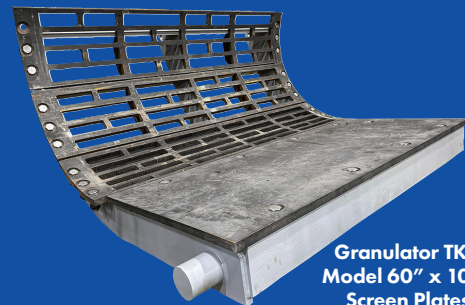
- **Unique Access Arrangement** – On most models, the entire rear quadrant is hinged to swing fully open, providing complete exposure of the rotor assembly and much of the crushing chamber. This design ensures unobstructed access, allowing the rotor assembly to be removed in its entirety and hammers to be replaced without disturbing other components of the feed system.

- **Bearing Housings** – The split housing design simplifies maintenance by allowing bearings to be flushed and lubricated directly on the shaft, reducing downtime and handling.

- **No Flywheel** – The rotor assembly's own mass provides ample inertia, removing the need for an external flywheel and eliminating the associated safety risks to plant personnel.

- **Output Size Adjustment** – Maintaining the correct output size is achieved by adjusting the screen cage to compensate for normal wear, a process accomplished through external screw mechanisms.

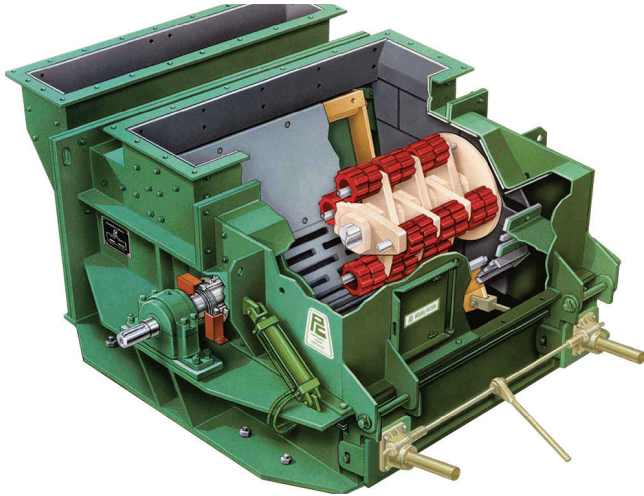
- **Crusher Protection** – Any uncrushable debris is routed into a built-in tramp iron trap, conveniently accessible through an inspection panel to simplify routine maintenance.



Granulator TTK
Model 60" x 103"
Screen Plates

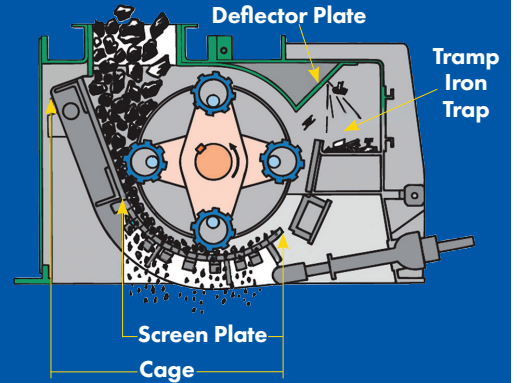
- **Screen Cage** – Koal-King's® screen plates, with specially engineered slots that maximize open area, are purpose-built to handle wet, frozen, fine unwashed coal from stockpiles at railcars and central power stations—delivering reliable performance even with the most challenging, sticky feed materials.

Operational Material Flow:



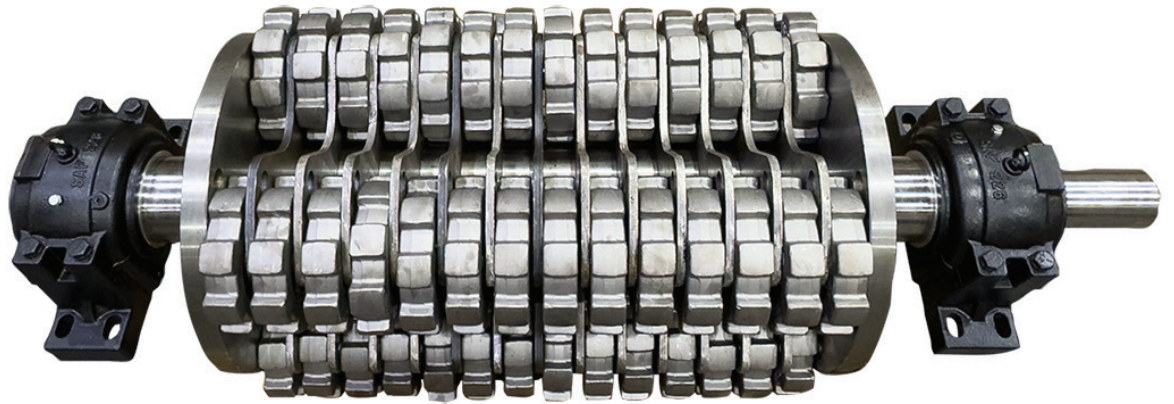
All reduction is performed in one pass.

Material enters through the feed opening directly into the path of the ring hammers, which deliver the initial breakage and propel the material against the breaker plate for further reduction. As the coal moves across the screen plate, final sizing is achieved through the rolling compression action of the ring hammers.



Complete Cage Coverage for Consistent Results:

Strategic Hammer Placement for Uniform Wear, Consistent Performance, and Superior Reduction.



Superior Hammer Technology:

- **Hammers** – Our toothed ring, forged-steel hammers feature a specialized profile that delivers superior crushing efficiency and significantly longer service life than third-party alternatives. Each hammer is strategically positioned to ensure complete coverage of the cage, resulting in more consistent material reduction and uniform wear across the screen cage.
- **Duralife® Hammers** – Our Duralife premium hammers are crafted from advanced alloy formulations designed to deliver superior wear resistance and exceptional toughness. Engineered for durability, they provide extended service life with enhanced shock resistance, significantly reducing the risk of cracking.



Forged Steel Ring Hammer



Duralife® AP Ring Hammer

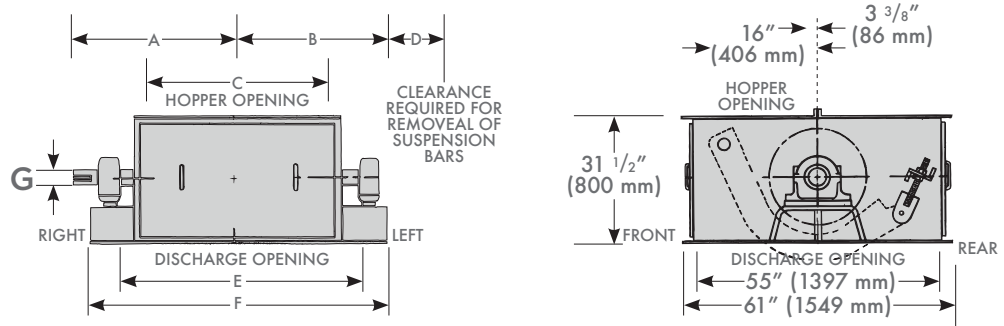


Duralife® XP Hard Facing Ring Hammer



Dimensions and Weights

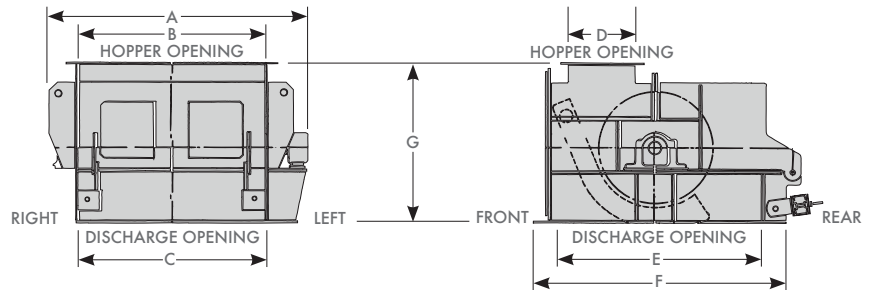
MODEL TTK 26 KOAL-KING® GRANULATOR



Granulator Approximate Layout Dimensions* and Shipping Weights in Inches (mm)

Model (Diameter x Length)	A	B	C Hopper Opening	D	E Discharge Opening	F	G	LBS (KG)
26" x 20" (660 x 508)	30 13/16" (783)	24 3/16" (614)	18 5/8" (473)	13" (330)	23 3/8" (600)	55" (1397)	2 1/2" (64)	3,500 (1,588)
26" x 30" (660 x 762)	38" (965)	29" (735)	28 1/8" (714)	23" (584)	33 1/8" (841)	67" (1702)	3" (76)	4,000 (1,814)
26" x 40" (660 x 1016)	42 3/4" (1086)	33 5/8" (859)	37 1/2" (953)	33" (838)	42 1/2" (1080)	76 3/8" (1940)	3" (76)	4,700 (2,132)
26" x 50" (660 x 1270)	49" (1245)	38 3/8" (975)	47" (1194)	44" (1138)	52" (1321)	87 3/8" (2219)	3 1/2" (89)	5,300 (2,404)
26" x 60" (660 x 1524)	53 11/16" (1364)	43" (1094)	56 3/8" (1432)	54" (1372)	61 3/8" (1559)	96 3/4" (2457)	3 1/2" (89)	5,900 (2,676)

MODEL TTK 36, 44, 48, 60, & 72 KOAL-KING® GRANULATOR



Granulator Approximate Layout Dimensions* and Shipping Weights in Inches (mm)

Model (Diameter x Length)	A	B Hopper Opening	C Discharge Opening	D Hopper Opening	E Discharge Opening	F	G	LBS (KG)
36" x 40" (914 x 1016)	83 3/4" (2127)	41 3/4" (1060)	42 1/2" (1080)	18" (457)	69 7/8" (1175)	79 1/4" (2013)	51" (1295)	8,000 (3,629)
36" x 49" (914 x 1245)	93 1/4" (2369)	51 1/4" (1302)	52" (1321)	18" (457)	69 7/8" (1775)	79 1/4" (2013)	51" (1295)	9,500 (4,309)
36" x 59" (914 x 1499)	102 3/4" (2610)	60 3/4" (1543)	61 1/2" (1562)	18" (457)	69 7/8" (1775)	79 1/4" (2013)	51" (1295)	11,000 (4,990)
36" x 68" (914 x 1727)	112 1/4" (2851)	70 1/4" (1784)	71" (1803)	18" (457)	69 7/8" (1775)	79 1/4" (2013)	51" (1295)	12,500 (5,670)
36" x 78" (914 x 1981)	121 15/16" (3097)	79 3/4" (2026)	80 1/2" (2045)	18" (457)	69 7/8" (1775)	79 1/4" (2013)	51" (1295)	14,400 (6,532)
44" x 60" (1118 x 1524)	102 7/16" (2605)	52 5/8" (1337)	60 5/8" (1540)	22" (559)	84 3/4" (2153)	99 1/4" (2521)	64 3/4" (1645)	18,775 (8,516)
44" x 71" (1118 x 1803)	113 1/2" (2883)	63 1/2" (1613)	71 1/2" (1816)	22" (559)	84 3/4" (2153)	99 1/4" (2521)	64 3/4" (1645)	21,700 (9,843)
44" x 82" (1118 x 2083)	124 1/2" (3162)	74 3/8" (1889)	82 3/8" (394)	22" (559)	84 3/4" (2153)	99 1/4" (2521)	64 3/4" (1645)	24,410 (11,072)
44" x 93" (1118 x 2362)	134 13/16" (3424)	85 1/4" (2165)	93 1/4" (2369)	22" (559)	84 3/4" (2153)	99 1/4" (2521)	64 3/4" (1645)	26,000 (11,793)
48" x 71" (1219 x 1803)	120 3/4" (3067)	63 1/2" (1613)	71 1/2" (1816)	25" (635)	91" (2311)	105 1/2" (2680)	71 1/2" (1816)	24,300 (11,022)
48" x 82" (1219 x 2083)	127 3/16" (3231)	74 3/8" (1889)	82 3/8" (2092)	25" (635)	91" (2311)	105 1/2" (2680)	71 1/2" (1816)	28,600 (12,973)
48" x 93" (1219 x 2362)	141 1/8" (3585)	85 1/4" (2165)	93 1/4" (2369)	25" (635)	91" (2311)	105 1/2" (2680)	71 1/2" (1816)	32,300 (14,651)
48" x 103" (1219 x 2616)	151 3/16" (3859)	96 1/8" (2442)	104 1/8" (2645)	25" (635)	91" (2311)	105 1/2" (2680)	71 1/2" (1816)	36,700 (16,647)
48" x 114" (1219 x 2896)	164 7/8" (4188)	107" (2718)	115" (2921)	25" (635)	91" (2311)	105 1/2" (2680)	71 1/2" (1816)	40,200 (18,234)
60" x 93" (1118 x 2362)	140 1/2" (3569)	85 1/4" (2165)	93 1/4" (2369)	32 1/4" (819)	111" (2819)	127 5/8" (3242)	85" (2159)	40,480 (18,361)
60" x 103" (1118 x 2616)	152 1/16" (3862)	96 1/8" (2442)	104 1/8" (2645)	32 1/4" (819)	111" (2819)	127 5/8" (3242)	85" (2159)	44,350 (20,117)
60" x 114" (1118 x 2896)	164 1/4" (4172)	107" (2718)	115" (2921)	32 1/4" (819)	111" (2819)	127 5/8" (3242)	85" (2159)	49,240 (22,335)
72" x 114" (1829 x 2896)	165 1/2" (4204)	107" (2718)	115" (2921)	39" (991)	129 3/4" (3296)	146 1/2" (3721)	99" (2515)	73,500 (33,339)
72" x 125" (1829 x 3175)	176 1/2" (4483)	118" (2997)	126" (3200)	39" (991)	129 3/4" (3296)	146 1/2" (3721)	99" (2515)	82,200 (37,285)
72" x 136" (1829 x 3454)	190" (4826)	129" (3277)	137" (3480)	39" (991)	129 3/4" (3296)	146 1/2" (3721)	99" (2515)	92,300 (41,867)
72" x 147" (1829 x 3734)	202" (5131)	140" (3556)	148" (3759)	39" (991)	129 3/4" (3296)	146 1/2" (3721)	99" (2515)	101,500 (46,040)

Call +1 855-483-7721 or email customer.service@astecindustries.com to find the sales representative nearest you.