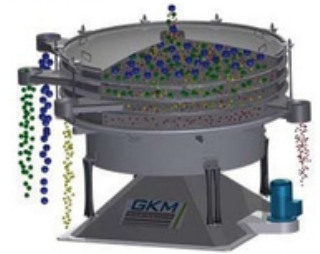


**INNOVATION. PASSION. SUCCESS.**

## Recycling of batteries (Screening out Black Mass)

The recycling process:

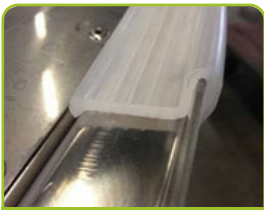
Batteries are shredded and fractionated into the individual components such as foils, outer casings and black mass (foil, AL, CU, small amounts of Fe). Using GKM's model KTS tumbler screening machine, in most cases, the required cut-points between 0.2 and 6.0 mm can be achieved.



Foils, aluminum, cooper etc.



Black mass  
approx. 40 – 50%



GKM clip-on dust tight, unique sealing system protects against any leakage



Ultrasonic mesh cleaning for finest cut points (0,2 – 0,4 mm) improving material quality (Black Mass)



All GKM screening machines are ATEX certified



Improved material separation and quality through a number of relief screens up to 6 decks



Manual and pneumatic deck lifting systems for a fast and efficient screen exchange and maintenance



Quick clamping system provides quick access for screen exchange with minimum downtime for opening and closing of the machine

### Process Data Example: Machine KTS 2000/4

Black Mass:	40 – 50%
Separation:	0,20 – 6,0 mm
Bulk density:	100 – 1.000 gr/l

Screening area (m <sup>2</sup> )	0.3	0.725	1.1	1.8	2.6	4.5	5.3
Diameter (mm) Ø	630	900	1100	1601	1901	2471	2672
Motor power (kW)	0.25	1.50	2.20	4.00	4.00	5.50	5.50
Weight (kg) 1 Deck	215 – 300	500 – 950	900 – 1100	1280 – 1580	1300 – 1700	2400 – 2800	2500 – 3000
(Height mm) H 2 Decks	817	944	1264	1283	1396	1572	1 5 8 2
(Height mm) H 3 Decks	930	1058	1378	1397	1510	1686	1696
(Height mm) H 4 Decks	1043	1172	1492	1511	1624	1800	1810
(Height mm) H 5 Decks	1156	1286	1606	1625	1738	1914	1924
(Height mm) H 6 Decks	1269	1400	1720	1739	1852	2028	2038
(Height mm) H	1383	1514	1834	1853	1966	2142	2152



NORTH AMERICAN PARTNER FOR LEADING EUROPEAN SUPPLIERS

### CONTACT US



+1.773.234.8003  
 ggind.com  
 4796 Colt Road  
 Rockford, IL 61103