# **Orange Peel Grapples**

## KM 650 large

Large orange peel grapple for the handling of bulky scrap, the KM 650 large for various applications is available with different tine shapes, different volumes (0.33 c.y., 0.46 c.y., 0.65 c.y.), with 4 or 5 tines.

- ▷ Different tine shapes of the KM 650 series to accommodate handling a variety of materials:
  - KM 651: fully closing tines for handling swarf, loose waste, soil, gravel etc.
  - KM 652: half closing tines for handling swarf, scrap, rubbish, waste paper etc.
  - KM 653: pointed tines for bulky scrap, car bodies, bundled waste paper etc.
- ▷ Number of tines can be chosen with 4 or 5 tines.
- ▷ Long life due to a solid design: the hydraulic cylinder pistons are protected by the gripping arms and the hydraulic hoses, connections and oil distributor are positioned in the robust centre section. Special wear resistant materials used in the production of the gripping arms and oversized bearings ensure a long service life for these sturdy grapples.
- ▶ A lifting-eye on the centre section acts as an additional stop.
- Powerful operation with high closing force (2,860 lbf to 3,960 lbf at an operating pressure of 3,750 psi).

Type     Number of tines     Volume     max. Opening A     Width E (closed)     Height C (closed, incl. rotator)     Self weight (w/o rotator)     Load capacity     Closing force       (c.y.)     (in)     (in)     (in)     (in)     (in)     (ibs)     (lbs)     (lbs)<	Orange peel grapple KM 650 large									
M 651-4     4     0.33     61     51     40     979     5,500     3,960       KM 651-4     4     0.46     68     50     43     1,034     6,600     3,520       0.65     85     52     53     1,221     6,600     2,860       0.33     61     51     40     1,144     5,500     3,960       KM 651-5     5     0.46     68     50     43     1,199     6,600     2,860       KM 651-5     5     0.46     68     50     43     1,199     6,600     3,520       KM 651-4     4     0.46     68     50     43     1,199     6,600     3,520       .     0.33     61     51     40     935     5,500     3,960       KM 652-4     4     0.46     68     50     43     968     6,600     3,520       .     0.33     61     51     40     1,111     5,500     3,960       KM 653-4	Туре			Â	(closed)	(closed, incl. rotator)	(w/o rotator)	capacity	force	
KM 651-4   4   0.46   68   50   43   1,034   6,600   3,520     0.65   85   52   53   1,221   6,600   2,860     KM 651-5   5   0.46   68   50   43   1,199   6,600   3,520     KM 651-5   5   0.46   68   50   43   1,199   6,600   3,520     KM 651-5   5   0.46   68   50   43   1,199   6,600   3,520     KM 651-6   85   52   53   1,397   6,600   2,860     KM 652-4   4   0.46   68   50   43   968   6,600   3,520     KM 652-4   4   0.46   68   50   43   968   6,600   3,520     M 652-4   4   0.46   68   50   43   968   6,600   3,520     M 652-4   4   0.46   68   50   43   1,111   6,600   3,520     M 652-5   5   0.46   68   50   43   1,111							. ,			
NM 651-5     5     0.46     68     50     43     1,144     5,500     3,960       KM 651-5     5     0.46     68     50     43     1,199     6,600     3,520       0.65     85     52     53     1,397     6,600     2,860       0.33     61     51     40     935     5,500     3,960       KM 652-4     4     0.46     68     50     43     968     6,600     3,520       0.65     85     52     53     1,111     6,600     2,860       0.65     85     52     53     1,111     6,600     2,860       0.33     61     51     40     1,111     5,500     3,960       KM 652-5     5     0.46     68     50     43     1,144     6,600     3,520       0.65     85     52     53     1,309     6,600     3,520       0.65     85     52     53     1,309     6,600     3,520 <td rowspan="2">KM 651-4</td> <td>4</td> <td></td> <td>-</td> <td>-</td> <td></td> <td></td> <td>•</td> <td>•</td>	KM 651-4	4		-	-			•	•	
KM 651-5     5     0.46     68     50     43     1,199     6,600     3,520       0.65     85     52     53     1,397     6,600     2,860       KM 652-4     4     0.46     68     50     43     968     6,600     3,520       KM 652-4     4     0.46     68     50     43     968     6,600     3,520       0.65     85     52     53     1,111     6,600     2,860       0.65     85     52     53     1,111     6,600     2,860       0.65     85     52     53     1,111     5,500     3,960       KM 652-5     5     0.46     68     50     43     1,144     6,600     3,520       0.65     85     52     53     1,309     6,600     2,860       0.65     85     52     53     1,309     6,600     3,520       0.65     85     52     53     9,570     6,600     3,520 <td></td> <td>0.65</td> <td>85</td> <td>52</td> <td>53</td> <td>1,221</td> <td>6,600</td> <td>2,860</td>			0.65	85	52	53	1,221	6,600	2,860	
0.65     85     52     53     1,397     6,600     2,860       KM 652-4     4     0.46     68     50     43     968     6,600     3,520       0.65     85     52     53     1,111     6,600     2,860       KM 652-4     4     0.46     68     50     43     968     6,600     3,520       0.65     85     52     53     1,111     6,600     2,860       KM 652-5     5     0.46     68     50     43     1,144     6,600     3,520       0.65     85     52     53     1,309     6,600     3,520       0.65     85     52     53     1,309     6,600     3,520       0.65     85     52     53     1,309     6,600     2,860       KM 653-4     4     0.46     68     50     43     869     6,600     3,520       0.65     85     52     53     957     6,600     3,520			0.33	61	51	40	1,144	5,500	3,960	
KM 652-4     4     0.33     61     51     40     935     5,500     3,960       KM 652-4     4     0.46     68     50     43     968     6,600     3,520       0.65     85     52     53     1,111     6,600     2,860       KM 652-5     5     0.46     68     50     43     1,144     6,600     3,520       KM 652-5     5     0.46     68     50     43     1,144     6,600     3,520       0.65     85     52     53     1,309     6,600     2,860       KM 653-4     4     0.46     68     50     43     1,144     6,600     3,520       0.65     85     52     53     1,309     6,600     2,860       KM 653-4     4     0.46     68     50     43     869     6,600     3,520       0.65     85     52     53     957     6,600     3,520       0.65     85     52 <td< td=""><td rowspan="3">KM 651-5</td><td>5</td><td>0.46</td><td>68</td><td>50</td><td>43</td><td>1,199</td><td>6,600</td><td>3,520</td></td<>	KM 651-5	5	0.46	68	50	43	1,199	6,600	3,520	
KM 652-4   4   0.46   68   50   43   968   6,600   3,520     0.65   85   52   53   1,111   6,600   2,860     0.33   61   51   40   1,111   5,500   3,960     KM 652-5   5   0.46   68   50   43   1,144   6,600   3,520     0.65   85   52   53   1,111   5,500   3,960     KM 652-5   5   0.46   68   50   43   1,144   6,600   3,520     0.65   85   52   53   1,309   6,600   2,860     KM 653-4   4   0.46   68   50   43   869   6,600   3,520     0.65   85   52   53   957   6,600   3,520     0.65   85   52   53   957   6,600   2,860     0.65   85   52   53   957   6,600   2,860     KM 653-5   5   0.46   68   50   43   1,034   5,500 <td></td> <td>0.65</td> <td>85</td> <td>52</td> <td>53</td> <td>1,397</td> <td>6,600</td> <td>2,860</td>			0.65	85	52	53	1,397	6,600	2,860	
0.65     85     52     53     1,111     6,600     2,860       0.33     61     51     40     1,111     5,500     3,960       KM 652-5     5     0.46     68     50     43     1,144     6,600     3,520       0.65     85     52     53     1,309     6,600     2,860       KM 653-4     4     0.46     68     50     43     1,144     6,600     2,860       KM 653-4     4     0.46     68     50     43     869     6,600     3,520       0.65     85     52     53     957     6,600     3,520       0.65     85     52     53     957     6,600     2,860       0.65     85     52     53     957     6,600     2,860       0.65     85     52     53     957     6,600     2,860       0.33     61     51     40     1,034     5,500     3,960       KM 653-5     5<			0.33	61	51	40	935	5,500	3,960	
KM 652-5     5     0.46     68     50     43     1,111     5,500     3,960       KM 652-5     5     0.46     68     50     43     1,144     6,600     3,520       0.65     85     52     53     1,309     6,600     2,860       KM 653-4     4     0.46     68     50     43     869     6,600     3,520       0.65     85     52     53     1,309     6,600     2,860       KM 653-4     4     0.46     68     50     43     869     6,600     3,520       0.65     85     52     53     957     6,600     2,860       0.65     85     52     53     957     6,600     2,860       0.33     61     51     40     1,034     5,500     3,960       KM 653-5     5     0.46     68     50     43     1,056     6,600     3,520	KM 652-4	4	0.46	68	50	43	968	6,600	3,520	
KM 652-5     5     0.46     68     50     43     1,144     6,600     3,520       0.65     85     52     53     1,309     6,600     2,860       KM 653-4     4     0.46     68     50     43     869     6,600     3,520       0.65     85     52     53     1,309     6,600     2,860       KM 653-4     4     0.46     68     50     43     869     6,600     3,520       0.65     85     52     53     957     6,600     2,860       0.65     85     52     53     957     6,600     2,860       0.65     85     52     53     957     6,600     2,860       0.33     61     51     40     1,034     5,500     3,960       KM 653-5     5     0.46     68     50     43     1,056     6,600     3,520			0.65	85	52	53	1,111	6,600	2,860	
0.65     85     52     53     1,309     6,600     2,860       KM 653-4     4     0.46     68     50     43     869     6,600     3,960       0.65     85     52     53     1,309     6,600     3,960       0.65     85     50     43     869     6,600     3,520       0.65     85     52     53     957     6,600     2,860       0.65     85     52     53     957     6,600     2,860       KM 653-5     5     0.46     68     50     43     1,034     5,500     3,960			0.33	61	51	40	1,111	5,500	3,960	
KM 653-4     4     0.33     61     51     40     858     5,500     3,960       KM 653-4     4     0.46     68     50     43     869     6,600     3,520       0.65     85     52     53     957     6,600     2,860       0.33     61     51     40     1,034     5,500     3,960       KM 653-5     5     0.46     68     50     43     1,056     6,600     3,520	KM 652-5	5	0.46	68	50	43	1,144	6,600	3,520	
KM 653-4     4     0.46     68     50     43     869     6,600     3,520       0.65     85     52     53     957     6,600     2,860       0.33     61     51     40     1,034     5,500     3,960       KM 653-5     5     0.46     68     50     43     1,056     6,600     3,520			0.65	85	52	53	1,309	6,600	2,860	
0.65     85     52     53     957     6,600     2,860       0.33     61     51     40     1,034     5,500     3,960       KM 653-5     5     0.46     68     50     43     1,056     6,600     3,520			0.33	61	51	40	858	5,500	3,960	
0.33     61     51     40     1,034     5,500     3,960       KM 653-5     5     0.46     68     50     43     1,056     6,600     3,520	KM 653-4	4	0.46	68	50	43	869	6,600	3,520	
KM 653-5     5     0.46     68     50     43     1,056     6,600     3,520			0.65	85	52	53	957	6,600	2,860	
			0.33	61	51	40	1,034	5,500	3,960	
0.65 85 52 53 1,155 6,600 2,860	KM 653-5	5	0.46	68	50	43	1,056	6,600	3,520	
			0.65	85	52	53	1,155	6,600	2,860	

#### Accessories

#### Type Description

KM 04 Frecommended KINSHOFER rotator for KM 650 largeKM 06 F140-40recommended KINSHOFER rotator for KM 650 large – for heavy duty application

### Requirements of truck crane

Operating pressure:max. 3,750 psiRecommended oil flow:8 - max. 20 GPMMind the pressure!

Technical drawings





