

Product Note

New Generic k-factors for CTDI in Ocean 2014

Background

With continuously increased availability of k-factors for different CT scanners it has been seen that the k-factors are quite equal for each manufacturer independently of scanner model. The k-factors for body body phantoms vary quite a lot for different kV settings.

In the past, generic settings have been available for 120 kV in Ocean 2014. Now the generic settings have been extended to cover a wider range of kV settings from 80 to 140 kV. At the same time the generic settings for 120 kV have been updated. In some cases the changes have been up to 7% for body phantoms.

The table below shows the available generic k-factors. For the 120 kV settings the percentage change is shown within brackets.

New generic k-factors

Manu- facturer	Set kV	k-factor Head Phantom	k-factor Body Phantom
Elscint	120	1,05 (0%)	1,49 (-1%)
Elscint	140	1,03	1,43
GE	80	1,07	1,98
GE	100	1,03	1,80
GE	120	1,02 (-3%)	1,75 (3%)
GE	135	1,01	1,63
GE	140	1,01	1,58
Philips	80	1,12	2,03
Philips	90	1,09	1,88
Philips	100	1,07	1,80
Philips	120	1,07 (1%)	1,80 (6%)
Philips	130	1,06	1,75
Philips	140	1,05	1,65
Picker	80	1,08	2,50
Picker	100	1,05	2,19
Picker	120	0,96 (-4%)	2,00 (5%)
Picker	130	0,95	2,01
Picker	140	0,94	1,91

Manu- facturer	Set kV	k-factor Head Phantom	k-factor Body Phantom
Marconi	90	1,10	1,89
Marconi	120	1,10 (0%)	1,87 (7%)
Marconi	130	1,11	1,70
Marconi	140	1,10	1,65
Shimadzu	80	1,13	2,47
Shimadzu	120	1,08 (1%)	1,99 (5%)
Shimadzu	130	1,07	1,98
Siemens	80	1,11	1,92
Siemens	100	1,09	1,68
Siemens	120	1,08 (1%)	1,69 (6%)
Siemens	125	1,07	1,68
Siemens	130	1,06	1,67
Siemens	133	1,08	1,65
Siemens	137	1,07	1,65
Siemens	140	1,07	1,61
Toshiba	80	1,14	2,14
Toshiba	100	1,09	1,97
Toshiba	120	1,03 (-2%)	1,58 (-7%)
Toshiba	130	1,02	1,47
Toshiba	135	1,02	1,45

Product versions

The new k-factors are implemented for:
Ocean 2014 version 2014.9 and higher

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