

# GENERATING GRINDING



## KAPP NILES

with small tools

Up to now the hard finishing of gears with interfering geometry was primarily realised by discontinuous profile grinding or gear honing. Compared to continuous generating grinding of components free from interfering contours, both processes have distinct disadvantages in terms of productivity and cost-effectiveness.

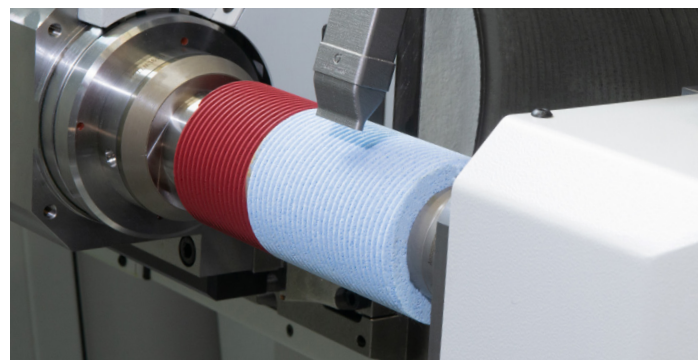
Until now, no gear grinding machine was able to process gears with interfering contours using the continuous generating grinding

method due to the high dynamic demands placed on tool and workpiece drives.

KAPP NILES is closing that gap and offers great streamlining opportunities by using continuous generating grinding for optimising the hard finishing process of complex gears.

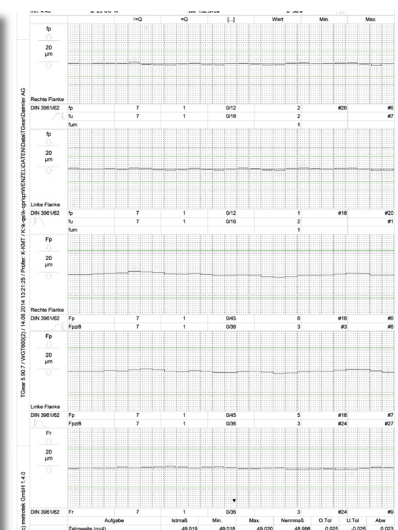
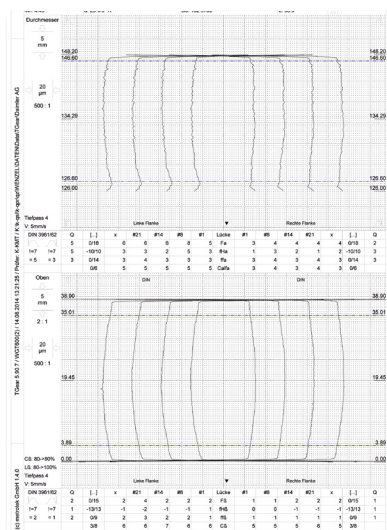
By using a high-speed grinding spindle on the **KX 160 / 260 TWIN HS** and **KNG 350 flex HS** machines, even gears which require a tool diameter of 55 mm can now be processed with generating grinding. In connection with the maximum tool width of 180 mm, it is possible to achieve the quality standards, processing times and costs common to serial production that were previously considered impossible for gears with interfering contours.

Due to the usage of combined grinding worms with an separate area for the fine grinding or polish grinding, highest gear surface qualities can be achieved.



profile and flank line measurement

pitch and runout measurement



	max. tip diameter [mm]	module range generating grinding [mm]	tool diameter range [mm] generating grinding	max. tool speed [min <sup>-1</sup> ]	max. workpiece speed [min <sup>-1</sup> ]
KX 160 / 260 TWIN HS	170 / 260	0.5 - 4.5 / 6	55 - 200	25,000	5,000
KNG 350 flex HS	350	0.5 - 6	55 - 200	25,000	5,000