

THE EXN1 SERIES IN OPERATION

Manufacture of high-precision rails made of AlMg3 with 240 N/mm².

To date, the customer has been using standard aluminium milling cutters with a ZrN coating. By switching to the H&V EXN1 Series (PERFORMMAKER & MIRRORMAKER), the production time per component was able to be reduced by more than 50%. Thanks to higher cutting depths and higher feed rates, the surface quality was also improved to a roughness (Ra) of less than 1 µm.

EXAMPLES OF MACHINING PARAMETERS WHEN ROUGHING WITH A FULL-SLOT
3-CUTTING EDGE END MILL CUTTER, Ø 12, 2XD

	Ae	Ap	Fz (mm/Z)	Vc (m/min)
EXN1 Performmaker Z3 2XD ASR	1xD	1.5xD	0.25	480
ZrN Z3 competitor	1xD	1.5xD	0.1	480
TAC Z3 competitor	1xD	1.5xD	0.12	480

Tool matrix for the EXN1-Series

