

5.2. Guidelines for Accuracy Grades by Machine Type

Table 1 shows guidelines for selecting an accuracy grade of the LM Guide according to the machine type.

Table 1 Guideline for Accuracy Grades by Machine Type

Type of machine		Machine tools													
		Machining center	Lathe	Milling machine	Boring machine	Jig borer	Drilling machine	Electric discharge machine	Punching press	Laser beam machine	Woodworking machine	NC drilling machine	Tapping center	Pallet changer	ATC
Accuracy grade	UP					●	●	●							
	SP	●	●	●	●	●	●	●		●					
	P	●	●	●	●			●	●	●	●	●	●		●
	H								●	●	●	●	●		
	Normal										●			●	●

Type of machine		Industrial robots		Semiconductor manufacturing machines			Other equipment									
		Cartesian coordinate	Cylindrical coordinate	Wire bonding machine	Prober	Electronic component inserter	Printed circuit board drilling machine	Injection molding machine	3D measuring instrument	Office equipment	Conveyance system	XY table	Coating machine	Welding machine	Medical equipment	Digitizer
Accuracy grade	UP				●				●							
	SP			●	●		●		●			●				●
	P	●		●		●	●					●				●
	H	●	●			●	●	●		●	●	●	●	●	●	●
	Normal	●	●					●		●	●		●	●	●	

UP: Ultra-precision grade

SP: Super-precision grade

P : Precision grade

H : High-accuracy grade

N : Normal grade