However, for programming case, it is recommended to divide the numbers into H code part and D code part.

H codes: H01 to H30

D codes: D31 to D99

Table 2.19

Offset method	G code	H or D code	Offset value memory
Tool length offset	G43 G44 G49	H [0][1]	No. / Offset value 01 02 03 04
Tool position offset	G45 G46 G47 G48	D [9][9]	. . . . 96 97 98 99
Tool dia. compensation C (Intersection computing system)	G40 G41 G42		

2.8 MISCELLANEOUS FUNCTIONS (M-FUNCTION)

The miscellaneous function is specified with the address M and three digits. The function of each M code (M00 to M89) is determined by the machine, except for several M codes. Refer to the machine tool builder's manual for the function of M codes except for the following M codes concerned with the control.

2.8.1 M CODES FOR STOP (M00, M01, M02, M30)

· M00 (Program Stop)

This code, when given in automatic operation mode, stops the automatic operation after the commands in the block containing M00 have been completed and M00 R signal is fed. The program may be continued by pressing the CYCLE START button.

· M01 (Optional Stop)

M01 performs the same function as program stop M00 whenever the OPTIONAL STOP switch is on. When the OPTIONAL STOP switch is off, the M01 code is disregarded.

· M02 (End-of-Program)

M02 is used at the end of program. When given in automatic operation mode, this code stops the automatic operation after the commands in the block containing M02 have been completed. Although the control is reset in most cases, the details are determined by the machine. Refer to the machine tool builder's manual.

· M30 (End-of-Tape)

M30 is given at the end of tape. When given in automatic operation mode, this code stops the automatic operation after the commands in the block containing M30 have been completed. In addition, in most cases, the control is reset and rewinds the tape (or memory). Since the details are determined by the machine, refer to the machine tool builder's manual.

NOTES:

· When M00, M01, M02 or M30 is given, it prevents the control from reading ahead the next block of information. The single decoded signal is fed in addition to the 2-digit BCD output for M codes.

· Whether M00, M01, M02 or M30 executes spindle stop, coolant off or some other executions, refer to the machine tool builder's manual.

· Whether the control is automatically reset or rewinds the tape (or memory), is determined by the following state.

(a) Input signal of the control "EOP" (internal reset input) is wired for "ON" or not.

(b) Input signal of the control "RWD" (rewind input) is wired for "ON" or not.

Refer to the machine tool builder's manual.