Safe and effective operation of the hoist is dependent on correct classification of the hoist's operation group. According to FEM9.511 the hoist's operating group can be determined from load spectrum and average Daily operating time.

1 Load Spectrum

The load spectrum can be determined from the table below

Light

Occasional full load

Usually light load

Small fixed load

Medium

Occasional full load

Usually light load

Average fixed load

Heavy

Repetitive full load

Usually average load

Heavy fixed load

Very Heavy

Usually almost full load

Very heavy fixed load

2 Average daily operating time

The average daily operating time of the hoist can be calculated from the running time of the hoisting machinery (Hours/day):

Formula

t=(2 x N x H x T)/(V x 60)

H = average hoisting height (m)

N = number of work cycles per hour (cycles/h)

T = daily working time (h)

V = hoisting speed (m/min)

3 Determining the operating group of the hoist

When the load spectrum and the average daily operating time of the hoist are identified, the hoist's operating group is obtained from the table below:

Load Spectrum	Average daily operating time	ISO(GB) / FEM
	(hours per day)	
	≤0.5	

≤1

≤2

≤4

≤8

≤16

Light

M3

1Bm

M4

1Am

M5

2m

M6

3m

Medium

M3

1Bm

M4

1Am

M5

2m

M6

3m

M7

4m

Heavy

M3

1Bm

M4

1Am

M5

2m

M6

3m

M7

4m

Very Heavy

M4

1Am

M5

2m

M6

3m

M7

4m

4 Safe working principles

Carefully following safe working principles is one of the most effective ways of preventing damage to property and injury to personnel.

The operator, service man and work manager for the hoist should be familiar with the safe working principles for the hoist.

A service team from customer or third party trained by manufacturer for operating the hoist and any maintenance services is needed.

Misuse of the hoist or improper servicing may result in an accident that cannot be prevented by the safety equipment. Training in operation and servicing the hoist, foresight and care are essential in order to prevent accidents.