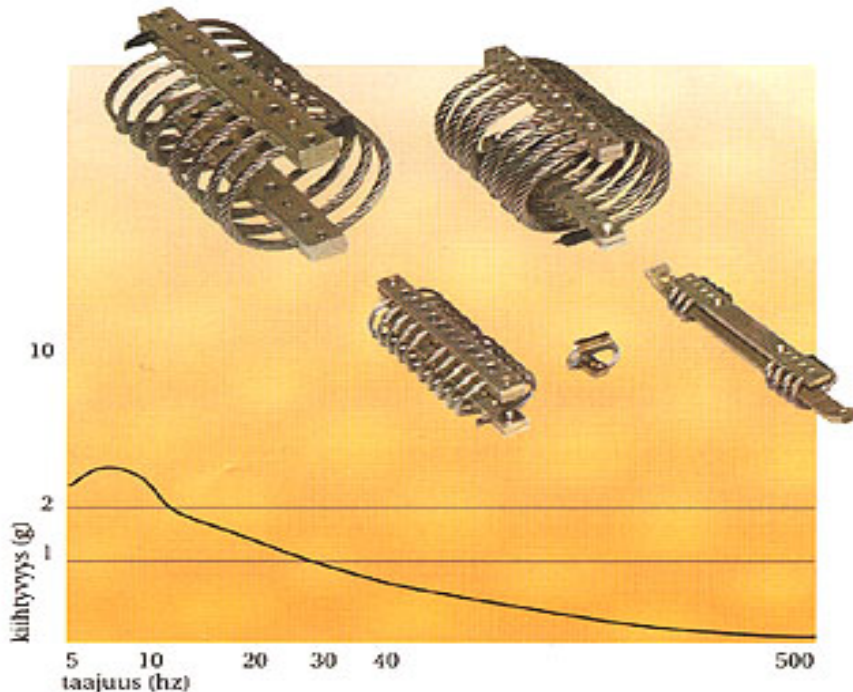


## ARMEshield wire rope isolator



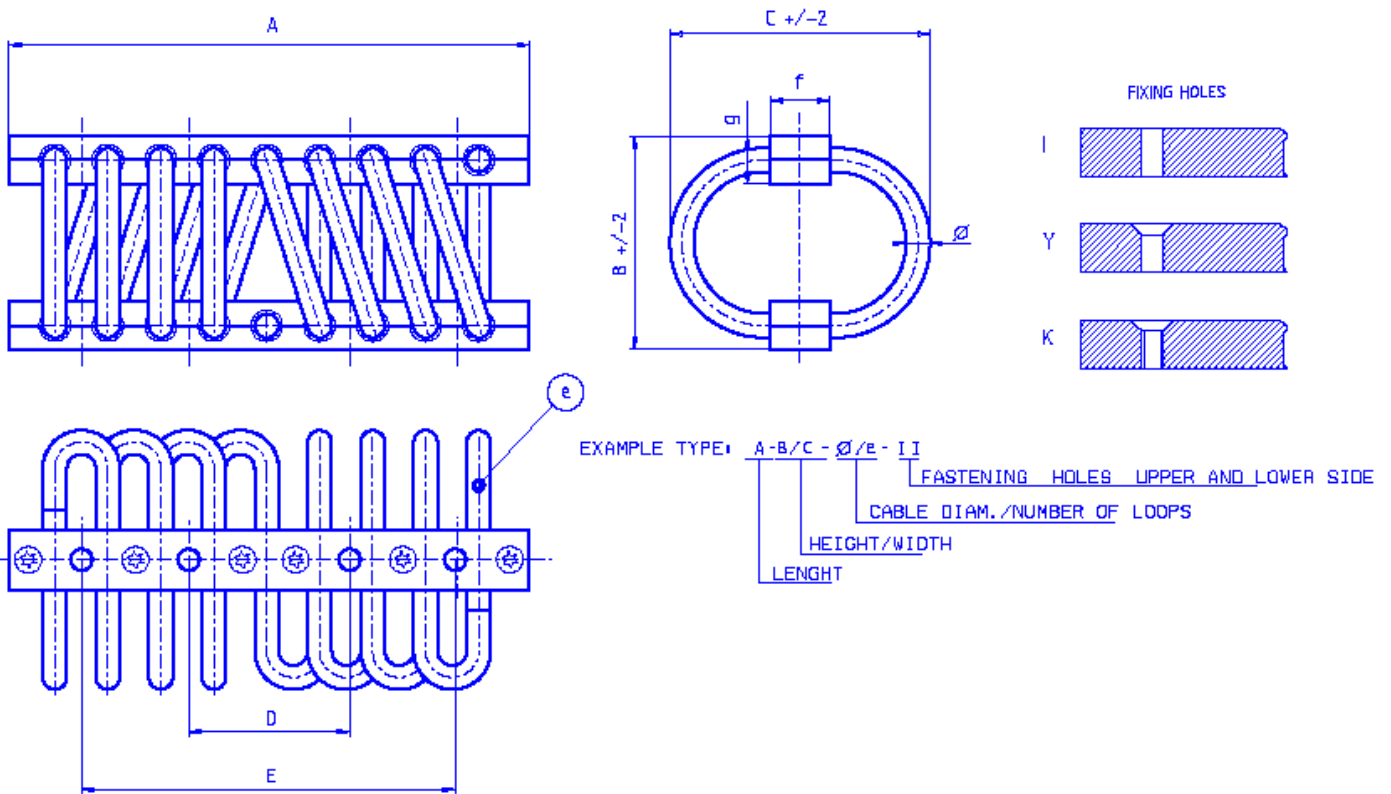
### General information

- The frequency range starting even from 5 Hz
- Full metallic
- Extremely low resonance amplification
- Custom-made dimensioning
- Excellent shock isolation
- For the masses from hundred grams to thousands of kilograms
- Ask for more information or make an offer
- Unequaled temperature range, -200°C...+370°C
- High damping
- Retainer bars, aluminium alloy/alodine (MIL-C-5541)
- Cable DIN 3060 7x19=133 strand, Aisi 316 or steel (Zn)
- Screws, Aisi 316
- Inserts, steel (Zn) or staniless steel
- Tested by ISO 10846

Specialed measure and - desing mounts.

Cable and elastomer combinations mounts for high frequencies, (hybridi)

## ARMEshield wire rope isolators

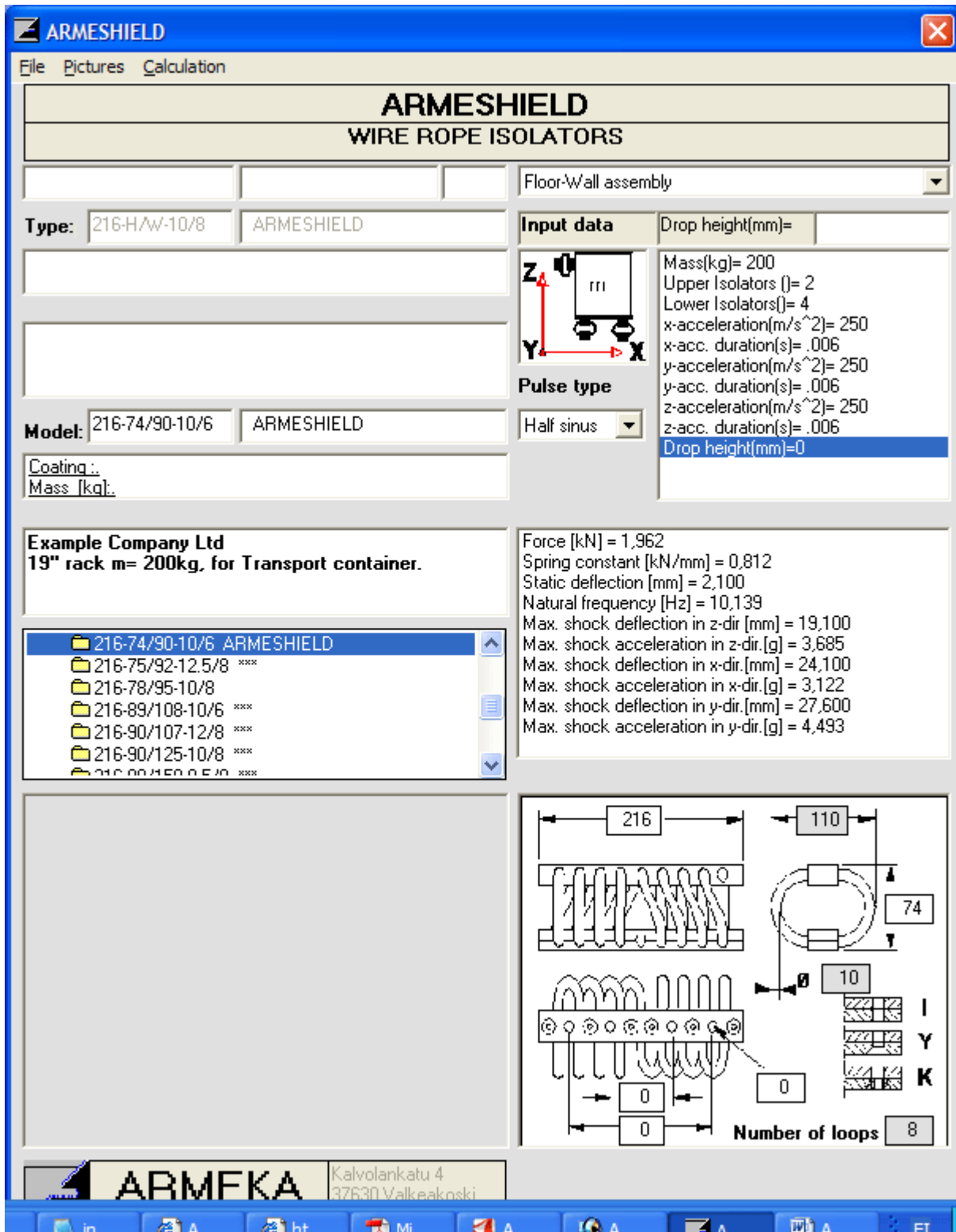


We calculate our mount by ARMEshield-program.

B, C and e can have as the result of the calculation .

A	D	E	f	g	Ø	I	Y	K
68	-	55,0	12	5	1,5...2,0	4,5	4,5	M4
80	-	68,3	12	5	1,5...2,0	4,5	4,5	M4
112	-	100,2	15	10	1,5...5,0	6,5	6,5	M6
127	-	114,3	15	10	1,5...5,0	6,5	6,5	M6
146	-	131,0	15	12	2,0...6,0	6,5	6,5	M6
216	66,8	155,8	25	20	6,0...12,0	9,0	9,0	M8
267	82,0	191,0	25	30	8,0...16,0	11,0	11,0	M10
370	114,2	266,6	40	40	10,0...22,0	13,0	13,0	M12
400	111,0	333,0	25	20	6,0...12,0	9,0	9,0	M8

## ARMEshield program



**ARMESHIELD**  
WIRE ROPE ISOLATORS

File Pictures Calculation

Floor-Wall assembly

Type: 216-H/W-10/8 ARMESHIELD

Model: 216-74/90-10/6 ARMESHIELD

Coating:  
Mass [kg]:

Example Company Ltd  
19" rack m= 200kg, for Transport container.

Input data

Drop height(mm)=

Mass(kg)= 200  
Upper Isolators ()= 2  
Lower Isolators()= 4  
x-acceleration(m/s<sup>2</sup>)= 250  
x-acc. duration(s)= .006  
y-acceleration(m/s<sup>2</sup>)= 250  
y-acc. duration(s)= .006  
z-acceleration(m/s<sup>2</sup>)= 250  
z-acc. duration(s)= .006  
Drop height(mm)=0

Pulse type  
Half sinus

Force [kN] = 1,962  
Spring constant [kN/mm] = 0,812  
Static deflection [mm] = 2,100  
Natural frequency [Hz] = 10,139  
Max. shock deflection in z-dir [mm] = 19,100  
Max. shock acceleration in z-dir.[g] = 3,685  
Max. shock deflection in x-dir.[mm] = 24,100  
Max. shock acceleration in x-dir.[g] = 3,122  
Max. shock deflection in y-dir.[mm] = 27,600  
Max. shock acceleration in y-dir.[g] = 4,493

216-74/90-10/6 ARMESHIELD  
216-75/92-12.5/8 \*\*\*  
216-78/95-10/8  
216-89/108-10/6 \*\*\*  
216-90/107-12/8 \*\*\*  
216-90/125-10/8 \*\*\*  
216-90/150-0.5/10 \*\*\*

216 110 74 10 0 0 0

Number of loops 8

ARMEKA Kalvolankatu 4 37630 Valkeakoski

## Testing and Modeling Vibration Isolators

Measurements

Analyse

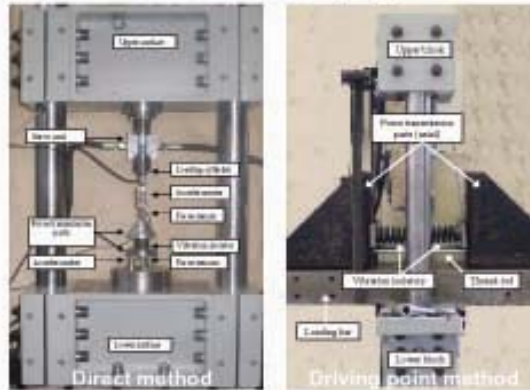
Modeling

Verify

Functional isolator model

Simulate

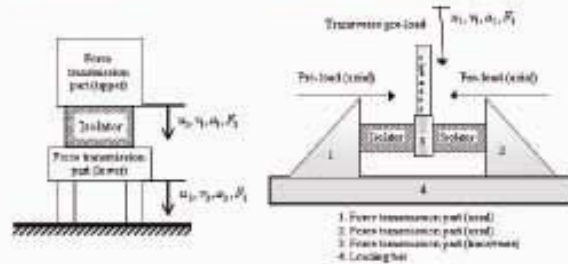
### Vibration Isolator Testing Equipment



•Testing equipment is meant to measure dynamic properties of the vibration isolators and it fulfills the requirements of the standard ISO 10846

•Both Direct and driving point method can be used in measurements

Operating limits	typical	max.
Frequency [Hz]	0 – 100	300
Pre-load [kN]	0,1 – 24	100
Amplitude [mm]	0,2 – 20	800



### Direct method

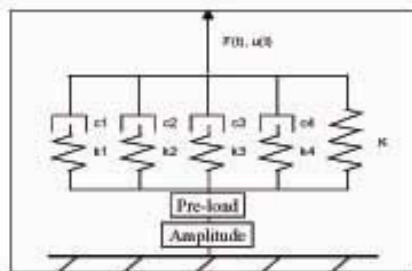
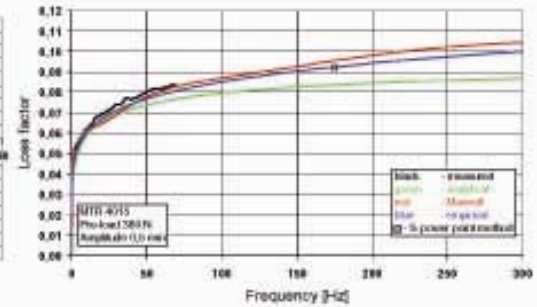
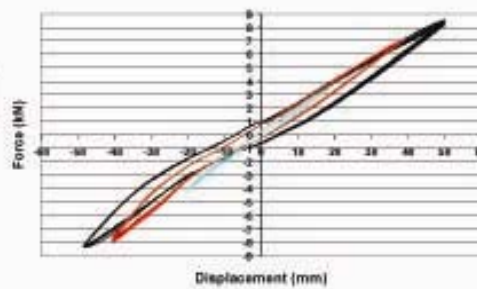
$$k_{2,1} = \frac{F_2}{u_1}$$

### Loss factor

$$\eta = \frac{\text{Im}[k_{2,1}]}{\text{Re}[k_{2,1}]}$$

### Driving point method

$$k_{1,1} = \frac{F_1}{u_1}$$



### Applications

