Q1.When European motors are rewound do you use Metric Magnet Wire

Metric magnet wire is very difficult to find in the USA. None of the regular sources of supply carry it.
As luck would have it ,though it's not a problem. This is why.
But before I explain let me say a few words about what are called Circular Mils. These are used in the motor business as units that represent the cross-sectional area of round magnet wire. In fact the circular mil area of a wire is equal to it's diameter in thousandths of an inch squared. So if we have a wire with a dia of 0.1870, then in circ mils it has a area of (187)x(187)= 34,969 cir mils
Now let's say a motor comes into the shop with 3 wires being used in parallel as the main conductors in the coils.The 3 wire sizes are as follows

Qty	Size	Dia mm	Dia inches	Cir mils
1	Metric 1.0	1	0.0394	1552
1	Metric 0.8	0.8	0.0315	992
1	Metric 0.63	0.63	0.0248	615

Total cir mils of 3 wires is:

1552+992+615 = 3,159 cir mils

When rewinding this motor we must have the same or larger(if the slot size permits) cir mils

Size AWG	Dia mms	Cir mils
18	0.0403	1624
18.5(half Size)	0.0380	1444
19	0.0359	1289
19.5(half Size)	0.0339	1149
20	0.0320	1024
20.5(half Size)	0.0302	912
22	0.0253	640
22.5	0.0239	571

From this table it is possible to select 3 appropriate wires to give us the 3159 cir mils needed.
For example:
1624 + 1024 +640 = 3288 cir mils…….4% more wire
If need be we can use half size wire and get:
1624 + 640 +912 = 3176 cir mils……..almost exact

I hope ,then ,that the examples above show how relatively easy it is to put back the same winding that originally came with the motor.