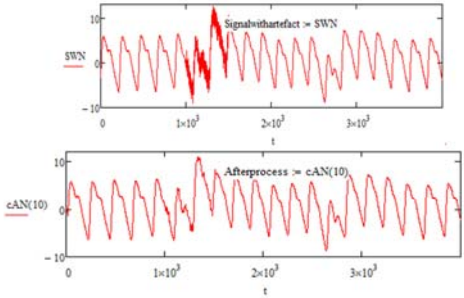

We can see that artefacts are successfully removed and the waveform still maintains as the original signal.

УДК 620.179.4

SYSTEM FOR CONTROL OF FABRIC SURFACE WITH COATING IN ROLL MACHINE

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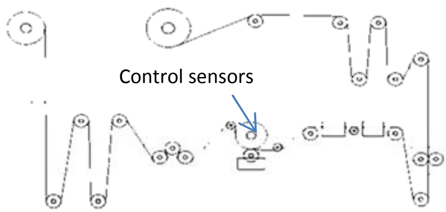
A coated fabric combines the benefits of the base fabric with those of the polymer with which it is coated. The resulting coated fabric will have many properties which cannot be offered by either component individually, and careful consideration is necessary to select both base fabric and coating polymer. The base fabric provides the mechanical strength of the composite material and supports the layer of coating applied to it. For quality coated fabrics, quality base fabrics are essential. This point is made because newcomers to the industry sometimes believe that the coating can cover fabric defects, and so second quality fabrics may be sent for coating. In fact, the defect is frequently made more prominent and the cost of rejected coated fabric, with the added value of coating, will be significantly higher than that of the base fabric alone.



Fir.1

It can be appreciated that coating penetration between individual threads will tend to reduce tear strength. Feed material is through commercials, but after applying we need to know the quality of operations Along canvases have are three sensors, that can control the quality of the coating (Fig.1).

To control these parameters develop hardware-based Labview. The system is equipped with several sensors that take Transmit surface condition through ADC. Virtual device illustrated in figure 2. Flowchart – fig.3

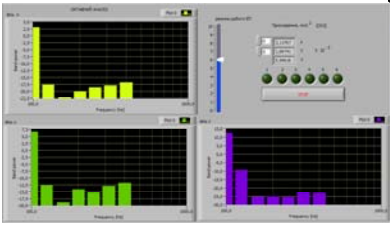


Fig. 2

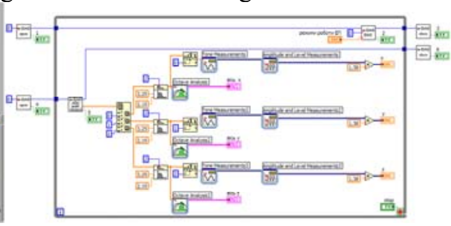


Fig.3

Surface condition is displayed in the corresponding dialog window.

So you can control the flow of roll coated fabric all time.

УДК 621.382

К ИЗМЕРЕНИЮ СКОРОСТИ ПОВЕРХНОСТНОЙ РЕКОМБИНАЦИИ В ТОНКОСЛОЙНЫХ ПОЛУПРОВОДНИКОВЫХ СТРУКТУРАХ

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В данной работе рассматриваются факторы, влияющие на точность метода определения скорости поверхностной рекомбинации в тонкослойных полупроводниковых структурах, основанного на измерении максимума зависимости сигнала фотомагнитного эффекта от величины магнитного поля $I_{ФМЭ} = f(B)$. Резкость максимума, определяющая точность метода, характеризуется углом наклона касательной к зависимости $I_{ФМЭ} = f(B)$ в районе максимума. Угол наклона определяется производной

$$\operatorname{tg}\alpha = f'(B) = \frac{a(b - c\cdot B^2)}{b + c\cdot B^2},$$

где a, b, c – величины, не зависящие от B. Максимум наблюдается при $B = \sqrt{\frac{b}{c}}$. Выберем точку в районе максимума, например, при $B = 0{,}9\sqrt{\frac{b}{c}}$. Тогда в этой точке $tg\,\alpha \approx 0{,}1\cdot a$. Следовательно, резкость максимума определяется только величиной a, которая зависит от параметров исследуемого материала

$$a = \eta I kTd\mu_н(\mu_н + \mu_о),$$

где $\mu_н$ и $\mu_о$ – подвижность основных и неосновных носителей заряда соответственно, d – толщина измеряемого образца.