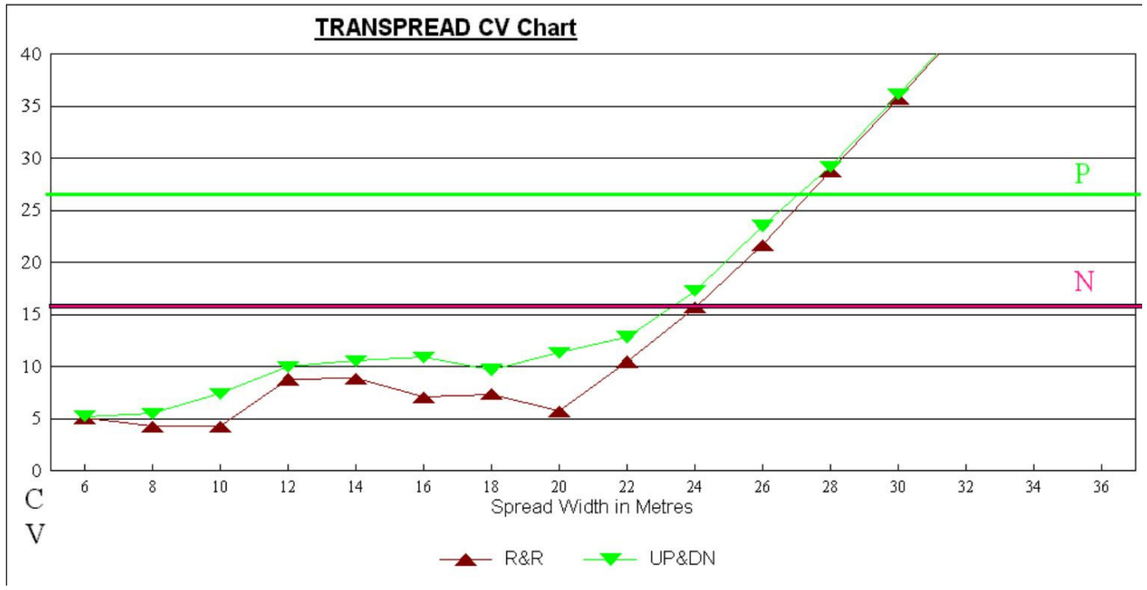
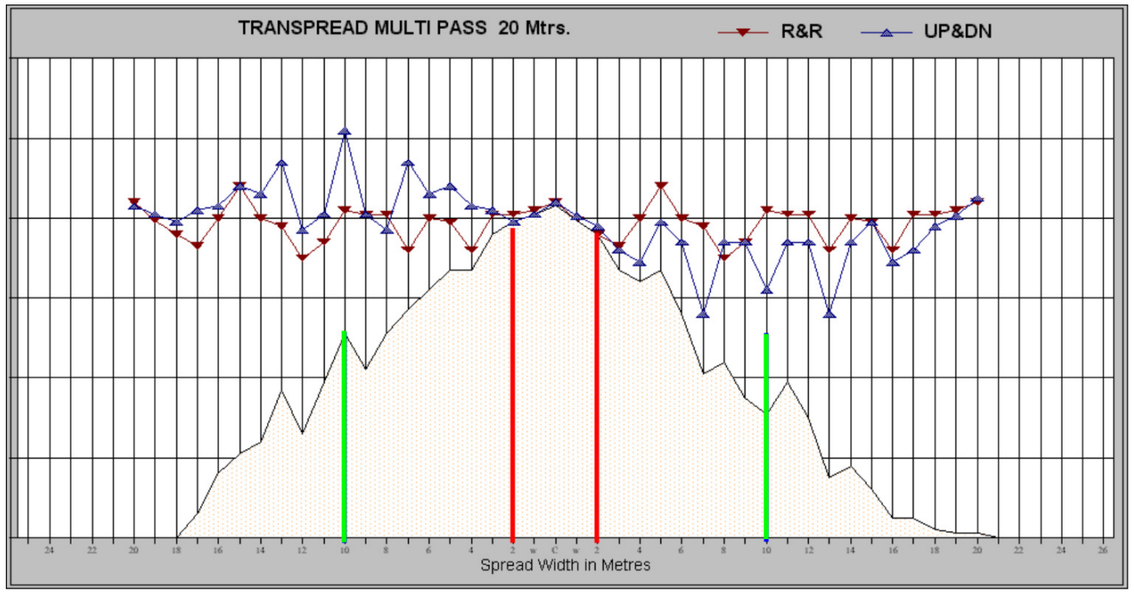
TRANSPREAD International Ltd.

Typical CV chart set to spread 20 meters. Spreading 15% Potash Super phosphate, using 950 spinner speed A very common type pattern used by many spreaders.

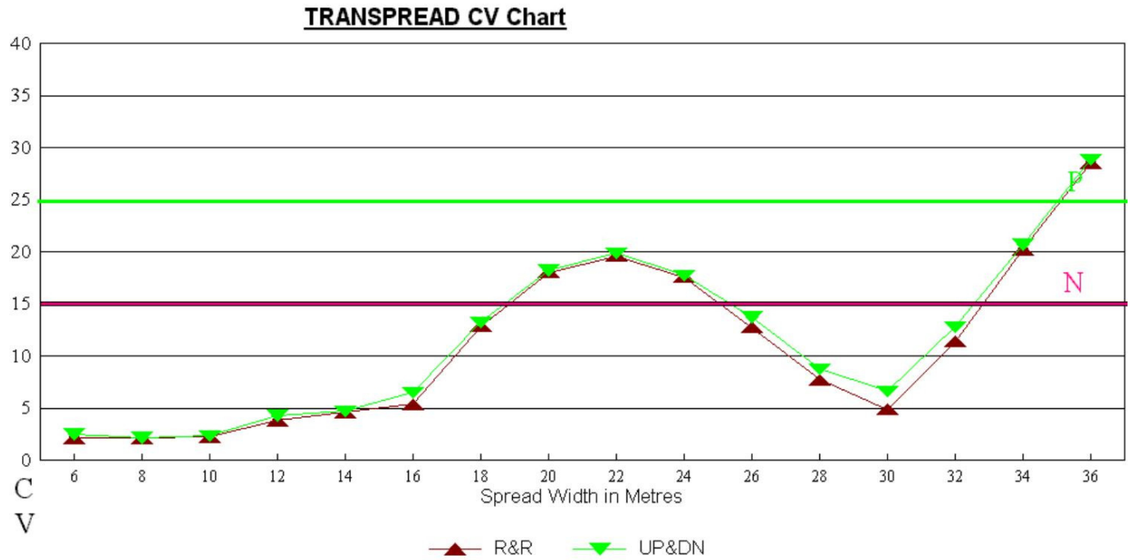


Single and multiple pass profile showing overlap below. If full rate is to be got to the field edge to avoid taper off of the crop then you will have to run only 2 mtrs. from the field boundary.

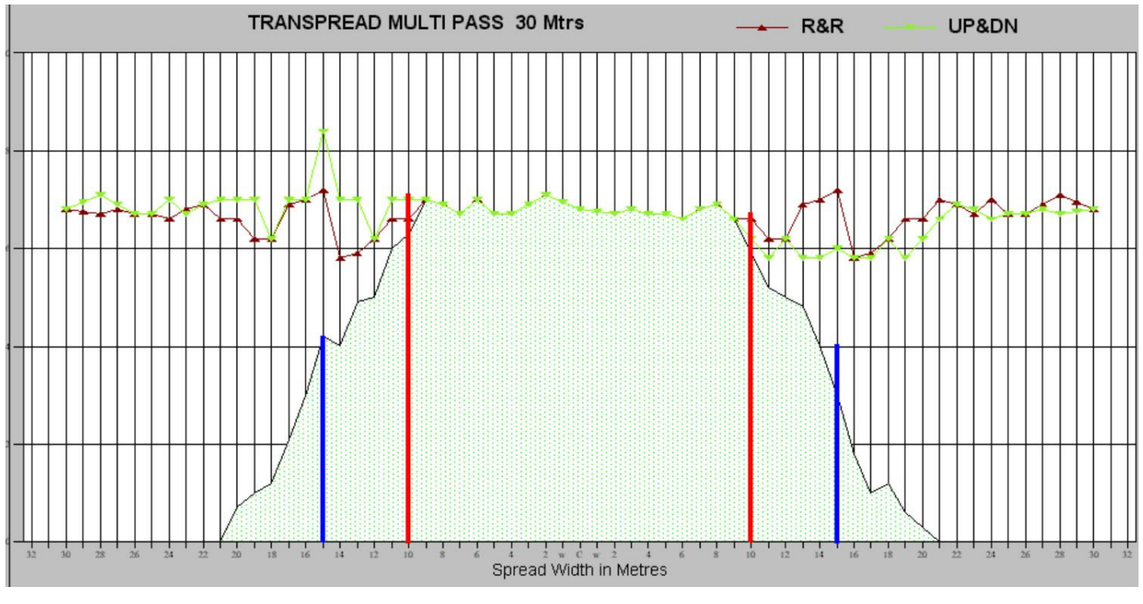


This is a typical chart of many spreaders and can be improved by slowing spinners and / or using the vanes. Doing so would result in a marked increase in production and be more environmentally friendly.

Typical CV chart from a TRANSPREAD 730 Wide Chain spreader set to spread 30 meters. Fitted with 675 spinners spreading Pivot Granulated Urea. Wide conveyor type spreaders are able to spread almost any product over a wide range of rates. Settings at 1000 spinner speed and Vane angle of 30'.



Single and multiple pass profile showing overlap, to get the full rate to the boundary you need to run at the red line yet normal overlap is at the blue line, considerably better than the previous result. To accept a drop off at

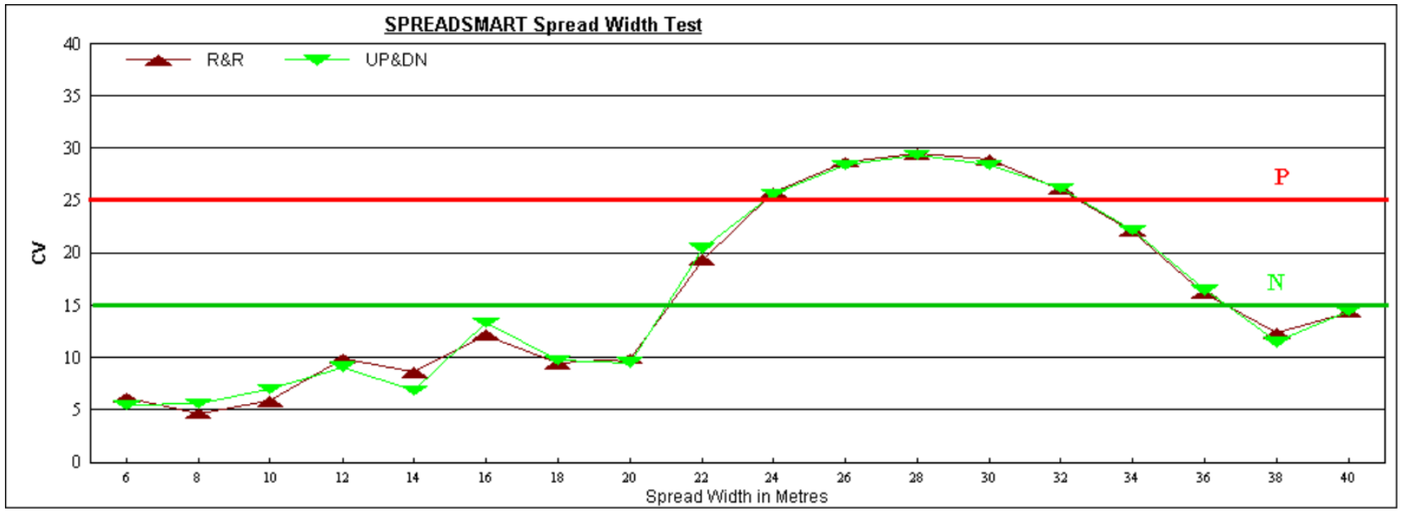


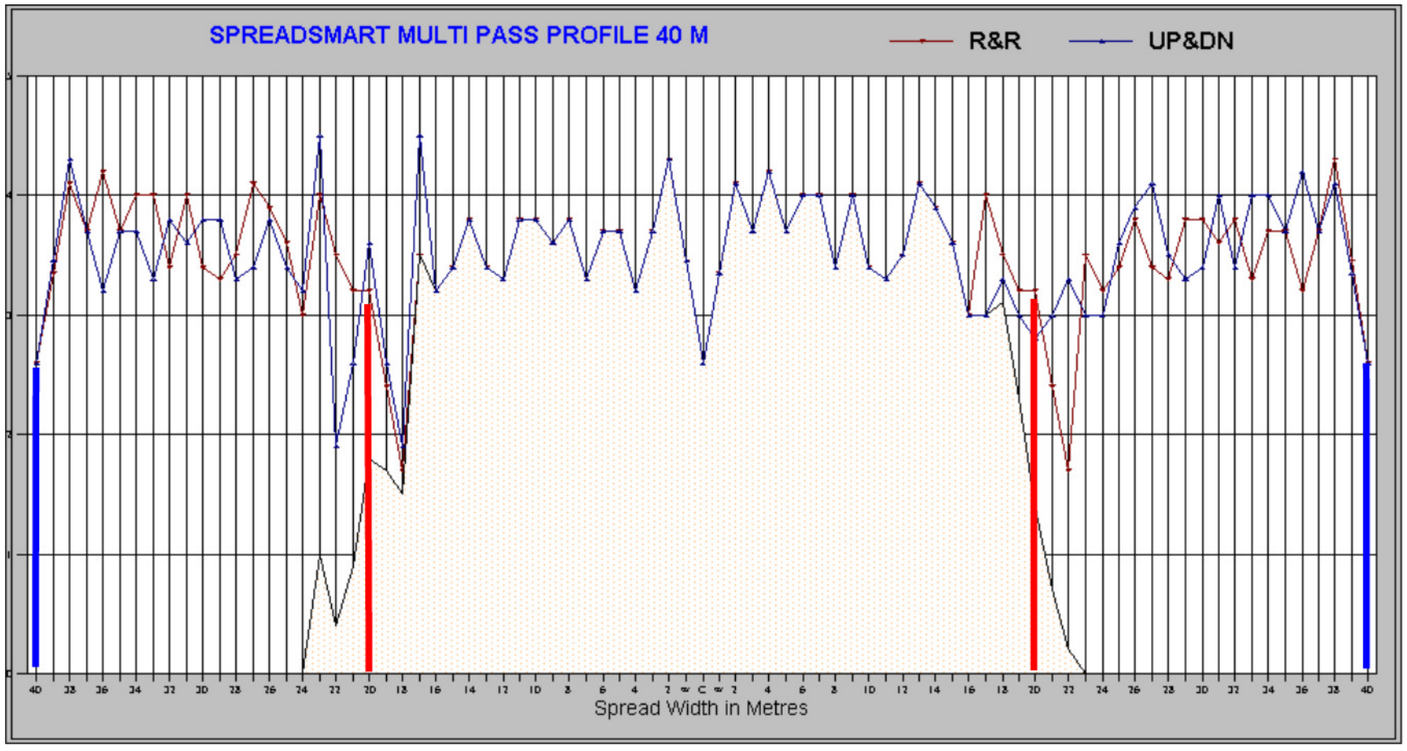
the field edge results in a large loss of production, to travel close to get full rate results in an unacceptable amount going on to waste land or water.

TRANSPREAD for WIDESPREAD

SMARTGUIDE 1020c by TRANSPREAD

This is the result of a 730 chain type spreader spreading Pivot single super using a spinner speed of 900 rev., And vane angle of 20'. This pattern will give regulatory authorities what they want. Overlap is at the red line resulting in the full rate up to the boundary and very little through into water or waste land. The environmentally friendly spread pattern when operated at 40 mtrs. will reduce waste, spreading time and compaction. It requires detailed knowledge of the spreaders characteristics to be able to set it correctly and the ability to drive accurately at the selected bout width, it results in --





- Less wasted fertiliser in water and waste land
- Greater production, reduced spreading time, increased profits for the farmer.
- Less compaction in the field
- Greater returns for the operator if he is a contractor due to less kilometres travelled to cover the required area..

The perceived disadvantages are..

- Driver has to drive more accurately, (incorrect)
- Spreader has to be set up for the required width, (correct)
- Wide spreader bout widths result in a poor job, (incorrect)

To answer the above:

Driver has to drive more accurately.
With any type of spread pattern, getting an accurate CV requires accurate driving, and in some cases will require the use of driving aids such as GPS. These are used extensively in some countries and should be used in all, at least by Contractors who can justify the expense by the higher returns of being able to spread wider.

Wide spreader bout widths.
Contractors often use width as an example of quality to try and get work from their opposition. As more knowledge is made available this will become more difficult, as good operators will provide a CV chart for the product and vehicle to establish the quality of their spreading.

Transpread has been developing spreaders which meet European Environmental requirements for many years and has a number of patents covering designs that make this possible.

Countries that have embraced Precision Farming with Site Specific Agriculture using GPS and variable rate require the full rate to the edge of the field with as little as possible going to waste. It is also the pattern that meets European requirements and may well become the only one to meet environmental requirements in other countries. In many cases there is more loss of production through not getting the full rate to the edge of a field than from uneven spreading inside the field although most Farmers are unaware of this.

A boom sprayer or air boom spreader is considered to have an ideal spread pattern, yet its distribution is very similar to the flat type spread pattern developed over the last 12 years by Transpread. The penalties for inaccurate driving with a boom spray are high, but it is inevitable that this is the way the industry will head in the future because production is better and environmental concerns are more fully addressed. GPS will be used for more accurate driving and wider bout widths will be used.

More accurate setting of the spreader will be required and more knowledge of its operating characteristics. The flat type pattern is a result of advanced spreader design and can be got with slower spinner speeds and more accurate spreader settings.

For more information on spreaders and Headland spreading go to web page and download Healand spreading leaflet for what is possible with Transpread Twin chain spreaders and the 1020c computer.

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