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### **The ability for realtime measurement of sugarbeet quality on the cossette belt.**

In the manufacturing of most products there is control of the inputs. This control is designed to maintain the standard of the manufacturing process and the quality of the end product. Processing of sugarbeets into sugar involves taking the harvested root, either fresh or stored and converting it into refined sugar. This Primary Processing takes the root and converts it into crystal sugar which allows it to be stored. After entering the plant the sugarbeets are washed and then sliced into cossettes, it is from these cossettes that the sugar is extracted. The cossettes are brought into the process on the 'cossette belt' and it is at this stage in the process that samples are collected with a given frequency and analyzed for their quality. The capacity of a sugarbeet plant is measured in tons sliced per hour or day. The slice capacity of a plant can range from 200 tons to over 700 tons per hour. For most plants they take a sample of the incoming cossettes about every 2 hours. This sample provides only a snapshot of the incoming beets due to the large volume of material that can be sliced between the sampling and the range of geography that the beets are received from. To improve the knowledge of the incoming raw good and provide real time information, KWS has developed a methodology to use NIRS technology from its BEETROMETER®. We will share with you how this system is able to provide you with quality values for POL Sugar and Dry Matter and the possibilities that the future holds.