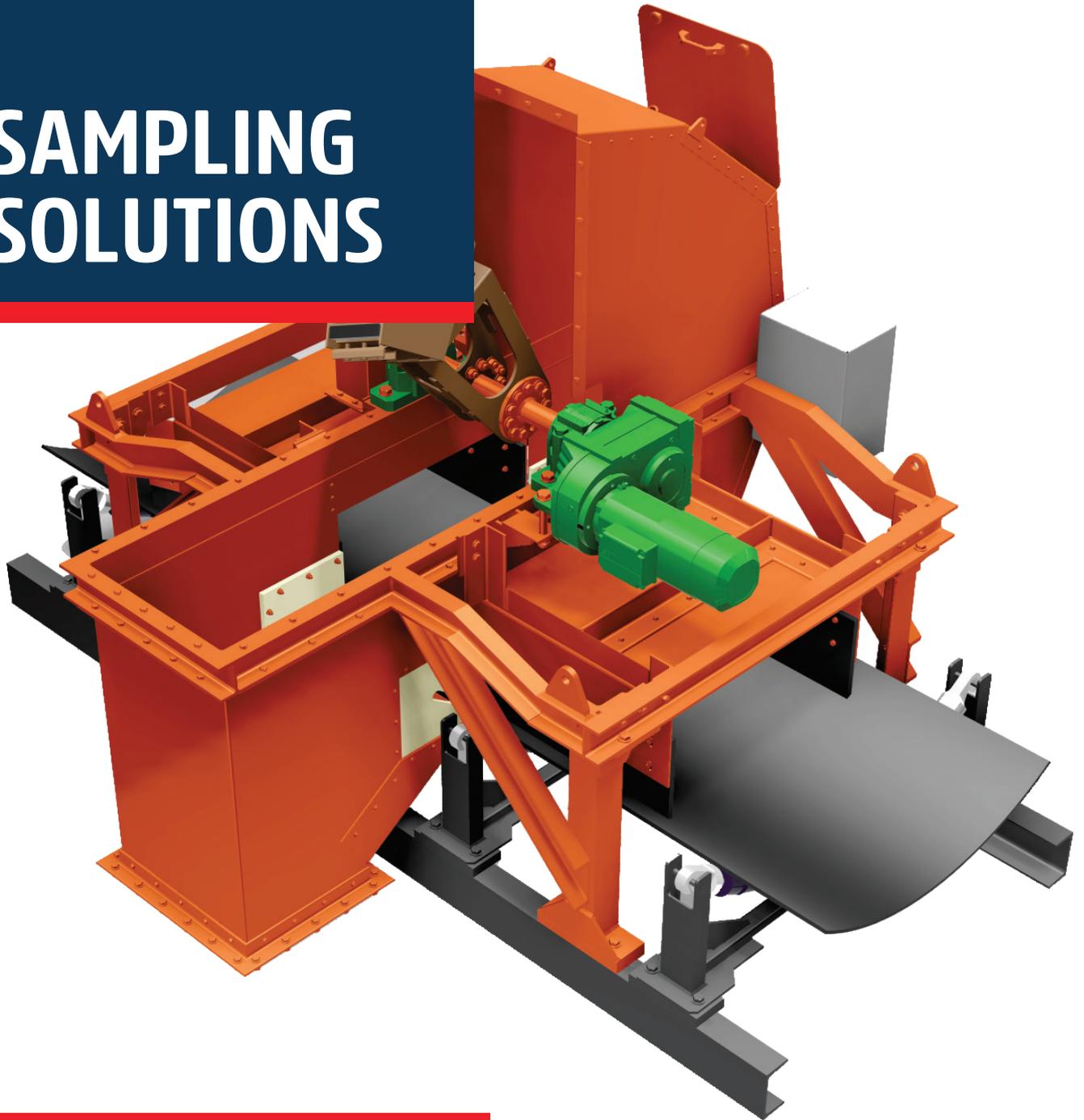


# SAMPLING SOLUTIONS



**SERIOUS**  
**ABOUT**  
**SERVICE**



**MALVERN**  
**ENGINEERING**

[www.malvern.co.za](http://www.malvern.co.za)

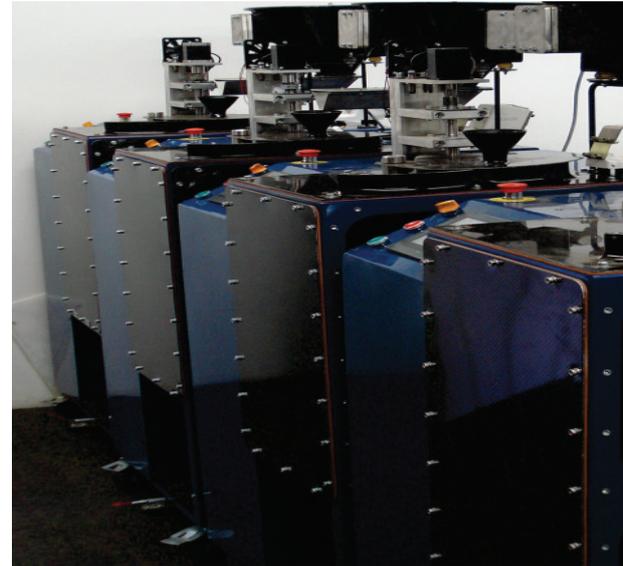
# SAMPLING SOLUTIONS

Malvern Engineering specialises in the design and manufacture of sampling equipment for bulk materials and solids. We offer:

- New sampling equipment.
- Rectification of problems in existing sampling equipment.
- Replacement of existing sampling equipment.
- Precision sampling equipment.

## VARIABLE SPLIT SAMPLE DIVIDER (VSSD)

- Achieves mechanically correct division to a precise target mass in one step in a short time.
- Eliminates the need for manual sample mass division in sample preparation protocols, with minimum possible assay variance.
- Permits precise control of the mass of the sub- sample.
- Operation in stand-alone mode.
- Operation in Auto mode. It can be interfaced to your Laboratory Information Management System (LIMS) via a simple serial link. Commands comply with the ModBus protocol.

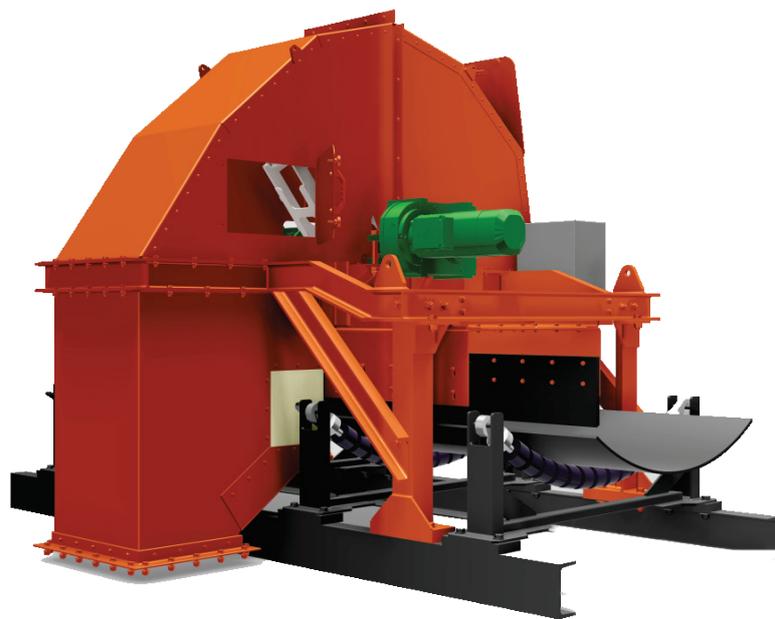


## APPLICATIONS

- Composite Sample Preparation
- Sample Testing for Metallurgical Tests

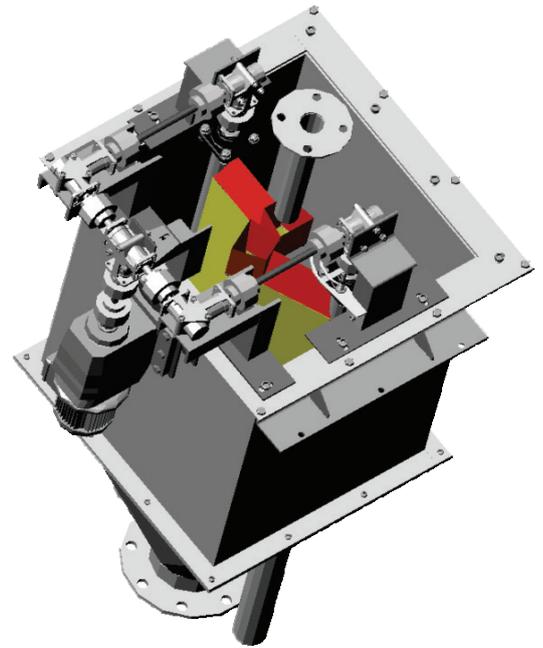
## CROSS BELT SAMPLER / HAMMER SAMPLER

- The Malvern Engineering Cross belt (or hammer) sampler has been robustly designed using the ISO 13909 standard as a basis for design.
- Designed with a double sweep/cleaning system which together with the flexible idlers supplied with the machine shapes the belt contour and ensures that a clean cut is taken.
- Servo controlled asynchronous servo-motor with minimum backlash.
- Flawless Belt tracking.
- Four Modes of Operation: Manual, Remote, Auto Timed, Inspection/Maintenance



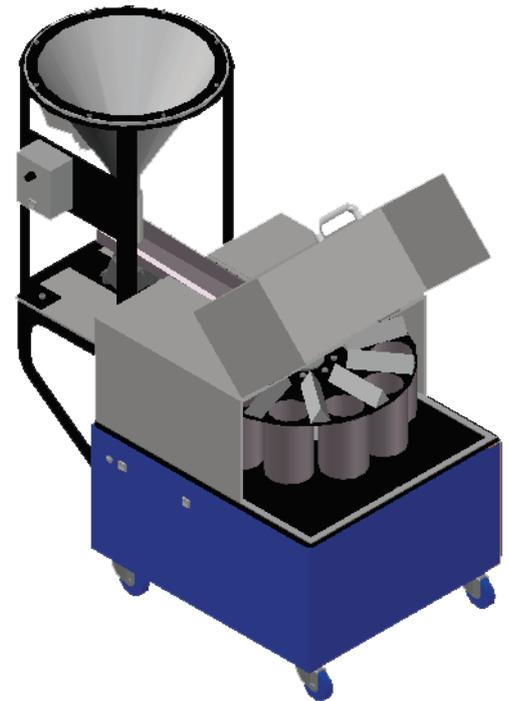
## INTERLEAVING SAMPLER

- Extracts two nominally identical samples from a flow of dry free flowing material.
- Reliable means of providing an undisputable measure of sampling precision.
- Designed to have minimal hang-up.
- Dust tight Construction.
- Available with two drive options - a stepper motor drive system or a variable speed sensorless vector controlled, geared drive system.
- Advantageous when splitting high value stream.
- Stepper motor drive system allows more flexibility and can be programmed to extract different sample masses from the lot.



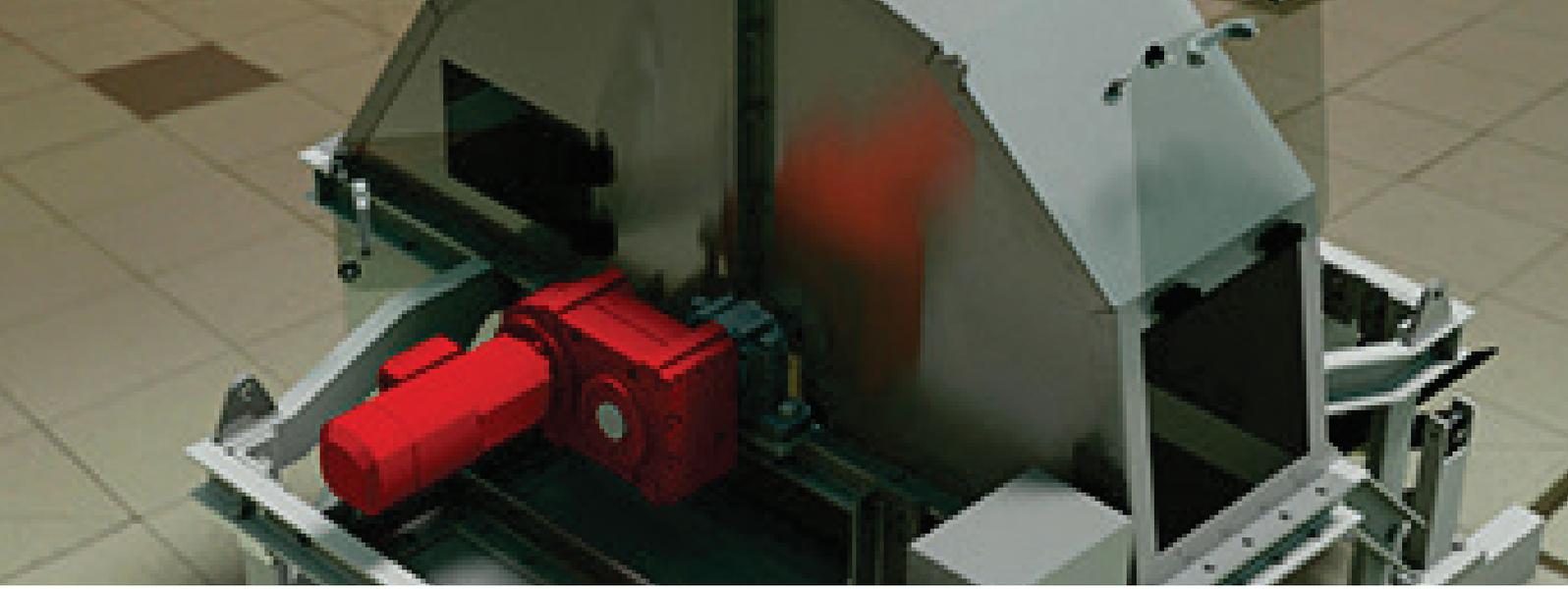
## ROTARY SAMPLE DIVIDER (RSD)

- Extremely reliable method for mass reduction of a sample.
- Large number of increments ensure that material segregation (distributional heterogeneity) in the starting sample is radically reduced in each of the subsamples.
- Heavy duty construction with a robust drive train that ensures constant speed throughout the splitting process.
- Minimises sample variance.
- Incorporates a state of the art feeder which ensures a constant flow of material to the splitting section, which can be calibrated per application to suit the relevant material being split.
- Sampling Capacity of standard unit: 15 Litres
- Division Ratio: 1:10



## SPECIFICATIONS OF STANDARD UNIT (RSD15)

Sample Capacity (litre/cu ft)	15/0.53	Dimensions (mm)	1350 x 750 x 1453
Division Ratio	1:10	Voltage	200-240 VAC, 50 Hz
Speed of rotation (m/s)	0.3	Power (W)	500



# SITE LOCATIONS



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